UNITED STATES MARINE CORPS
AND ENVIRONMENTAL JUSTICE POLICY

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<td>BWI</td>
<td>Basewide Water Infrastructure</td>
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<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
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<td>CEJ</td>
<td>Committee on Environmental Justice</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>CPEN</td>
<td>Marine Corps Base Camp Pendleton</td>
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<td>DoD</td>
<td>Department of Defense</td>
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<td>EIS</td>
<td>Environmental Impact Statement</td>
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<td>Executive Order</td>
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<td>FEIS</td>
<td>Final Environmental Impact Statement</td>
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<td>GAO</td>
<td>United States Government Accounting Office</td>
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<td>Geographic Information System</td>
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<td>HI</td>
<td>Hawaii</td>
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<td>IWG</td>
<td>Interagency Working Group</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<td>NOA</td>
<td>Notice of Availability</td>
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<td>OHV</td>
<td>Off-highway vehicles</td>
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<td>PCB</td>
<td>Polychlorinated biphenyl</td>
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<td>PL</td>
<td>Public Law</td>
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<td>ROD</td>
<td>Record of Decision</td>
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<td>United States Code</td>
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<td>USCCR</td>
<td>United States Commission on Civil Rights</td>
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<td>USEPA</td>
<td>United States Environmental Protection Agency</td>
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<td>USMC</td>
<td>United States Marine Corps</td>
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Abstract

The United States Marine Corps (USMC) makes decisions every day that impact the environment. Although intended to benefit society, these decisions can have a disproportionate impact on poor and minority populations. On February 11, 1994, President Bill Clinton issued Executive Order (EO) 12898 titled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. That same year, the Council on Environmental Quality (CEQ) published official guidance on how the federal government, including the USMC, should comply with EO 12898. To date, the USMC has incorporated environmental justice analyses into the National Environmental Policy Act (NEPA) process, yet has not developed its own branch specific environmental justice evaluative process. Without a documented evaluation process, compliance with CEQ requirements within environmental justice analyses can be questioned.

This research investigates how effective and consistent the USMC incorporates environmental justice concerns under the NEPA process, with a focus on Environmental Impact Statement (EIS) documentation. An embedded single case study design for qualitative analysis was utilized. Three of the most recent NEPA Final EISs, sponsored by the USMC, were examined for this study. In addition, EIS supporting documentation were examined, including the Record of Decision, press releases, public comments, and scoping materials. In addition, interviews with key personnel involved with developing the EIS were conducted.

The results indicate that the USMC has included basic environmental justice analyses into the EIS process based on CEQ requirements, yet the extent of implementation within EIS documentation is not fully compliant or consistent with CEQ requirements. The USMC could avoid gaps and inconsistencies within environmental justice analyses by developing a specific methodology or guidance document. A methodology or guidance document will give NEPA project managers guidelines on consistently incorporating environmental justice concerns into NEPA EIS analyses.
Chapter 1: Introduction to Environmental Justice

The United States (US) government and its agencies make decisions every day that impact the environment. Although intended to benefit society, these decisions can have a disproportionate impact on poor and minority populations. Environmental and social equality advocates have long been concerned about the disproportionately high adverse human health impacts of federal projects, programs and policies on disadvantaged low-income and minority communities (Bullard, 2003). The environmental justice movement focuses on ensuring that these communities have equal environmental protection and an equal voice in the decision-making process regarding federal projects that have the potential to impact their communities (Clinton, 1994). According to the US Environmental Protection Agency (USEPA), “environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (USEPA, 1998). The federal government has put in place several policies and strategies to minimize environmental justice issues.

This research analyzes how effective and consistent the United States Marine Corps (USMC), a branch of the Department of Defense (DoD), incorporates environmental justice concerns under the National Environmental Policy Act (NEPA) process, with a focus on Environmental Impact Statement (EIS) documentation. Three of the most recent NEPA Final EISs (FEIS), sponsored by the USMC, were examined for this study. The case study was
evaluated using the iterative linear process for qualitative research developed by Robert K. Yin (2013). The case study process involves six steps outlined below (Yin, 2013):

- Select the cases and determine data gathering and analysis techniques
- Prepare to collect the data
- Collect data
- Evaluate and analyze the data
- Prepare the report

The research will seek to find opportunities to develop a methodology to aid the USMC in conducting environmental justice analyses within the NEPA process.

**Research Justification and Objectives**

Nearly twenty years have passed since EO 12898, *Federal Actions To Address Environmental Justice In Minority Populations and Low-Income Populations* was signed (Clinton, 1994). The USMC, as part of DoD, is required to implement the strategy by incorporating environmental justice into its mission, primarily under NEPA (Clinton, 1994). To date, the USMC has incorporated environmental justice analyses into the NEPA process, yet has not developed its own branch specific environmental justice evaluative process. Without a documented evaluation process, the consistency and effectiveness of environmental justice analyses can be questioned.

The value in ensuring that environmental justice analyses are effective and consistent is two-fold. First, disproportionate impacts to minority and poor populations can be avoided, and second, the NEPA EIS analyses have a stronger legal standing if
challenged. According to Richard Thelin, Special Counsel for the USMC Western Area Counsel Office, “Being consistent with such guidance is likely to help the Federal agency survive any court challenge to the implementation of its NEPA process in any particular case. Therefore, consistently implementing CEQ guidance is to the agency's benefit” (Thelin, 2014).

Richard Thelin, the lead NEPA lawyer for western USMC installations, agrees that an environmental justice methodology would benefit the USMC in terms of avoiding litigation and disproportionate impacts; yet having a methodology in place would not likely change as the majority of USMC projects decisions do not impact populations off the installation. He concludes that the USMC would probably benefit from a branch level methodology to ensure potential impacts “would not fall through the cracks” (Thelin, 2014).

Disproportionate impacts to minority and poor populations are not a new concern for the DoD. Well before environmental justice policy was developed, the US Navy conducted live bombing and explosive exercises on the Puerto Rican Island of Vieques for more than 60 years (Wilcox, 2001). These military exercises caused pollution that impacted the health of the Vieques people (US Navy vs. Puerto Rico, 2000; Wilcox, 2001). Vieques has high concentrations of people who identify themselves as members of the Hispanic or Latino race (US Census, 2010). If environmental justice concerns, such as the pollution caused from of bombing, would have been considered, the military exercises may not have adversely impacted the minority populations of Vieques. In fact, it could be argued that if environmental justice policies had been in place in the 1940s, the bombing exercises may have never taken place. Instead, Vieques is left with a Superfund site that still shows high levels of contamination years after the
bombing has ceased (USEPA, 2007). To this day, the people of Vieques have a cancer rate 27% higher than Puerto Rico’s general population (US Navy vs. Puerto Rico, 2000; Wilcox, 2001).

For this research project, the question was asked, how effective and consistent the USMC incorporates environmental justice concerns under the NEPA process, with a focus on EIS documentation. The objectives of this study are as follows:

- Identify the extent and consistency the USMC has implemented environmental justice policies into the NEPA process, focusing on FEIS documentation since 2012.
- Identify the gaps in USMC NEPA analyses that may prevent effective evaluation of environmental justice issues.

**Environmental Justice Background Discussion**

The environmental justice movement is centered on the premise that one community should not be exposed to higher levels of pollution than any other community, regardless of race, color, creed, or income (USEPA, 1998). The purpose of this study is to analyze how effective and consistent the USMC incorporates environmental justice concerns under the NEPA process, with a focus on EIS documentation. The study also explores the definition of environmental justice and outlines historical events that led up to the environmental justice grassroots movement.

**Environmental Justice Defined**

Environmental justice has varied definitions and multiple related terms that help to define the framework of the movement and development of environmental justice policy. For the purposes of this study, the USEPA definition of environmental justice will be used.
Environmental justice is the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (USEPA, 1998). The term environmental equity is often recognized as a synonym for environmental justice (USEPA, 1996).

Environmental racism is a term that was coined by civil rights leader, Reverend Benjamin Chavis, Jr., in 1987. This term focuses on the exclusion of minority communities, or communities of color, from environmental decisions.

“Environmental racism is the racial discrimination in environmental policy – making and enforcement of regulations and laws, the deliberate targeting of communities of color for toxic waste facilities, the official sanctioning of the presence of life-threatening poisons and pollutants in communities of color, and the history of excluding people of color from leadership of the environmental movement” (Chavis, 1993).

Environmental injustice recognizes that environmental pollution does not discriminate between the rich and poor, or by the color of your skin (Mohai, Pellow, & Roberts, 2009). This term is seen as the antithesis of environmental justice, implying that environmental justice seeks to stop environmental injustice from occurring (Mohai, Pellow, & Roberts, 2009).

Minority is defined by the Council on Environmental Quality (CEQ) as members of the following groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not Hispanic origin; or Hispanic (CEQ, 1996). Minority populations should be identified if they exceed 50 percent of the general population of an area in the vicinity of a proposed project, or if their population concentrations are meaningfully greater than typical percentages for that group in other geographical areas. A minority population is also identified if multiple minority groups...
are present in one geographical location and the cumulative percentage is greater than 50% or meaningfully greater than the general population (CEQ, 1996).

The conventional term **disproportionately high and adverse human health effects** is usually measured in risks and rates that are considered significant or above generally accepted norms (CEQ, 1996). When the risk or rate of impact exposure for poor or minority populations exceeds that of the general population, there is a disproportionately high and adverse effect (CEQ, 1996).

*Environmental Justice: The movement*

Social equality leaders have rallied against environmental injustice towards minorities since the 1960s. In 1968 African American garbage collectors and workers went on strike, supported by civil rights leaders, to oppose the hazardous conditions they were exposed to while completing daily basic duties (Bullard, 2003). The first lawsuit citing environmental injustice utilizing civil rights law took place in 1979. In this historic lawsuit, residents of a black neighborhood challenged the location of a waste processing facility in *Bean v. Southwestern Waste Management, Inc.* (Bullard, 2003).

In 1982, the grassroots environmental justice movement was finally nationally acknowledged thanks to Warren County, North Carolina. The state of North Carolina had chosen a section of Warren County with the highest percentage of African Americans to dump 120 million pounds of polychlorinated biphenyl (PCB) contaminated dirt (Mohai, Pellow, Roberts, 2009). In the protests, 500 people were arrested, including civil rights leaders and members of the Black Congressional Caucus. Chairman of the Congressional Black Caucus, Walter Fauntroy, was one of the arrested protestors (Bullard, 2003). The local activists failed to stop the
dumping of PCBs, but succeeded at spurring a national scale civil rights movement to fight environmental injustice (Bullard, 2003).

Inspired by the environmental injustice of the Warren County PCB landfill, Chairman of the Congressional Black Caucus, Walter Fauntroy initiated a US General Accounting Office (GAO) investigation into the siting’s of other hazardous waste facilities in USEPA Region IV in 1983 (Bullard, 2003). The study concluded that 3 of the 4 toxic waste landfills were in communities that were primarily African American (Bullard, 2003; GAO, 1983). This GAO investigation resulted in both the USEPA and civil rights organizations recognizing the value of joining forces to fight environmental injustice (Bullard, 2003). Another landmark publication by the United Church of Christ (UCC) Commission for Racial Justice exposed that three out of five African Americans lived near abandoned hazardous waste sites (UCC, 1987).

By the 1980’s, the nation was awake and responding to the environmental justice movement. Minority groups were standing up against injustice and winning battles (Bullard, 2003). Protests and rallies were organized and nationally publicized (Ferris and Hahn-Baker, 1995). A multi-cultural coalition in Los Angeles came together and successfully opposed an incinerator installation in their community; Native American tribes fought and won the battle against hazardous waste landfills on their land (Ferris and Hahn-Baker, 1995).

In 1990, the University of Michigan School of Natural Resources sponsored a historic environmental justice conference involving civil rights leaders, USEPA officials, and scholars (Ember, 1995). Soon after, USEPA administrator William Reilly authorized an environmental equity study. The Office of Environmental Equity, eventually renamed Office of Environmental Justice, was established as a result of the study (Ember, 1995).
Up until now, the environmental justice movement was an American centric movement – yet environmental injustice was not uniquely American (Ferris and Hahn-Baker, 1995). In 1991, the movement went global. The First National People of Color Environmental Leadership Summit assembled in Washington DC with almost 1000 participants from the US, along with several South American and African nations. Their statement demanded international action against environmental injustice (Ferris and Hahn-Baker, 1995). The conference resulted in the development of the Principles of Environmental Justice that defined the unfair burden people of color have historically borne and goals to achieve environmentally safe livelihoods (1991). For an outline of the Principles of Environmental Justice, see Appendix D.

Still with no official US guidance in place, several federal agencies and congressman attempted to establish environmental justice policy independently. In 1992, there was an attempt to amend the Resource Conservation and Recovery Act that would require a demographic assessment and an accumulative impact review of a proposed landfill site. That same year, Al Gore (Democrat, Tennessee) and John Lewis (Democrat, Georgia) proposed the “Environmental Justice Act”, yet it failed to pass. In 2007, the act was reintroduced to the House of Representatives, but still has not become law.

In President Clinton’s 1993 Earth Day address, he committed to establishing a federal environmental justice action plan. He fulfilled his promise by signing landmark EO 12898 requiring that all federal agencies address environmental justice issues associated with all federal programs, projects and policies. Additionally, President Clinton issued a memorandum to federal agencies designating NEPA as the vehicle for addressing environmental justice concerns (Clinton, 1994). Under EO 12898 federal agencies are given the following requirements:

“To the greatest extent practical and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each federal agency shall
make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico and the Commonwealth of the Mariana Island” (Clinton, 1994).

Within a year of Clinton issuing EO 12898, the DoD developed a strategy that identified how the agency would meet the intent of the mandate. The DoD Strategy on Environment Justice (1995) mirrors the approach of the President’s memorandum (Clinton, 1994) by incorporating environmental justice principles into NEPA procedures. NEPA requires federal agencies to analyze the environmental impacts of all proposed projects and involve the public in the decision-making process. DoD argued that by using NEPA as its environmental justice policy vehicle, institutional changes would be possible, rather than focusing on individual one-time projects (DoD, 1995).

The Secretary of Defense, designated as the lead in the development and implementation of the DoD strategy, organized the Committee on Environmental Justice (CEJ) (DoD, 1995). This committee was designed to guide the implementation of the DoD strategy across all military branches. One of the key components of the DoD strategy directed that each branch of the military incorporate environmental justice in all NEPA analyses (1995). It further specified that every military installation should periodically assess how their activities and operations were impacting minority and poor communities surrounding their facilities (DoD, 1995).

Shortly after DoD signed the strategy in 1995, the USEPA published the Environmental Justice Strategy (1995). Two years later in 1997, the USEPA developed the Environmental Justice Implementation Plan to supplement the 1995 strategy to ensure that environmental justice
was incorporated into the USEPA mission. In 1996, the CEQ published official guidance on how the federal government, including the military, should comply with EO 12898 (1994).

In 2010, President Obama issued a Memorandum of Understanding (MOU) on environmental justice that recommitted the federal government to integrating environmental justice into all programs, policies and activities. This MOU recommits federal agencies to develop or evaluate their strategies on environmental justice.

**Environmental Justice and the Public Policy Arena**

President Richard Nixon signed the *National Environmental Policy Act (NEPA)* into public law (PL 91-190) on January 1, 1970. NEPA was enacted due to the public’s concerns over the impact of federal projects on the environment. The primary purpose of NEPA is to “encourage productive and enjoyable harmony between man and his environment” (42 USC 5 4321). It is a procedural law requiring that all proposed federal actions consider environmental impacts by preparing different levels of environmental review based on potential impact thresholds. The intent is to assist federal agencies in making decisions that consider environmental impacts (NEPA, 2006). For projects expected to significantly impact or have unknown impact to the environment or human health, the highest level of analysis, known as an Environmental Impact Statement (EIS), must be prepared and include public participation. An EIS is a detailed evaluation of impacts to both the environment and human health. The EIS includes preparation and assessment of proposed viable alternatives (CEQ, 1995). The criteria used to determine if potential impacts are considered “significant” requires consideration of context and intensity of impacts (CEQ, 1995).
As discussed above, on February 11, 1994, President Bill Clinton signed Executive Order (EO) 12898 titled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Executive Orders are an important part of policymaking. The president is given this authority by delegation from Congress, but an EO does not require congressional approval. EOs are considered a non-legislative rule (Ostrow, 1987).

On the same day he signed EO 12898, President Clinton issued an accompanied memorandum highlighting laws that already are designed to provide communities with a healthy and safe environment (Clinton, 1994). He outlined in the memo that in addition to the Title VI Civil Rights Act of 1964, federal agencies shall also analyze environmental effects and socioeconomic impacts specific to minority and low-income families. The President also instructed federal agencies to allow for communities to have a voice in the NEPA process. The memo pointed out that NEPA already requires that federal agencies analyze the environmental, human health and socioeconomic impacts of federal actions (Clinton, 1994). He also highlighted the Freedom of Information Act, the Sunshine Act, and the Emergency Planning and Community Right-to-Know Act siting that minorities and the poor “must have adequate access to public information relating to human health, environmental planning, and environmental regulation” (Clinton, 1994). Siting these established laws implied that a community’s language, location, or transportation issues should not be an excuse for their exclusion from the decision-making process. The EO is seen as the first environmental justice success in the federal policy arena (USCCR, 2003). The intent of the EO was to require that all federal agencies include environmental justice in their mission and maintains evaluation criteria to assess its programs and policies (Clinton, 1995).
This EO is divided into 6 distinct sections, with most sections having sub-sections describing responsibilities and agency tasks. To understand what is required of the USMC when incorporating environmental justice into the NEPA analysis, an overview of the EO is critical.

The first section titled Implementation, briefly describes how federal agencies will comply with the EO. It is divided into four distinct subsections: 1) Agency Responsibilities, 2) develop an Interagency Working Group, 3) Development of Agency Strategies, and 4) Reports to the President.

Agency Responsibilities requires all federal agencies to incorporate environmental justice into their mission. This means they will not only identify, but also address any “disproportionately high or adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations” (Clinton, 1994). This leading sentence sets the tone of the EO as an acknowledgement of environmental injustice and a commitment to avoid it in the future (Clinton, 1994). It is important to note that NEPA already required that all proposed projects, policies and activities undergo an environmental impact review identifying environmental, human health and socioeconomic impacts prior to approving the action (NEPA, 2006). The inclusion of environmental justice into a USMC NEPA analyses is a natural step in capturing any potential disproportionately high or adverse impacts (Clinton, 1994; DoD, 1995).

In the section Creation of an Interagency Working Group, the USEPA is ordered to administer an interagency federal working group (IWG) to provide guidance to all agencies, serve as a central organization for the agencies as they develop their strategic plans, assist in coordinated research and inter-agency cooperation, assist in data collection, examine existing data, hold public meetings, and develop interagency model projects stimulating inter-agency
cooperation (Clinton, 1994). Since the IWG was established in 1994, it has grown to include 17 federal agencies, to include DoD (USEPA, nd).

The USEPA has maintained its status as chair of the IWG. Just recently, it has reconvened the IWG for the first time since the late nineties (Obama, 2011). In 2011, the IWG published a community-based resource guide and directory of member agencies. This publication is to aide communities in accessing agency information and improves public participation with federal programs. DoD is excluded from the directory, yet included in the resource guide (USEPA, 2011). The USEPA or IWG website does not state why DoD is excluded from the directory. In response to President Obama’s commitment to environmental justice, the USEPA recently published an update to the agency’s environmental justice strategic plan, Environmental Justice 2014. It serves as a roadmap to assist the USEPA in developing cross-agency focus areas (USEPA, 2014).

In the section titled Development of Agency Strategies, each federal agency was given 12 months to finalize an environmental justice strategic plan, and 24 months to report back their implementation progress to the IWG with follow-up periodic reports as requested (Clinton, 1994). Each strategic plan must include four key components. The DoD Strategy on Environmental Justice incorporates all four key components outlined below (1995).

1) Promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations
2) Ensure greater public participation
3) Improve research and data collection relating to health and environmental statues in areas with minority populations and low-income populations
4) Identify differential patterns of consumption of natural resources among minority populations and low-income populations
Reports to the President requires that the IWG report to the president within 14 months describing the implementation of the EO, and include the final environmental justice strategies of each of the IWG member federal agencies (Clinton, 1994).

Section 2-2, Federal Agency Responsibilities for Federal Programs, is the most concise section of the EO. The intent of this section is to highlight Title VI Civil Rights Act of 1964 by stating that federal agencies “do not have the effect of excluding persons from participation in, denying persons the benefit of, or subjecting persons to discrimination under, such programs policies, and activities, because of their race, color, or national origin” (Clinton, 1994).

Research, Data Collection, and Analysis is addressed in the third section of the EO. This section directs federal agencies to include diverse population sectors in environmental human health research, while identifying multiple and cumulative exposures (Clinton, 1994). The importance of allowing for minority and low-income population participation in the public comment period was reiterated in this section. It also tasks federal agencies with collecting, maintaining and analyzing their assessments of environmental human health risks borne by minority and low-income populations (Clinton, 1994). In addition, agencies must assess the populations expected to have economic, environmental, or human health impacts as related to a facility or site action. Again, the importance of allowing for minority and low-income population participation in the public comment period was outlined in this section (Clinton, 1994).

Section 4-4, Guidance, addresses the obligation of federal agencies to communicate to populations that rely on the consumption of fish and wildlife for subsistence any risks to their consumption patterns. In addition, federal agencies must publish any scientific information available documenting health risks with consuming the fish and wildlife (Clinton, 1994).
Section 5-5 outlines the expectations of *Public Participation and Access to Information*. It recognizes the public’s right to submit comments or recommendations directly to a federal agency regarding environmental justice concerns, but asks the agencies to report all comments back to the IWG. Federal agencies must ensure all public documents, notices, and hearings are “concise, understandable, and readily accessible to the public.” The IWG has the responsibility to hold public meetings, receive public comments and prepare a summary of those comments.

Each federal agency *may*, however, translate documents, notices and hearings for the non-English speaking community when “practical and appropriate”. This last statement is open for interpretation. It is important to note that poor and minority participation in the NEPA process is highly dependent on community members’ abilities to read the publications and understand them (Johnson, 1997). Therefore, translations are a vital component to involving minority populations in the decision-making process (Johnson, 1997).

Section 6-6 contains a list of *General Provisions*. It designates the head of each federal agency responsible for implementing the EO, as well as clarifying the scope of “federal agency” as any agency on the IWG. Other provisions include allowance for federal agencies to petition for exemption and costs to comply with this are borne by each federal agency. Lastly, it states that the EO “shall not be construed to create any right to judicial review involving the compliance or noncompliance of the US, its agencies, its officers, or any other person with this order” (Clinton, 1994).

There could be an assumption drawn that such lofty requirements for major federally approved projects might inhibit economic growth in poor or minority communities. There is more to it according to the *Not in My Backyard: EO 12898 and Title VI as Tools for Achieving Environmental Justice* report (USCCR, 2003). While many projects have changed locations
based on the potential issues associated with environmental justice, communities argue that even if these projects were built in their neighborhoods, the jobs associated with them are often too skilled to hire local community members (USCCR, 2003). These communities are often left with the dichotomy of choosing their health or an industry’s economic promises (USCCR, 2003).

Throughout the EO, several recurring phrases allow for flexibility in interpretation. The phrase “practical and appropriate” is a subjective term, yet nowhere does the EO designate an authority for determination or clarification of terms. Other terms left for reader interpretation include, “may”, “appropriate information”, and “readily accessible”. To help clarify and solidify obligations of federal agencies, the CEQ produced a guidance document that is discussed in the next section (CEQ, 1995).

In summary, EO 12898 is a non-legislative rule delegating responsibilities and guidance to federal agencies to incorporate environmental justice into their mission. The requirements outlined mirror the intent of NEPA and Title VI Civil Rights Act of 1964 for all proposed federal projects, policies, and program. See appendix A for a full copy of EO 12898 and its accompanying memorandum.

**CEQ Guidance on Environmental Justice under NEPA** – The CEQ historically maintains oversight of the federal government’s NEPA implementation and compliance with other environmental policy. In the memorandum that accompanied EO 12898, President Clinton identified NEPA as a tool for addressing environmental justice issues. Naturally, the CEQ was given oversight of federal agency compliance with EO 12898 as well. CEQ has since published a guidance document which expresses that achievement of environmental justice is “wholly consistent” with NEPA (1996).
Under CEQ guidance, federal agencies must consider environmental justice issues at “each and every step” of the NEPA process. The CEQ asks that all federal agencies determine if their actions raise environmental justice concerns, are sensitive to understanding the history of a specific population, understand the proposed action, and identify the nature of environmental or health impact (1996). To ensure these factors are considered, a federal agency should base their determination on six guiding principles (CEQ, 1996). Below is an abbreviated list.

1. Consider affected area composition
2. Consider relevant public health data
3. Recognize interrelated cultural, social, occupational, historical, or economic factors
4. Develop effective public participation strategies
5. Assure meaningful community representation
6. Seek tribal representation

The CEQ makes additional considerations for federal agencies conducting an environmental justice analysis under NEPA. First, EO 12898 does not change NEPA’s existing statutory interpretations or existing case law (CEQ, 1996). If an action is expected to discriminate based on race, sex, color, origin or religion, then a federal agency should consider using the Civil Rights Act (1964) as a means to mitigate the discrimination. It is important to note, in 2001, the Supreme Court ruled that people can only enforce their civil rights if they can prove intentional discrimination (Alexander v. Sandoval, 2001). Secondly, under NEPA, identified significant impacts only brings agency awareness to alternatives, mitigation measures, and community preferences, it does not necessarily stop an action from going forward (CEQ, 1996). Lastly, the EO and CEQ do not prescribe any specific format for examining environmental justice with NEPA. CEQ tasks each federal agency to identify how they will integrate analyses of environmental justice issues (CEQ, 1996).
However, CEQ has outlined how to consider environmental justice issues within the seven phases of the NEPA EIS process (1996). The first phase is *scoping*. At this time, the federal agency should make a preliminary determination of any potential environmental justice issues. If the proposed action requires an EIS, public input concerning environmental justice should be sought after (CEQ, 1996). If minority or low-income communities have the potential to be impacted, the federal agency should develop a public involvement strategy. The second phase is *public participation*. CEQ identifies many opportunities for agencies to improve their public outreach with minority and poor communities, to include involvement of churches, clinics, and civic organizations. A successful scoping process involves active public involvement.

For the third phase of NEPA, agencies should determine composition of affected population. To determine if a minority or low-income community is likely to have a disproportionately high or adverse human health or environmental effect, CEQ recommends that the agency use census data or previous studies in their analyses (1996). When an environmental justice issue is identified, agencies must analyze how the impacts are distributed within the affected community. It is recommended that the agency use GIS to help effectively display available data to the public (CEQ, 1996).

The *alternatives* phase is where the public has an opportunity to comment on proposed action alternatives (CEQ, 1996). Agencies should encourage minority and poor communities that may potentially suffer environmental human health impacts to help develop and comment on these alternatives. In addition, if an EIS is prepared, when agencies identify an environmentally preferred alternative in the *ROD*, they must take into consideration all identified disproportionately high and adverse environmental human health impacts. In the final phase,
mitigation, the agency should consider affected populations views when developing mitigation strategies. Table 1 below outlines CEQ’s guidance on how federal agencies incorporate environmental justice within the NEPA process.

<table>
<thead>
<tr>
<th>NEPA Phases</th>
<th>Environmental Justice Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoping</td>
<td>Seek input from minority and low-income populations</td>
</tr>
<tr>
<td></td>
<td>Develop a proactive outreach strategy</td>
</tr>
<tr>
<td></td>
<td>Ensure effective communication with diverse community groups by develop cooperative working relationships</td>
</tr>
<tr>
<td>Public Participation</td>
<td>Overcome linguistic, economic, institutional, cultural, and historic barriers to improve public participation</td>
</tr>
<tr>
<td>Composition of affected population</td>
<td>Utilize census data</td>
</tr>
<tr>
<td></td>
<td>Utilize previously published studies</td>
</tr>
<tr>
<td>Analyze</td>
<td>Identify (quantitatively and spatially) whether impacts on minority or low-income populations would be disproportionally high and adverse</td>
</tr>
<tr>
<td></td>
<td>Document the nature and extent of potential impacts</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Encourage affected populations to recommend alternatives</td>
</tr>
<tr>
<td></td>
<td>Consider minority and low-income population impacts when identifying the environmentally preferred alternative in ROD</td>
</tr>
<tr>
<td>Record of Decision</td>
<td>Identify how impacts to minorities and low-income populations were acknowledged in decision-making process</td>
</tr>
<tr>
<td></td>
<td>Make ROD available to public in plain-English and appropriate translations</td>
</tr>
<tr>
<td>Mitigation</td>
<td>Consider affected populations views when developing mitigation strategies</td>
</tr>
</tbody>
</table>

The NEPA phases outlined in the table are taken directly from CEQ’s Guidance on Environmental Justice Under NEPA (1996)
**DoD Strategy on Environmental Justice** - The DoD is divided into five military branches; the Army, Navy, Air Force, Coast Guard, and Marine Corps (NSA, 1947). Established in 1775 as a naval infantry by Captain Samuel Nicholas, the USMC has been a historical component of the Department of the Navy since 1834 (NSA, 1947; Naval Orientation, 1991). Both branches, Navy and Marine Corps, report to the Secretary of the Navy. Following USMC and Naval policies, the Deputy Assistant Secretary of the Navy for Installations and Environment has authority to sign draft and FEISs and Records of Decision (RODs) (MCO 5090.2A; Procedures for Implementing NEPA, 2004).

EO 12898 and the accompanying memorandum established the scope by which federal agencies were to incorporate environmental justice into their missions, primarily by complying with NEPA (1994). DoD, a designated member of the IWG, issued their final strategy on environmental justice on March 24, 1995, as required by the EO. The strategy is divided into three sections, *Summary Report, Strategy on Environmental Justice, and Model Projects and Programs* (DoD, 1995).

Section 1, *Summary Report*, outlines DoD’s commitment to complying with EO 12898, an overview of the strategy, and a brief description of the model projects and programs it was required to identify by the EO. The *Summary* named five overarching principles that focus on institutional changes throughout all of DoD operations (1995):

- Promote partnerships with all stakeholders
- Identify the impacts of DoD activities on minority and low-income populations
- Streamline government
- Improve the day-to-day operations of installations
- Foster nondiscrimination in DoD programs

“DoD will integrate the President’s policy on environmental justice into its mission by ensuring that its programs, policies, and activities with potential disproportionately high and adverse human health or environmental effects on minority and low-income populations are identified and addressed. Affected communities will be partners in the process to address these concerns; together, we will build a foundation that reflects an awareness and understanding of environmental justice issues. In addition DoD will annually evaluate progress in implementing and maintaining compliance with the provision of the Executive order” (DoD, 1995).

The DoD Strategy on Environmental Justice identifies several specific ways to establish accountability, monitor, and evaluate their progress in implementing EO 12898. The strategy outlines five goals, offering strategies for each of the goals (DoD, 1995). Achieving these goals is an on-going endeavor and would require cooperation from all levels of the department, from top leadership down to the individual employees at the installation level (DoD, 1995). The goals are outlined in Table 2.

To meet the first strategic goal, DoD appointed the Office of the Deputy Under Secretary of Defense for Environmental Security to lead the strategy development and oversee its implementation (DoD, 1995). DoD also established the CEJ to implement, monitor and evaluate environmental justice issues (DoD, 1995). Importantly, DoD noted that all military departments have identified an office that will ensure compliance with the EO. It is important to note that there is no specific mention of NEPA within the strategy or its goals, yet the second goal does require that the effects of actions on minority and low-income populations be assessed implying NEPA as the policy vehicle (DoD, 1995). Table 2 lists the goals and how DoD proposes to achieve the goals as outlined in the DoD Strategy on Environmental Justice (1995).
Table 2. Goals Outlined in the DoD Strategy on Environmental Justice (DoD, 1995)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Implementation</td>
<td>Establish a decision-making infrastructure to implement the provisions of the EO</td>
</tr>
<tr>
<td>Goal 2: Human Health and Environmental Research, Data Collection, and Analysis</td>
<td>Identify populations and communities that may be exposed to disproportionately high and adverse human health or environmental effects caused by activities under DoD's US jurisdiction. Identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of DoD programs, policies and activities on minority and low-income populations at DoD US sites and facilities. Ensure that DoD environmental and human health research, whenever practicable and appropriate, includes diverse segments of the population. Identify the patterns of consumption for, and communicate the health risks to, populations who principally rely on fish and/or wildlife for subsistence at DoD US installations.</td>
</tr>
<tr>
<td>Goal 3: Public Participation and Outreach</td>
<td>Improve opportunities for minority and low-income communities to participate in and have access to information on DoD policies and practices that affect human health and the environment.</td>
</tr>
<tr>
<td>Goal 4: Nondiscrimination</td>
<td>Foster nondiscrimination in DoD-funded programs or activities that substantially affect human health or the environment as required by Title VI of the Civil Rights Act.</td>
</tr>
<tr>
<td>Goal 5: National Performance Review</td>
<td>Promote the principles set forth in the Report of the National Performance Review: From Red Tape to Results: Creating a Government that Works better and Costs Less, in the planning, development, and implementation of the provisions of the EO.</td>
</tr>
</tbody>
</table>

The goals outlined in Table 2 are taken directly from the DoD Strategy on Environmental Justice (1995).

The final section of the document, Model Projects and Programs, identifies seven model projects that could immediately address environmental justice concerns at the time it was signed. These model projects were a starting point for DoD to integrate environmental justice into its programs, policies, and activities (DoD, 1995).
DoD has taken additional steps to partner with Native Americans and Alaskans. In 1996, DoD signed the Native American Lands Environmental Mitigation Program devoting funds to mitigating environmental impacts on Indian lands and properties conveyed in the Alaska Native Claims Settlement Act. In October 1998, the DoD American Indian and Alaska Native Policy was signed by the Secretary of Defense. This policy acknowledges that tribes have a significant role in the decision making process on military hazardous material cleanup issues. It ultimately defined government-to-government coordination between DoD and Native American tribes for major federal projects (1998).

According to EO 12898, CEQ guidance, and the DoD strategy, the USMC was required to incorporate environmental justice into its missions, primarily by complying with NEPA. The USMC has based its EIS environmental justice analyses on the EO and CEQ guidance. Marine Corps Order (MCO) 5090.2A describes EO 12898 briefly and its relationship to NEPA in enclosure 2.

“The DoD Component documentation under 42 USC 4321 et seq. [NEPA] must contain an analysis of the impacts of the proposed action and alternatives considered, including impacts that may have disproportionately high adverse human health or environmental effects on populations covered by EO 12898” (MCO 5090.2A).

The USMC does not have a branch specific methodology for evaluating environmental justice within the NEPA process using EO 12898, CEQ guidance and the DoD strategy.

Chapter 2: Research Approach

A case study analysis evaluates how effective and consistent the USMC incorporates environmental justice concerns under the NEPA process, with a focus on EIS documentation,
using multiple sources of evidence: FEISs, supporting documentation, and interviews. This case study is based on the embedded single–case study design of Robert K. Yin’s theory in Case Study Research Design and Methods (2013). This case study framework involves studying a single industry, in this case the USMC, and three FEISs as the embedded units of analysis. The multiple units of analysis approach will allow for robust and diverse data collection. Figure 1 demonstrates the design of the embedded single-case study design.

Figure 1. Embedded single-case study design (Yin, 2013)

Research Limitations

Several research limitations were identified which may limit the study or influence methods. First, personal bias will be a factor to mitigate. The researcher is a federal employee of the USMC, and her spouse is an active duty US Marine. An attempt to overcome personal bias will be accomplished through developing clear parameters for units of analysis selection and attempting to interview non-governmental groups. Also, the researcher will work closely with her research advisor to minimize unintended bias.
Secondly, the non-governmental groups needed for the interviews were not always readily available or willing to discuss the research topic. To overcome this gap in evidence, public comments submitted during the NEPA process were heavily relied on for non-governmental and public views and opinions.

Lastly, government employees are concerned their comments may impact a project or cause an injunction, therefore limiting or filtering their responses to avoid legal exposure. Two different steps were taken to limit bias from interviewers. The interviewee was offered the opportunity to be anonymous. Secondly, by choosing FEIS with signed RODs, it reduced the ability for this research to impact the status of the ROD giving the interviewee an opportunity to comment more freely.

Selection Criteria for Units of Analysis

FEISs were chosen for this case study based on three selection criteria; sponsor organization, timeframe, and a ROD status. The EIS sponsor organization is the USMC. The timeframe required that the USMC FEISs be published between 2012 to present date. Finally, the FEISs must have a signed ROD. The USMC has published five FEISs since 2012. Only three of the FEISs met all of the case study selection criteria. The three FEISs that met the selection criteria are:

- Pendleton Basewide Water Infrastructure, FEIS (BWI FEIS).
- Land Acquisition and Airspace Establishment to Support Large-Scale Life Fire and Maneuver Training, FEIS (LAAE FEIS).
- Basing of MV-22 and H-1 Aircraft in Support of III Marine Expeditionary Force Elements in Hawaii, FEIS (Basing Aircraft FEIS).
The units of analysis represent a wide range of projects in multiple locations within the United States. One FEIS involves land and airspace acquisition (LAAE FEIS), another FEIS involves infrastructure upgrade (BWI FEIS), and the third is for the basing of aircraft allowing for a diverse analysis. Two of the FEISs involve Marine Corps bases in California; the other FEIS is for Marine Corps bases in Hawaii.

The case study framework was limited to only USMC published FEISs to narrow the research to only one branch of the military. The 2012 to present timeframe was chosen to focus on the most recent analysis techniques used by the USMC. Only FEISs that have signed RODs were selected. Since CEQ guidance on environmental justice under NEPA (1996) has specific criteria for the ROD phase, in order to fully evaluate and compare implementation consistency, all FEISs must be at the same NEPA phase.

For this research, three sources of evidence will be used as described in Table 4. The evidence collected will be used to evaluate the research objectives, primarily to analyze how effective and consistent the USMC is at incorporating environmental justice concerns under the NEPA process, with a focus on EIS documentation. The research will seek to find opportunities to develop a methodology to aid the USMC in conducting environmental justice analyses within the NEPA process.

Supporting documentation was examined to evaluate the selected FEISs and the process to develop them, including the ROD, press releases, public comments, and scoping materials. In addition, interviews with key personnel involved with developing the EIS were conducted. Evaluation assessments are made based on review of documents and records, and interview feedback, including published public comments. The interviewees were selected from the USMC, other governmental agencies, and non-governmental organizations. Effort was made to
identify and contact all types of interviewees for each FEIS in the case study. To ensure the integrity of the interview findings, the researcher obtained approval of the survey protocol from the Duke University Institutional Review Board prior to beginning reaching out to potential interviewees. See Appendix E for interview details. The majority of those solicited for interviews chose not to participate; therefore, interviews were not a primary source of information and only provided supplemental insight for the case study. Table 3 describes the sources of evidence used for the case study.

Table 3. Sources of Evidence

<table>
<thead>
<tr>
<th>Source of Data</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEIS</td>
<td>Public report outlining the official NEPA analysis</td>
</tr>
<tr>
<td>Supporting NEPA documentation</td>
<td>Peer reviewed journal articles from leading scientific and social journals; government records; presidential EOs; census records; NEPA scoping documentation; federal agency plans and strategies.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Focused interviews of USMC personnel; other governmental agency personnel; non-governmental organizations; public comments.</td>
</tr>
</tbody>
</table>

Units of Analysis Overview

_Pendleton Basewide Water Infrastructure FEIS_ (BWI FEIS) – The purpose of this EIS was to study the potential environmental and social impacts associated with the water treatment and water infrastructure improvements project aboard Marine Corps Base Camp Pendleton (BWI FEIS, 2012). An upgraded water system prepares the Base for growth, improves water distribution reliability and safety, conserves resources, and sustains compliance with emergent regulations (BWI FEIS, 2012). The FEIS evaluates and compares five alternatives and the no action alternative. Alternative five was identified in the ROD as the preferred alternative (BWI FEIS, 2012).
Marine Corps Base Camp Pendleton is the premier amphibious training Base, located on 17 miles of San Diego county coastline in southern California (BWI FEIS, 2012). It occupies nearly 125,000 acres of mostly undeveloped land. Approximately 38,000 people occupy base housing facilities (BWI FEIS, 2012). Active duty service members, their families, civilian federal employees and local businesses make up the Base’s daytime populations of 70,000 (BWI FEIS, 2012). Southern California cities have significant minority and poor populations (US Census, 2010). The BWI FEIS was published on August 2012. Joseph Ludovici, who is the acting Principal Deputy Assistant Secretary of the Navy for Energy, Installations and Environment, signed the ROD on September 25, 2012. The FEIS is 1,672 pages, and includes all CEQ required elements, including socio-economic and environmental justice analyses.

**Land Acquisition and Airspace Establishment to Support Large-Scale Life Fire and Maneuver Training** (LAAE FEIS, 2012) – The purpose for the EIS was to evaluate the potential environmental and social impacts associated with the a large-scale training range facility through a land acquisition, modification and establishment of a Special Use Airspace, and increased training profile at the Marine Corps Air Ground Combat Center (the “Combat Center”) (LAAE FEIS, 2012). The USMC has a training requirement for Marine Expeditionary Brigade level maneuver training. In order for the Combat Center to meet this training requirement, additional land and airspace must be established (LAAE FEIS, 2012). The need for this additional land and airspace is based on the current areas for training being inadequate to support such large-scale training. The FEIS evaluates and compares six alternatives and the no action alternative. Alternative 6 was identified in the ROD as the preferred alternative LAAE ROD, 2013).

The Combat Center is located in Twentynine Palms, California and is the largest combined-arms live fire training base in the Marine Corps inventory encompassing more than
935 square miles. The mission of the base includes maintaining the ability to conduct live-fire combined arms training. The LAAE FEIS was published on July 2012. Joseph Ludovici, who is the acting Principal Deputy Assistant Secretary of the Navy for Energy, Installations and Environment, signed the ROD on February 11, 2013. The FEIS is two volumes spanning a total of 1,985 pages, and includes all CEQ required elements, including socio-economic and environmental justice analyses.

*Basing of MV-22 and H-1 Aircraft in Support of III Marine Expeditionary Force Elements in Hawaii* (Basing Aircraft FEIS) - The purpose of the proposal was to analyze environmental and social impacts of basing two Osprey squadrons and one Cobra and Huey helicopter squadron to establish and maintain training and operations for these aircraft stateside (Basing Aircraft FEIS, 2012). Demolition, construction and renovation of USMC facilities in Hawaii would be necessary to accommodate these squadrons (Basing Aircraft FEIS, 2012). The current training situation has deficiencies stateside and would provide the Marine Corps the ability to be compliant with training operations requirements. The FEIS evaluates and compares five alternatives and the no action alternative. The alternative to base the squadrons at Marine Corps Base Hawaii Kaneohe Bay met all of the airfield requirements and was identified as the preferred alternative in the ROD (Basing Aircraft ROD, 2012).

The Basing Aircraft FEIS was published in June 2012. The Marine Corps sought to base and operate several squadrons in Hawaii to improve aviation training, readiness and operations. The aircraft to be based included the MV-22 Osprey and the H-1 Huey and Cobra helicopters. Joseph Ludovici, who is the acting Principal Deputy Assistant Secretary of the Navy for Energy, Installations and Environment, signed the ROD on August 1, 2012. The FEIS is two volumes
spanning a total of 1,446 pages, and includes all CEQ required elements, including socio-economic and environmental justice analyses.

**FEIS Exclusions from Case Study**

Two FEISs were excluded from the study that fit two of the three selection criteria. Both FEISs were sponsored by the USMC and fell within the timeframe of published FEISs, yet neither had signed RODs. The Chocolate Mountain Aerial Gunnery Range Land Withdrawal, with the final legislative EIS was published in April 2013. In a legislative FEIS, the USMC requests that Congress is the sole decision-making authority. The legislative FEIS does not contain a preferred alternative, and Congress will state its decision using legislative procedures. Therefore, no ROD is issued in the legislative FEIS process. The Proposed Modernization and Expansion of Townsend Bombing Range FEIS was published in March 2013. The ROD is not signed and is still pending analysis of public comments; no preferred alternative has been identified yet.

**FEIS Evaluative Criteria**

Three evaluation criteria (Table 4) were used to assess the effectiveness and consistency of the USMC conducting environmental justice analyses in FEISs. The criteria include *public participation, data management basis,* and *effectiveness.* Each criterion was defined by requirements outlined in the CEQ’s *Environmental Justice Guidance under NEPA.*
Table 4. Criteria – based on *CEQ Environmental Justice Guidance under NEPA* (1996)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>CEQ Requirement (1996)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Participation</td>
<td>• During scoping phase, sought input from potentially impacted minority and low-income populations.</td>
</tr>
<tr>
<td></td>
<td>• During public participation phase, overcame linguistic, economic, institutional, cultural and historical barriers to improve public participation.</td>
</tr>
<tr>
<td></td>
<td>• During Alternative phase, encouraged affected populations to recommend alternatives.</td>
</tr>
<tr>
<td>Data Management Basis</td>
<td>• During the analyze phase, Identify (quantitatively and spatially) whether impacts on minority or low-income populations would be disproportionally high and adverse.</td>
</tr>
<tr>
<td></td>
<td>• During the composition of population phase, utilized census and/or previous study data.</td>
</tr>
<tr>
<td></td>
<td>• During the analyze phase, document the nature and extent of potential impacts to communities.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>• During scoping phase, developed a proactive outreach strategy.</td>
</tr>
<tr>
<td></td>
<td>• During the alternatives phase, considered community impacts when identifying the environmentally preferred alternative in the ROD.</td>
</tr>
<tr>
<td></td>
<td>• During the ROD phase, identified how impacts to populations were acknowledged in the decision-making process.</td>
</tr>
<tr>
<td></td>
<td>• During the mitigation phase, considered affected population views when developing mitigation strategies</td>
</tr>
</tbody>
</table>

The requirements listed in Table 4 were taken directly from *CEQ’s Guidance on Environmental Justice under NEPA* (1996).

*Public Participation* is a key element of a successful NEPA analysis. NEPA’s effectiveness at choosing the alternative with the least environmental impact can be questionable, yet, by law, it forces federal agencies to make the NEPA analyses available to the public and consider their concerns in the decision-making process (Bulman, 1990). CEQ has identified key areas within the NEPA process that must include public participation when evaluating environmental justice issues (CEQ, 1995). These key areas include the scoping, public
participation, and alternatives phases. DoD must first identify these groups, along with their concerns and interests, in order to ensure minority and low-income groups with potential environmental and health impacts are included in the NEPA decision-making process (CEQ, 1996). Once identified, the level of interaction with these groups will be considered; such as reaching out to potentially impacted groups during the scoping phase, meetings and hearings were located where the groups could easily attend, and considering comments and recommendations of the groups when choosing or developing the preferred alternative in the ROD (CEQ, 1996).

Public participation is assessed through evaluation of FEIS scoping documents. Interviews with identified groups, when possible, as well as interviews with those involved with the development of the EIS were also considered.

*Data Management Basis* - EO 12898, CEQ guidance, and the DoD strategy all commit a large portion of their policies to research, data collection and analysis. In order to identify populations and communities that have the potential for disproportionately high and adverse human health or environmental impacts, data collection and resource must be of the highest integrity. To ensure consistent and reliable research, USMC must collect data sets from reliable sources. CEQ identifies reliable sources as the US Census Bureau or previously published studies (1996). Quantitative data should always come from a government source or published academic study. Evaluation of FEIS data management will include factors of determining if populations and communities may be exposed to disproportionately high and adverse human health or environmental effects caused by USMC activities and actions.
The sources of demographic data used for environmental justice analyses were evaluated to ensure compliance with CEQ requirements. In addition, it was assessed if the data collection used in the FEIS accurately documented the nature and extent of the potential impacts.

In addition to quality data collection, data analysis must also follow CEQ requirements in determining minority or poor populations (CEQ, 1996). The requirements listed below were taken directly from the *CEQ Guidance on Environmental Justice under NEPA (1996)*:

- Minority populations are identified as American Indian or Alaskan Native; Asian or Pacific Islander; Black, not Hispanic origin; or Hispanic.

- Minority populations should be identified if they exceed 50 percent of the general population of an affected area.

- If minority population is meaningfully greater than typical percentages for that group in other geographical areas.

- A minority population is also identified if multiple minority groups are present in one geographical location.

- A minority population is identified if the cumulative percentage is greater than 50% or meaningfully greater than the general population.

*Effectiveness* - For the purposes of this case study, effectiveness is the extent to which the USMC has implemented CEQ *Environmental Justice Guidance under NEPA*. This is defined as whether or not the USMC 1) developed a proactive outreach strategy, 2) acknowledged minority or poor population impacts in the ROD, and 3) considered potentially affected populations in mitigation strategies. To determine effectiveness, multiple sources of evidence will be considered, including documents, records, and interviews. Interviews with government personnel and NGOs were also conducted when possible. See Appendix E for interview details.
Several stakeholder groups associated with the FEISs, including affected populations, were contacted for interviews. Only one group agreed to participate. The interview questions were based on the details of their involvement with an EIS. Variations of the following interview questions were asked to participants. See Appendix E for interview participant responses.

Each FEIS will receive one of the following evaluation assessments for each criterion: poor, adequate, and excellent. Facts provided in interviews will be used to support the evidence provided by the document and record evaluation. The evaluation criteria are discussed below showing various levels of implementation and the evaluative assessment assigned to the level of implementation. The following evaluative assessments will be assigned to each FEIS based on the evidence found (Table 5):

### Table 5. Overall Assessment of FEISs based on CEQ requirements (1996)

<table>
<thead>
<tr>
<th>Public Participation</th>
<th>Data Management Basis</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POOR</strong></td>
<td>-Little to no public participation.</td>
<td>-Did not utilize census and/or previous study data.</td>
</tr>
<tr>
<td></td>
<td>-Minority and poor populations not identified in scoping phase.</td>
<td>-Did not define minority or poor populations as per CEQ requirements.</td>
</tr>
<tr>
<td></td>
<td>-Minority and poor group comments were not considered in decision-making process.</td>
<td>-Did not analyze or document the nature and extent of potential impacts to communities.</td>
</tr>
<tr>
<td><strong>ADEQUATE</strong></td>
<td>-Adequate public participation.</td>
<td>-Utilized census data and/or previous study data in analysis.</td>
</tr>
<tr>
<td></td>
<td>-Minority and poor populations identified and consulted in scoping phase.</td>
<td>-Defined minority and poor populations, but did not meet the requirements completely.</td>
</tr>
<tr>
<td></td>
<td>-Minority and poor group comments were considered in decision-making process.</td>
<td>-Analyzed and document the nature and extent of potential impacts to communities.</td>
</tr>
<tr>
<td><strong>EXCELLENT</strong></td>
<td>-High level of public participation.</td>
<td>-Identified both the impacts fully and completely as per CEQ requirements.</td>
</tr>
</tbody>
</table>
The requirements outlined in Table 5 were based on CEQ’s Guidance on Environmental Justice under NEPA (1996)

Chapter 3: Case Study Analysis

All three FEIS reported no significant environmental or health impacts to surrounding communities, even if there were poor or minority populations in the vicinity of the project (BWI FEIS, 2012; LAAE FEIS, 2013; Basing Aircraft FEIS, 2012; and Thelin, 2014). The conclusion of the FEISs was that there would be no impacts to human health or the environment outside the boundaries of the installation. Therefore, rather than focusing on adverse impacts, this case study focuses on the process of identifying poor and minority groups, despite the “less than significant environmental impacts” cited by the FEIS’s. (BWI FEIS, 2012; LAAE FEIS, 2013; and Basing Aircraft FEIS, 2012).

Evaluation of the BWI FEIS

Public Participation

A standard protocol for soliciting public involvement was used in the BWI EIS (NEPA, 2006; BWI FEIS, 2012). The NOI was published in the Federal Register initiating a comment period, indicating when and where the public open house would take place (BWI FEIS, 2012). Only one scoping open house was held in San Clemente, on the north side of Camp Pendleton. The base encompasses more than 125,000 coastal acres (BWI FEIS, 2012). The decision to only
host one open house on the north side potentially dampened the involvement of other communities living dozens of miles away from the San Clemente meeting location. If there are low-income or minority populations, including military families living aboard the base, within the scope of the project, then the location of the open house may have inhibited their meaningful involvement in the scoping phase. Scoping meetings could have been held in Oceanside and Fallbrook to improve community involvement. In the original scoping meeting, a Native American Tribe representative requested involvement to avoid disturbance of Native American artifacts during construction. This resulted in the development of a programmatic agreement that outlined mitigation strategies requiring Native American monitors be present during ground disturbance (BWI FEIS, 2012). Overall assessment is rated poor based on limited outreach, isolated locations of public meetings, and minimal outreach publications.

Data Management Basis

Census blocks were used to evaluate the distribution and population density of minorities within the vicinity of the project (BWI FEIS, 2012). US Census Bureau from 2000 data was used for the analysis. The data was organized by ethnicity by block, and then presented by total percent minority for each block. There are two distinct groups: census blocks that contain a project corridor within its boundaries (project blocks), and blocks that do not (non-project blocks). This initial evaluation shows that many of the project blocks contain pockets of high concentrations of minorities, including some blocks having 100% minority groups (BWI FEIS, 2012). The block data is then subtotaled into total project blocks and non-project blocks – with project and non-project block average percentages being approximately 43% minority, which is less than the CEQ 50% threshold (BWI FEIS, 2012). An area of concern is that the analysis compares minority group percentages to neighboring counties. This analysis missed the
opportunity to compare the minority concentrations to the state of California general population. In addition, the analysis does not consider the individual blocks with high minority concentrations as stand-alone minority groups. It only looks at total project average, and ignores individual ethnic groups. This analysis did not meet the CEQ requirements for determining minority groups (BWI FEIS, 2012). The evaluation assessment is *adequate* for partial fulfillment of CEQ requirements (CEQ, 1996).

**Effectiveness**

A proactive outreach strategy was not developed. It failed to offer equal opportunity for surrounding community members to attend open houses, including the Base inhabitants. The ROD indicates “early and open communications with interested groups”, yet does not mention consultation with Native American Tribes until the draft EIS NOA was published (BWI FEIS ROD, 2012). The ROD does indicate that Native American tribes were consulted for the development of a programmatic agreement (BWI FEIS ROD, 2012). In addition, Native American monitors were present during ground disturbing activities once the project was implemented (Thelin, 2014).

Despite the gap in properly identifying potential minority populations, the FEIS considers minority population’s views when developing mitigation strategies, such as developing a strategy to mitigate the disturbance of Native American sacred sites and artifacts, as mentioned earlier (2012). However, the views of other minority groups in the project block areas were not sought after. Even though the public outreach strategy resulted in being less than effective, the overall assessment is rated *adequate* based on the FEIS determination that no environmental or health impacts to any population within the vicinity of the proposed project would result (BWI FEIS,
With the less than significant impact determination, the ROD did not have to address impacts to minority or economically disadvantaged groups (BWI FEIS, 2012).

It is worth noting that there are pockets of Latino and Hispanic groups in the vicinity of this project, some with population totals of 100% (US Census, 2000). Therefore, translation of literature in Spanish could have been valuable to the public and increased their participation in the decision-making process. There is no reference to availability of literature in Spanish within the FEIS documentation. It is important to note that translations are not required by NEPA (2006) or CEQ (1996) (Johnson, 1997). Table 6 outlines the overall assessment scores for each of the evaluation criterion.

Table 6: BWI FEIS Evaluative Scores

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Overall Assessment Score</th>
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<tbody>
<tr>
<td>Public Participation</td>
<td>Poor</td>
</tr>
<tr>
<td>Data Management Basis</td>
<td>Adequate</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Adequate</td>
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**Evaluation of the Land Acquisition and Airspace Establishment FEIS**

**Public Participation**

The USMC began the NEPA process for a LAAE FEIS with a feasibility study to determine where the proposed action could be placed. The feasibility study found one location in the USMC inventory that could accommodate the proposed level of training, the Combat Center in Twentynine Palms, California (LAAE FEIS, 2012). Public participation and notifications began with the required NOI in the Federal Register, along with publishing in local newspapers, mailings, and the formation of a website (LAAE FEIS, 2012). The scoping phase incorporated extensive meetings with local groups in the vicinity of the proposed project (LAAE FEIS, 2012). The scoping process incorporated an extensive outreach strategy. Native American groups and
recreational user groups were consulted in the scoping phase. Public open house scoping meetings were held in three locations, including a distant location that accommodated the recreational users. The largest group of commenters was the recreational off-highway vehicle (OHV) users concerned about the de-designation of wilderness. The OHV user groups submitted two petitions opposing the proposed project with a total of 12,239 signatures (LAAE ROD, 2013). During the scoping phase, the public presented multiple alternatives and mitigation measures that were included in the development of the alternatives in the EIS. All scoping materials were published in English only.

The public outreach strategy included a series of documented meetings with various stakeholder groups in the vicinity of the proposed project, to include Native American tribal councils, OHV groups, conservation groups and various philanthropic agencies. Overall, 19,244 comments were received over the entire scoping phase, with the majority of comments coming from the OHV community (LAAE FEIS, 2012). The overall evaluative assessment for public participation was excellent and met and exceeded all CEQ requirements.

Data Management Basis

2010 census data was not available during the publication of the draft EIS, therefore the demographic information was updated in the FEIS to incorporate this newly published data (LAAE FEIS, 2012). The analysis did not look at the ethnicity or income level of the users of the area, such as the OHV groups, but only inhabitants of the areas considered to be within vicinity of the proposed action (LAAE FEIS, 2012).

The FEIS did not define concentrations of minority populations as per CEQ guidance. The Native American population percentages for the state of California are 1.7%, and 2.2% within the San Bernardino County (US Census, 2010). Within the vicinity of the project,
specific areas are more than double those county and state concentrations, with Homestead Valley having a Native American population at 4.4% (US Census, 2010). In addition, the aggregate totals of minority groups were not considered. Using CEQ guidance, the determinations of environmental justice concerns are not only subject to raw percentages being over 50%, but also include if they are meaningfully greater than the general population (1996). Therefore, the FEIS statement that “there are no known concentrations of minority populations in the immediate vicinity of the project area” could be challenged if there were documented significant environmental impacts in question.

The FEIS identifies the requirement to assess the significance of impacts to minority and low-income populations through three criteria: 1) project area must contain such populations; 2) project causes adverse impacts; and 3) such populations must bear a disproportionate burden of impacts (LAAE FEIS, 2013). Therefore, the LAAE FEIS only adequately addresses environmental justice communities by partially analyzing the census data.

**Effectiveness**

The outreach strategy was effective at reaching all groups with potential impacts. An aggressive public meeting schedule allowed for meetings with individual groups to focus on their specific concerns. It is important to note that only traditional outreach methods were used, which are not usually adequate vehicles of communication to reach communities of concern. The OHV community was the largest participator in the NEPA process, indicating a focused outreach strategy was used. The comments received directly influenced the alternatives presented in the FEIS, and the preferred alternative presented in the ROD. Both of these determinations clearly point to an effective outreach strategy. Areas of concern regarding effectiveness include the failure of the USMC to identify minority populations that are meaningfully greater than the
general population, and the absence of translations of literature into Spanish and Asian
languages. Overall, effectiveness is rated as adequate. Table 7 outlines the overall assessment
scores for each of the evaluation criterion.

Table 7: Land Acquisition FEIS Evaluative Scores

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Overall Assessment Score</th>
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<tbody>
<tr>
<td>Public Participation</td>
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<td>Data Management Basis</td>
<td>Adequate</td>
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<tr>
<td>Effectiveness</td>
<td>Adequate</td>
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**Evaluation of the Basing of MV-22 and H-1 Aircraft in Hawaii FEIS**

**Public Participation**

The development of the EIS for the proposed project of basing MV-22 and H-1 aircraft in
Hawaii began with determining which areas were suitable for meeting the purpose and need of
the project. It was determined early in the NEPA process that Marine Corps Base (MCB)
Hawaii Kaneohe Bay could accommodate the needed squadrons for aviation training and
construction of improved training facilities (Basing Aircraft FEIS, 2012). The USMC initiated
public participation as per the NEPA scoping phase requirement (NEPA, 2006). This included
publishing the NOI in the Federal Register (Basing Aircraft FEIS, 2012). The outreach strategy
included publication of the NOI in newspapers on 4 islands, mailings to 165 stakeholders, and
development of a website (Basing Aircraft FEIS, 2012). Once the NOI was published,
stakeholders were interviewed to pre-identify any concerns that may come up at the scoping
open house. Five scoping open houses were held on four different Hawaiian Islands (Basing
Aircraft FEIS, 2012). One of the comments received at an open house recommended extending
the comment period (Basing Aircraft FEIS, 2012). Project managers agreed to extend the
comment period by one month. The availability of public participation in commenting on the
draft EIS was published in the Federal Register just before the holiday season on November 10. The public again requested an extension of the comment period based on the inconvenience of the holiday season and the government refused (Basing Aircraft FEIS, 2012). Hard copies were distributed to stakeholder groups and libraries, and were available on the project website. The availability of the FEIS also followed procedure for soliciting public participation.

The EIS process followed the requirements for public participation. Areas of concern include public comments on the inconvenience of the draft EIS comment period and open houses falling over the holiday season. Overall, public participation is rated as *adequate*.

*Data Management Basis*

The FEIS quantitatively identified low-income and minority groups (2012). The FEIS utilized census data determined by the 2010 American Census Survey. The data represented each income and race/ethnicity to demonstrate the percent of the populations and total percent of races recorded (Basing Aircraft FEIS, 2012). Oddly, it did not include the Hispanic or Latino population in the total percent of races. An area of concern is that CEQ guidance on determining minority groups was only partially fulfilled. The minority population totals were not compared to the general population. Without comparing to the general population it is impossible to determine if the aggregate or individual groups are meaningfully greater than typical percentages for that group in the general population. If the percentage of Native Hawaiians in Kaneohe was compared to the state of Hawaii general population, it could demonstrate that this area has a meaningfully greater percentage of Native Hawaiians. As per the US Census Bureau, the state’s population of Native Hawaiians is 23%, whereas, Kaneohe is 33.2% (US Census, 2010, Basing Aircraft FEIS, 2012). By using CEQ guidelines, the project area contains a minority group that is meaningfully greater than the general Hawaiian population. In addition, the analysis combined
the minority populations for all of the geographical areas surrounding the project (Basing Aircraft FEIS, 2012). This type of analysis may have overlooked pockets of minority populations that could potentially bear a disproportionate burden of pollution caused by the project, if there was a significant impact identified. In this case, the environmental impacts were less than significant indicating no environmental justice concerns. Finally, the analysis to identify minority or poor groups was not acknowledged or identified in the FEIS or ROD. The economic analysis clearly demonstrated that there were no groups identified as poor. Based on the partial fulfillment of CEQ requirements on determination of minority groups, the data management basis has an evaluation of *adequate*.

**Effectiveness**

The FEIS recognizes Native Hawaiian groups’ rights to negotiate with a government-to-government equality by discussing the trading of lands with the US government by Hawaii’s crown princess, Victoria Kamamalu (Basing Aircraft FEIS, 2012). The FEIS then demonstrates this level of consultation with native groups to develop a programmatic agreement to mitigate impacts to historic properties and traditional areas. It is important to note, with such large concentrations of native Hawaiians within the vicinity of the project, an analysis showing the impacts to these specific groups as compared with the general population, even if negligible or nonexistent, would have been a valuable element of the decision making process. In addition, the ROD did not mention how public comments influenced the decision-making process of choosing a preferred alternative. With the majority of the public comments focusing on current noise pollution compounded with proposed noise pollution, and complaints about the time of noise pollution, this was a clear opportunity to engage the public on developing mitigation strategies despite less than significant impacts cited by the USMC (Basing Aircraft FEIS, 2012).
The ROD states that operational requirements were the primary basis of deciding the preferred alternative. The no action alternative is identified as the environmentally preferred alternative in the ROD, yet states that impacts from the other two alternatives would be avoided or mitigated. There was no mention of public comment and its influence on the choice of alternative (Basing Aircraft ROD, 2012). No alternative language was found for any of the information or documents made public. It is important to note the Asian population of Kaneohe was documented at 58% (US Census, 2010). Based on the consultation with native Hawaiian tribes to develop the programmatic agreement, the evaluative assessment is adequate. Table 8 outlines the overall assessment scores for each of the evaluation criterion.

Table 8: Basing Aircraft in HI FEIS Evaluative Scores

<table>
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<th>Evaluation Criteria</th>
<th>Overall Assessment Score</th>
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<tbody>
<tr>
<td>Public Participation</td>
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<td>Data Management Basis</td>
<td>Adequate</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Adequate</td>
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**FEIS Evaluation Discussion**

The three FEISs evaluated within this case study demonstrated very different methodologies for conducting the environmental justice analyses. There was little consistency in defining a minority population, evaluating impacts or interpreting overall CEQ requirements. See Appendix F for a summary of overall evaluation assessments comparing all three FEISs.

By developing a branch specific methodology, the USMC could be consistent in the development of environmental justice analyses, therefore limiting legal exposure and potential impacts to poor and minority groups (Thelin, 2014). In order for such a methodology to be successful, it must be based on CEQ and EPA guidance to help guide the NEPA practitioner in conducting the analysis.
When defining a minority population, there was no consistent analysis across all three FEISs. In addition, the BWI FEIS (2012) compared minority group concentrations averaged over all geographical areas potentially impacted even though large, whereas the other two looked at the minority and low-income concentrations of individual towns (LAAE, 2012; Basing Aircraft, 2012). The FEIS for Basing Aircraft (2012) compared minority concentrations to the general population of Hawaii, whereas the other two FEISs looked at neighboring cities or counties to determine general population comparisons (LAAE FEIs, 2012; BWI FEIS, 2012). The Land Acquisition FEIS only compared the minority and low-income concentrations to its own county, San Bernardino (BWI FEIS 2012; LAAE FEIS, 2012; and Basing Aircraft FEIS, 2012).

The public participation levels for each FEIS were vastly different. Only one of the projects, LAAE FEIS, identified potential environmental justice concerns in the scoping phase. No potential minority or low-income groups were consulted until after they commented during the scoping phase for the remaining two proposed projects. The level of communication with the community was inconsistent across all three FEISs. The BWI FEIS only held one scoping meeting and one open house for the draft EIS even though the area of the project was very large. Two of the EISs created websites and literature in addition to the NOI publication, whereas one EIS only published the NOI (BWI FEIS 2012; LAAE FEIS, 2009; and Basing Aircraft FEIS, 2012).

The inconsistencies on data management and public participation led to varied results in the effectiveness of implementing environmental justice concerns under NEPA in the FEIS documentation. By not fully adhering to CEQ requirements, all three FEISs did not completely define minority groups (1996). By not defining minority groups or showing minority groups had
equal voice in the decision-making process, it is difficult to categorically state that the proposed projects has no environmental justice concerns.

All three FEIS analyses had an overall assessment for Data Management Basis of adequate based on partially analyzing census data as per CEQ requirements. The LAAE FEIS rated excellent in effectiveness, whereas the other two FEISs rated adequate. See Table 9 for the overall assessment scores.

Table 9: Evaluation Criteria Scoring Overview

<table>
<thead>
<tr>
<th></th>
<th>Basing Aircraft in HI</th>
<th>Land Acquisition</th>
<th>BWI</th>
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<tr>
<td>Basis</td>
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<tr>
<td>Effectiveness</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
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Chapter 4: Conclusion

Environmental justice can be a challenge to DoD as it balances national security with environmental impacts. EO 12898 (Clinton, 1994) reinforces the Civil Rights Act of 1964 requiring that DoD analyze environmental justice concerns for all actions. The purpose of this study was to analyze how effective and consistent the USMC incorporated environmental justice analysis under NEPA, with a focus on EIS documentation. This analysis also explored the definition of environmental justice and related terminology and the history of the movement. Specifically, the analysis was designed to evaluate two research objectives. The research objectives guided the case study and analysis.

Identify the how effective and consistent the USMC incorporates environmental justice concerns into the NEPA process, focusing on FEIS documentation since 2012. The USMC has included basic environmental justice analyses into its EIS process based on CEQ guidance. The extent of implementation within FEIS documentation is not fully compliant with CEQ
requirements (1996). The FEISs cite EO 12898 and CEQ guidance, yet fail to implement the guiding principles fully. An environmental justice analysis is included in each FEIS, yet not a single FEIS properly defines a minority group in the project area or uses consistent analysis techniques. None of the FEISs contain any type of specific minority group impact analysis, as determined by citing less than significant impacts to communities off of the installations (BWI FEIS 2012; LAAE FEIS, 2012; and Basing Aircraft FEIS, 2012). All three FEISs included in the case study cite no environmental justice concerns, no mitigation measures needed.

*Identify the gaps in USMC NEPA implementation inhibiting effective environmental justice analysis within FEISs.* The USMC could avoid gaps and inconsistencies within environmental justice analyses by developing a branch specific methodology or guidance documents. The FEISs used census data and identified general population very differently. In most cases, no minority groups were identified, therefore no analysis of disproportionately adverse or high impacts were evaluated. An environmental justice methodology would define minority population clearly for purposes of FEIS analyses and give guidance on how to determine impacts to minority groups so that even if minority or low-income populations in areas are small, disproportionately high and adverse effect of a project on minority group pockets would not be overlooked. Environmental justice analysis should be based on impacts and not overall population size.

**Recommendation**

It is recommended that the USMC develop a methodology for conducting environmental justice analysis. A methodology will give the USMC specific guidelines on consistently incorporating environmental justice concerns and analyses into the EIS process. The
methodology should include three sections: an introduction, a methodology, and impact analysis section. The introduction would describe environmental justice and the requirements of federal agencies to evaluate environmental justice under NEPA. The methodology section would outline the process and procedures to identify minority and low-income populations and ensure their participation in the decision-making process. The analysis section will cover how to determine disproportionately high human health and environmental impacts from the proposed project and if these areas contain minority or low-income populations. By determining a clear methodology, the inconsistency of determining minority and low-income populations as demonstrated in the case study would be avoided.

Areas for Future Study

Areas for future study include the following topics:

1. Analysis of USMC implementation of environmental justice policy for installation level activities, such as Installation Master Plans and annual audits.

2. Analysis of the usability of environmental justice analyses from the public’s perspective.

3. Impacts of environmental justice principles on national security and military preparedness.

Summary

This research project examined how the USMC has incorporated CEQ’s requirements for environmental justice analyses under the NEPA FEIS process. The analysis included a case study looking at the three most recent FEISs that were sponsored by the USMC and had a signed ROD. Overall, USMC has incorporated environmental justice into all NEPA FEISs, yet has shown
inconsistencies in how environmental justice concerns are identified and evaluated. It is recommended that an environmental justice methodology be developed to assist USMC project managers in consistently evaluating and identifying environmental justice concerns under NEPA.
Appendix A:

Presidential Memorandum and Executive Order 12898
MEMORANDUM FOR THE HEADS OF ALL DEPARTMENTS AND AGENCIES

SUBJECT: Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Today I have issued an Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. That order is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice. That order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

The purpose of this separate memorandum is to underscore certain provision of existing law that can help ensure that all communities and persons across this Nation live in a safe and healthful environment. Environmental and civil rights statutes provide many opportunities to address environmental hazards in minority communities and low-income communities. Application of these existing statutory provisions is an important part of this Administration's efforts to prevent those minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects.

I am therefore today directing that all department and agency heads take appropriate and necessary steps to ensure that the following specific directives are implemented immediately:

In accordance with Title VI of the Civil Rights Act of 1964, each Federal agency shall ensure that all programs or activities receiving Federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.
Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities.

Each Federal agency shall provide opportunities for community input in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of meetings, crucial documents, and notices.

The Environmental Protection Agency, when reviewing environmental effects of proposed action of other Federal agencies under section 309 of the Clean Air Act, 42 U.S.C. section 7609, shall ensure that the involved agency has fully analyzed environmental effects on minority communities and low-income communities, including human health, social, and economic effects.

Each Federal agency shall ensure that the public, including minority communities and low-income communities, has adequate access to public information relating to human health or environmental planning, regulations, and enforcement when required under the Freedom of Information Act, 5 U.S.C. section 552, the Sunshine Act, 5 U.S.C. section 552b, and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11044.

* * *

This memorandum is intended only to improve the internal management of the Executive Branch and is not intended to, nor does it create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person.

/signed/

WILLIAM J. CLINTON
Executive Order 12898 of February 11, 1994

Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1–1. Implementation.

1–101. Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.

1–102. Creation of an Interagency Working Group on Environmental Justice. (a) Within 3 months of the date of this order, the Administrator of the Environmental Protection Agency ("Administrator") or the Administrator's designee shall convene an interagency Federal Working Group on Environmental Justice ("Working Group"). The Working Group shall comprise the heads of the following executive agencies and offices, or their designees: (a) Department of Defense; (b) Department of Health and Human Services; (c) Department of Housing and Urban Development; (d) Department of Labor; (e) Department of Agriculture; (f) Department of Transportation; (g) Department of Justice; (h) Department of the Interior; (i) Department of Commerce; (j) Department of Energy; (k) Environmental Protection Agency; (l) Office of Management and Budget; (m) Office of Science and Technology Policy; (n) Office of the Deputy Assistant to the President for Environmental Policy; (o) Office of the Assistant to the President for Domestic Policy; (p) National Economic Council; (q) Council of Economic Advisers; and (r) such other Government officials as the President may designate. The Working Group shall report to the President through the Deputy Assistant to the President for Environmental Policy and the Assistant to the President for Domestic Policy.

(b) The Working Group shall: (1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1–103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;

(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3–3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice;
(6) hold public meetings as required in section 5–502(d) of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies.

1–103. Development of Agency Strategies. (a) Except as provided in section 6–605 of this order, each Federal agency shall develop an agency-wide environmental justice strategy, as set forth in subsections (b)–(e) of this section that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The environmental justice strategy shall list programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to, at a minimum: (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations; (2) ensure greater public participation; (3) improve research and data collection relating to the health of and environment of minority populations and low-income populations; and (4) identify differential patterns of consumption of natural resources among minority populations and low-income populations. In addition, the environmental justice strategy shall include, where appropriate, a timetable for undertaking identified revisions and consideration of economic and social implications of the revisions.

(b) Within 4 months of the date of this order, each Federal agency shall identify an internal administrative process for developing its environmental justice strategy, and shall inform the Working Group of the process.

(c) Within 6 months of the date of this order, each Federal agency shall provide the Working Group with an outline of its proposed environmental justice strategy.

(d) Within 10 months of the date of this order, each Federal agency shall provide the Working Group with its proposed environmental justice strategy.

(e) Within 12 months of the date of this order, each Federal agency shall finalize its environmental justice strategy and provide a copy and written description of its strategy to the Working Group. During the 12 month period from the date of this order, each Federal agency, as part of its environmental justice strategy, shall identify several specific projects that can be promptly undertaken to address particular concerns identified during the development of the proposed environmental justice strategy, and a schedule for implementing those projects.

(f) Within 24 months of the date of this order, each Federal agency shall report to the Working Group on its progress in implementing its agency-wide environmental justice strategy.

(g) Federal agencies shall provide additional periodic reports to the Working Group as requested by the Working Group.

1–104. Reports to the President. Within 14 months of the date of this order, the Working Group shall submit to the President, through the Office of the Deputy Assistant to the President for Environmental Policy and the Office of the Assistant to the President for Domestic Policy, a report that describes the implementation of this order, and includes the final environmental justice strategies described in section 1–103(e) of this order.

Sec. 2–2. Federal Agency Responsibilities for Federal Programs. Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.
Sec. 3–3. Research, Data Collection, and Analysis.

3–301. Human Health and Environmental Research and Analysis. (a) Environmental human health research, whenever practicable and appropriate, shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards.

(b) Environmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures.

(c) Federal agencies shall provide minority populations and low-income populations the opportunity to comment on the development and design of research strategies undertaken pursuant to this order.

3–302. Human Health and Environmental Data Collection and Analysis. To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. section 552a): (a) each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(b) In connection with the development and implementation of agency strategies in section 1–103 of this order, each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public, unless prohibited by law; and

(c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are: (1) subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11001–11050 as mandated in Executive Order No. 12856; and (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law.

(d) In carrying out the responsibilities in this section, each Federal agency, whenever practicable and appropriate, shall share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

Sec. 4–4. Subsistence Consumption of Fish and Wildlife.

4–401. Consumption Patterns. In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

4–402. Guidance. Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or
wildlife. Agencies shall consider such guidance in developing their policies and rules.

Sec. 5–5. Public Participation and Access to Information. (a) The public may submit recommendations to Federal agencies relating to the incorporation of environmental justice principles into Federal agency programs or policies. Each Federal agency shall convey such recommendations to the Working Group.

(b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations.

(c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

(d) The Working Group shall hold public meetings, as appropriate, for the purpose of fact-finding, receiving public comments, and conducting inquiries concerning environmental justice. The Working Group shall prepare for public review a summary of the comments and recommendations discussed at the public meetings.

Sec. 6–6. General Provisions.

6–601. Responsibility for Agency Implementation. The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order.

6–602. Executive Order No. 12250. This Executive order is intended to supplement but not supersede Executive Order No. 12250, which requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Nothing herein shall limit the effect or mandate of Executive Order No. 12250.

6–603. Executive Order No. 12875. This Executive order is not intended to limit the effect or mandate of Executive Order No. 12875.

6–604. Scope. For purposes of this order, Federal agency means any agency on the Working Group, and such other agencies as may be designated by the President, that conducts any Federal program or activity that substantially affects human health or the environment. Independent agencies are requested to comply with the provisions of this order.

6–605. Petitions for Exemptions. The head of a Federal agency may petition the President for an exemption from the requirements of this order on the grounds that all or some of the petitioning agency’s programs or activities should not be subject to the requirements of this order.

6–606. Native American Programs. Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.

6–607. Costs. Unless otherwise provided by law, Federal agencies shall assume the financial costs of complying with this order.

6–608. General. Federal agencies shall implement this order consistent with, and to the extent permitted by, existing law.

6–609. Judicial Review. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving the compliance or noncompliance
of the United States, its agencies, its officers, or any other person with this order.

William Clinton

THE WHITE HOUSE,
Appendix B:

Council on Environmental Quality: Environmental Justice Guidance under NEPA
Environmental Justice
Guidance Under the National Environmental Policy Act

Council on Environmental Quality
Front cover photograph of John Heinz National Wildlife Refuge at Tinicum by John and Karen Hollingsworth

Front cover photograph of school bus and children by Sam Kittner.
ENVIRONMENTAL JUSTICE
Guidance Under the
National Environmental Policy Act

Council on Environmental Quality
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I. Introduction

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."\(^1\) provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The Executive Order makes clear that its provisions apply fully to programs involving Native Americans.

In the memorandum to heads of departments and agencies that accompanied Executive Order 12898, the President specifically recognized the importance of procedures under the National Environmental Policy Act (NEPA)\(^2\) for identifying and addressing environmental justice concerns. The memorandum states that "each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by [NEPA]." The memorandum particularly emphasizes the importance of NEPA's public participation process, directing that "each Federal agency shall provide opportunities for community input in the NEPA process." Agencies are further directed to "identify potential effects and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices."

The Council on Environmental Quality (CEQ) has oversight of the Federal government's compliance with Executive Order 12898 and NEPA.\(^3\) CEQ, in consultation with EPA and other affected agencies, has developed this guidance to further assist Federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed. To the extent practicable and permitted by law, agencies may supplement this guidance with more specific procedures tailored to particular programs or activities of an individual department, agency, or office.

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2 42 U.S.C. §4321 et seq.
3 Certain oversight functions in the Executive Order are delegated to the Deputy Assistant to the President for Environmental Policy. Following the merger of the White House Office on Environmental Policy with CEQ, the Chair of CEQ assumed those functions. The Environmental Protection Agency (EPA) has lead responsibility for implementation of the Executive Order as Chair of the Interagency Working Group (IWG) on Environmental Justice.
II.

Executive Order 12898 and the Presidential Memorandum

In addition to the general directive in Executive Order 12898 that each agency identify and address, as appropriate, "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations," there are several provisions of the Executive Order and a number of supporting documents to which agencies should refer when identifying and addressing environmental justice concerns in the NEPA process.

First, the Executive Order itself contains particular emphasis on four issues that are pertinent to the NEPA process:

- The Executive Order requires the development of agency-specific environmental justice strategies. Thus, agencies have developed and should periodically revise their strategies providing guidance concerning the types of programs, policies, and activities that may, or historically have, raised environmental justice concerns at the particular agency. These guidances may suggest possible approaches to addressing such concerns in the agency's NEPA analyses, as appropriate.

- The Executive Order recognizes the importance of research, data collection, and analysis, particularly with respect to multiple and cumulative exposures to environmental hazards for low-income populations, minority populations, and Indian tribes. Thus, data on these exposure issues should be incorporated into NEPA analyses as appropriate.

- The Executive Order provides for agencies to collect, maintain, and analyze information on patterns of subsistence consumption of fish, vegetation, or wildlife. Where an agency action may affect fish, vegetation, or wildlife, that agency action may

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4 Executive Order No. 12898, 59 Fed. Reg. at 7630 (Section 1-101).

5 Id. at 7630 (Section 1-103).

6 Id. at 7631 (Section 3-3).

7 For further information on considering cumulative effects, see Considering Cumulative Effects Under The National Environmental Policy Act (Council on Environmental Quality, Executive Office of the President, Jan. 1997).

8 Id. at 7631 (Section 4-401).
also affect subsistence patterns of consumption and indicate the potential for disproportionately high and adverse human health or environmental effects on low-income populations, minority populations, and Indian tribes.

- The Executive Order requires agencies to work to ensure effective public participation and access to information.9 Thus, within its NEPA process and through other appropriate mechanisms, each Federal agency shall, "wherever practicable and appropriate, translate crucial public documents, notices and hearings, relating to human health or the environment for limited English speaking populations." In addition, each agency should work to "ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public."10

Second, the memorandum accompanying the Executive Order identifies four important ways to consider environmental justice under NEPA.

- Each Federal agency should analyze the environmental effects, including human health, economic, and social effects of Federal actions, including effects on minority populations, low-income populations, and Indian tribes, when such analysis is required by NEPA.11

- Mitigation measures identified as part of an environmental assessment (EA), a finding of no significant impact (FONSI), an environmental impact statement (EIS), or a record of decision (ROD), should, whenever feasible, address significant and adverse environmental effects of proposed federal actions on minority populations, low income populations, and Indian tribes.12

- Each Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices.13

- Review of NEPA compliance (such as EPA's review under § 309 of the Clean Air Act)

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9 Id. at 7632 (Section 5-5).

10 Id. at 7632 (Section 5-5).

11 Memorandum from the President to the Heads of Departments and Agencies. Comprehensive Presidential Documents No. 279. (Feb. 11, 1994).

12 Id.

13 Id.
must ensure that the lead agency preparing NEPA analyses and documentation has appropriately analyzed environmental effects on minority populations, low-income populations, or Indian tribes, including human health, social, and economic effects.\textsuperscript{14}

Third, the Interagency Working Group (IWG), established by the Executive Order to implement the order's requirements, has developed guidance on key terms in the Executive Order. The guidance, reproduced as Appendix A, reflects a general consensus based on Federal agencies' experience and understanding of the issues presented. Agencies should apply the guidance with flexibility, and may consider its terms a point of departure rather than conclusive direction in applying the terms of the Executive Order.

\textsuperscript{14} Id.
III.

Executive Order 12898 and NEPA

A. NEPA Generally

NEPA's fundamental policy is to "encourage productive and enjoyable harmony between man and his environment." In the statute, Congress "recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment." The following goals, set forth in NEPA, make clear that attainment of environmental justice is wholly consistent with the purposes and policies of NEPA:

- to "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings";

- to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences";

- to "preserve important historic, cultural, and natural aspects of our natural heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice"; and

- to "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities."

These goals are promoted through the requirement that all agencies of the Federal government shall include in every recommendation or report on proposals for legislation and other

16 42 U.S.C. § 4331(c).
17 42 U.S.C. § 4331(b).
18 42 U.S.C. § 4331(b)(2).
19 42 U.S.C. § 4331(b)(3).
21 42 U.S.C. § 4331(b)(5).
major Federal actions significantly affecting the quality of the human environment, a "detailed statement by the responsible official" on: the environmental impacts of the proposed action; adverse environmental effects that cannot be avoided should the proposal be implemented; alternatives to the proposed action; the relationship between local, short-term uses of man's environment and long-term productivity; and any irreversible or irretrievable commitments of resources involved in the proposed action itself.22

Preparation of an EA may precede preparation of an EIS, to determine whether a proposed action may "significantly affect" the quality of the human environment. The EA either will support a finding of no significant impact (FONSI), or will document the need for an EIS. Agency procedure at each step of this process should be guided by the agency's own NEPA regulations and by the CEQ regulations found at 40 C.F.R. Parts 1500-1508.

B. Principles for Considering Environmental Justice under NEPA

Environmental justice issues may arise at any step of the NEPA process and agencies should consider these issues at each and every step of the process, as appropriate. Environmental justice issues encompass a broad range of impacts covered by NEPA, including impacts on the natural or physical environment and interrelated social, cultural and economic effects.23 In preparing an EIS or an EA, agencies must consider both impacts on the natural or physical environment and related social, cultural, and economic impacts.24 Environmental justice concerns may arise from impacts on the natural and physical environment, such as human health or ecological impacts on minority populations, low-income populations, and Indian tribes, or from related social or economic impacts.

1. General Principles

Agencies should recognize that the question of whether agency action raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population, the particular type of environmental or human health impact, and the nature of the proposed action itself. There is not a standard formula for how environmental justice issues should be identified or addressed. However, the following six principles provide general guidance.

22 42 U.S.C. § 4332(c).

23 The CEQ implementing regulations define "effects" or "impacts" to include "ecological...aesthetic, historic, cultural, economic, social or health, whether direct, indirect or cumulative." 40 C.F.R. 1508.8.

• Agencies should consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and if so whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes.

• Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available. For example, data may suggest there are disproportionately high and adverse human health or environmental effects on a minority population, low-income population, or Indian tribe from the agency action. Agencies should consider these multiple, or cumulative effects, even if certain effects are not within the control or subject to the discretion of the agency proposing the action.

• Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community.

• Agencies should develop effective public participation strategies. Agencies should, as appropriate, acknowledge and seek to overcome linguistic, cultural, institutional, geographic, and other barriers to meaningful participation, and should incorporate active outreach to affected groups.

• Agencies should assure meaningful community representation in the process. Agencies should be aware of the diverse constituencies within any particular community when they seek community representation and should endeavor to have complete representation of the community as a whole. Agencies also should be aware that community participation must occur as early as possible if it is to be meaningful.

• Agencies should seek tribal representation in the process in a manner that is consistent with the government-to-government relationship between the United States and tribal governments, the federal government’s trust responsibility to federally-recognized tribes, and any treaty rights.

2. Additional Considerations

The preceding principles must be applied in light of these further considerations that are
pertinent to any analysis of environmental justice under NEPA.

- The Executive Order does not change the prevailing legal thresholds and statutory interpretations under NEPA and existing case law. For example, for an EIS to be required, there must be a sufficient impact on the physical or natural environment to be "significant" within the meaning of NEPA. Agency consideration of impacts on low-income populations, minority populations, or Indian tribes may lead to the identification of disproportionately high and adverse human health or environmental effects that are significant and that otherwise would be overlooked.25

- Under NEPA, the identification of a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory. Rather, the identification of such an effect should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population.

- Neither the Executive Order nor this guidance prescribes any specific format for examining environmental justice, such as designating a specific chapter or section in an EIS or EA on environmental justice issues. Agencies should integrate analyses of environmental justice concerns in an appropriate manner so as to be clear, concise, and comprehensible within the general format suggested by 40 C.F.R. § 1502.10.

C. Considering Environmental Justice in Specific Phases of the NEPA Process

While appropriate consideration of environmental justice issues is highly dependent upon the particular facts and circumstances of the proposed action, the affected environment, and the affected populations, there are opportunities and strategies that are useful at particular stages of the NEPA process.

1. Scoping

During the scoping process, an agency should preliminarily determine whether

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25 Title VI of the Civil Rights Act of 1964, U.S.C. 2000d et seq., and agency implementing regulations, prohibit recipients of federal financial assistance from taking actions that discriminate on the basis of race, sex, color, national origin, or religion. If an agency is aware that a recipient of federal funds may be taking action that is causing a racially discriminatory impact, the agency should consider using Title VI as a means to prevent or eliminate that discrimination.
an area potentially affected by a proposed agency action may include low-income populations, minority populations, or Indian tribes, and seek input accordingly. When the scoping process is used to develop an EIS or EA, an agency should seek input from low income populations, minority populations, or Indian tribes as early in the process as information becomes available. Any such determination, as well as the basis for the determination, should be more substantively addressed in the appropriate NEPA documents and communicated as appropriate during the NEPA process.

If an agency identifies any potentially affected minority populations, low-income populations, or Indian tribes, the agency should develop a strategy for effective public involvement in the agency's determination of the scope of the NEPA analysis. Customary agency practices for notifying the public of a proposed action and subsequent scoping and public events may be enhanced through better use of local resources, community and other nongovernmental organizations, and locally targeted media.

### Agencies should consider enhancing their outreach through the following means:

- Religious organizations (e.g., churches, temples, ministerial associations);
- Newspapers, radio and other media, particularly media targeted to low-income populations, minority populations, or Indian tribes;
- Civic associations;
- Minority business associations;
- Environmental and environmental justice organizations;
- Legal aid providers;
- Homeowners', tenants', and neighborhood watch groups;
- Federal, state, local, and tribal governments;
- Rural cooperatives;
- Business and trade organizations;
- Community and social service organizations;
- Universities, colleges, vocational and other schools;
- Labor organizations;
- Civil rights organizations;
- Local schools and libraries;
- Senior citizens' groups;
- Public health agencies and clinics; and
- The Internet and other electronic media.

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26 For more information on scoping, see Memorandum from Nicolas C. Yost, *Scoping Guidance* (Council on Environmental Quality, Executive Office of the President, April 30, 1981).
The participation of diverse groups in the scoping process is necessary for full consideration of the potential environmental impacts of a proposed agency action and any alternatives. By discussing and informing the public of the emerging issues related to the proposed action, agencies may reduce misunderstandings, build cooperative working relationships, educate the public and decisionmakers, and avoid potential conflicts. Agencies should recognize that the identity of the relevant "public" may evolve during the process and may include different constituencies or groups of individuals at different stages of the NEPA process. This may also be the appropriate juncture to begin government-to-government consultation with affected Indian tribes and to seek their participation as cooperating agencies. For this participation to be meaningful, the public should have access to enough information so that it is well informed and can provide constructive input.

The following information may help inform the public during the scoping process:

- A description of the proposed action;
- An outline of the anticipated schedule for completing the NEPA process, with key milestones;
- An initial list of alternatives (including alternative sites, if possible) and potential impacts;
- An initial list of other existing or proposed actions, Federal and non-Federal, that may have cumulative impacts;
- Maps, drawings, and any other appropriate material or references;
- An agency point of contact;
- Timely notice of locations where comments will be received or public meetings held;
- Any telephone number or locations where further information can be obtained;
- Examples of past public comments on similar agency actions.

Thorough scoping is the foundation for the analytical process and provides an early opportunity for the public to participate in the design of alternatives for achieving the goals and objectives of the proposed agency action.
2. Public Participation

Early and meaningful public participation in the federal agency decision making process is a paramount goal of NEPA. CEQ's regulations require agencies to make diligent efforts to involve the public throughout the NEPA process. Participation of low-income populations, minority populations, or tribal populations may require adaptive or innovative approaches to overcome linguistic, institutional, cultural, economic, historical, or other potential barriers to effective participation in the decision-making processes of Federal agencies under customary NEPA procedures. These barriers may range from agency failure to provide translation of documents to the scheduling of meetings at times and in places that are not convenient to working families.

The following steps may be considered, as appropriate, in developing an innovative strategy for effective public participation:

- Coordination with individuals, institutions, or organizations in the affected community to educate the public about potential health and environmental impacts and enhance public involvement;

- Translation of major documents (or summaries thereof), provision of translators at meetings, or other efforts as appropriate to ensure that limited-English speakers potentially affected by a proposed action have an understanding of the proposed action and its potential impacts;

- Provision of opportunities for limited-English speaking members of the affected public to provide comments throughout the NEPA process;

- Provision of opportunities for public participation through means other than written communication, such as personal interviews or use of audio or video recording devices to capture oral comments;

- Use of periodic newsletters or summaries to provide updates on the NEPA process to keep the public informed;

- Use of different meeting sizes or formats, or variation on the type and number of media used, so that communications are tailored to the particular community or population;

- Circulation or creation of specialized materials that reflect the concerns and sensitivities of particular populations such as information about risks specific to subsistence consumers of fish, vegetation, or wildlife;

- Use of locations and facilities that are local, convenient, and accessible to the disabled, low-income and minority communities, and Indian tribes; and

- Assistance to hearing-impaired or sight-impaired individuals.
3. Determining the Affected Environment

In order to determine whether a proposed action is likely to have disproportionately high and adverse human health or environmental effects on low-income populations, minority populations, or Indian tribes, agencies should identify a geographic scale for which they will obtain demographic information on the potential impact area. Agencies may use demographic data available from the Bureau of the Census (BOC) to identify the composition of the potentially affected population. Geographic distribution by race, ethnicity, and income, as well as a delineation of tribal lands and resources, should be examined. Census data are available in published formats, and on CD-ROM available through the BOC. This data also is available from a number of local, college, and university libraries, and the World Wide Web. Agencies may also find that Federal, tribal, state and local health, environmental, and economic agencies have useful demographic information and studies, such as the Landview II system, which is used by the BOC to assist in utilizing data from a geographic information system (GIS). Landview II has proven to be a low-cost, readily available means of graphically accessing environmental justice data. These approaches already should be incorporated into current NEPA compliance.

Agencies should recognize that the impacts within minority populations, low-income populations, or Indian tribes may be different from impacts on the general population due to a community's distinct cultural practices. For example, data on different patterns of living, such as subsistence fish, vegetation, or wildlife consumption and the use of well water in rural communities may be relevant to the analysis. Where a proposed agency action would not cause any adverse environmental impacts, and therefore would not cause any disproportionately high and adverse human health or environmental impacts, specific demographic analysis may not be warranted. Where environments of Indian tribes may be affected, agencies must consider pertinent treaty, statutory, or executive order rights and consult with tribal governments in a manner consistent with the government-to-government relationship.

4. Analysis

When a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe has been identified, agencies should analyze how environmental and health effects are distributed within the affected community. Displaying available data spatially, through a GIS, can provide the agency and the public with an effective visualization of the distribution of health and environmental impacts among demographic populations. This type of data should be analyzed in light of any additional qualitative or quantitative information gathered through the public participation process.
Where a potential environmental justice issue has been identified by an agency, the agency should state clearly in the EIS or EA whether, in light of all of the facts and circumstances, a disproportionately high and adverse human health or environmental impact on minority populations, low-income populations, or Indian tribe is likely to result from the proposed action and any alternatives. This statement should be supported by sufficient information for the public to understand the rationale for the conclusion. The underlying analysis should be presented as concisely as possible, using language that is understandable to the public and that minimizes use of acronyms or jargon.

5. Alternatives

Agencies should encourage the members of the communities that may suffer a disproportionately high and adverse human health or environmental effect from a proposed agency action to help develop and comment on possible alternatives to the proposed agency action as early as possible in the process.

Where an EIS is prepared, CEQ regulations require agencies to identify an environmentally preferable alternative in the record of decision (ROD).27 When the agency has identified a disproportionately high and adverse human health or environmental effect on low-income populations, minority populations, or Indian tribes from either the proposed action or alternatives, the distribution as well as the magnitude of the disproportionate impacts in these communities should be a factor in determining the environmentally preferable alternative. In weighing this factor, the agency should consider the views it has received from the affected communities, and the magnitude of environmental impacts associated with alternatives that have a less disproportionate and adverse effect on low-income populations, minority populations, or Indian tribes.

6. Record of Decision

When an agency reaches a decision on an action for which an EIS was prepared, a public record of decision (ROD) must be prepared that provides information on the alternatives considered and the factors weighed in the decision-making process. Disproportionately high and adverse human health or environmental effects on a low-income population, minority population, or Indian tribe should be among those factors explicitly discussed in the ROD, and should also be addressed in any discussion of whether all practicable means to avoid or minimize environmental and other interrelated effects were adopted. Where relevant, the agency should discuss how these issues are addressed

27 40 C.F.R. § 1505.2(b)
in any monitoring and enforcement program summarized in the ROD.28

Dissemination of the information in the ROD may provide an effective means to inform the public of the extent to which environmental justice concerns were considered in the decision-making process, and where appropriate, whether the agency intends to mitigate any disproportionately high and adverse human health or environmental effects within the constraints of NEPA and other existing laws. In addition to translating crucial portions of the EIS where appropriate, agencies should provide translation, where practicable and appropriate, of the ROD in non-technical, plain language for limited-English speakers. Agencies should also consider translating documents into languages other than English where appropriate and practical.

7. Mitigation

Mitigation measures include steps to avoid, mitigate, minimize, rectify, reduce, or eliminate the impact associated with a proposed agency action.29 Throughout the process of public participation, agencies should elicit the views of the affected populations on measures to mitigate a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe and should carefully consider community views in developing and implementing mitigation strategies. Mitigation measures identified in an EIS or developed as part of a FONSI should reflect the needs and preferences of affected low-income populations, minority populations, or Indian tribes to the extent practicable.

D. Where no EIS or EA is prepared

There are certain circumstances in which the policies of NEPA apply, and a disproportionately high and adverse human health or environmental impact on low-income populations, minority populations, or Indian tribes may exist, but where the specific statutory requirement to prepare an EIS or EA does not apply. These circumstances may arise because of an exemption from the requirement, a categorical exclusion of specific activities by regulation, or a claim by an agency that another environmental statute establishes the “functional equivalent” of an EIS or EA. For example, neither an EIS nor an EA is prepared for certain hazardous waste facility permits.

In circumstances in which an EIS or EA will not be prepared and a disproportionately high and adverse human health or environmental impact on low-income populations, minority populations, or Indian tribes may exist, but where the specific statutory requirement to prepare an EIS or EA does not apply. These circumstances may arise because of an exemption from the requirement, a categorical exclusion of specific activities by regulation, or a claim by an agency that another environmental statute establishes the “functional equivalent” of an EIS or EA. For example, neither an EIS nor an EA is prepared for certain hazardous waste facility permits.

28 See 40 C.F.R. § 1505.2(c).

29 See 40 C.F.R. § 1508.20.
populations, minority populations, or Indian tribes may exist, agencies should augment their procedures as appropriate to ensure that the otherwise applicable process or procedure for a federal action addresses environmental justice concerns. Agencies should ensure that the goals for public participation outlined in this guidance are satisfied to the fullest extent possible. Agencies also should fully develop and consider alternatives to the proposed action whenever possible, as would be required by NEPA.
IV.

Regulatory Changes

Consistent with the obligation of all agencies to promote consideration of environmental justice under NEPA and in all of their programs and activities, agencies that promulgate or revise regulations, policies, and guidances under NEPA or under any other statutory scheme should consult with CEQ and EPA to ensure that the principles and approaches presented in this guidance are fully incorporated into any new or revised regulations, policies, and guidances.
V.

**Effect of this Guidance**

Agencies should apply, and comply with, this guidance prospectively. If an agency has made substantial investments in NEPA compliance, or public participation with respect to a particular agency action, prior to issuance of this guidance, the agency should ensure that application of this guidance does not result in additional delays or costs of compliance.

This guidance is intended to improve the internal management of the Executive Branch with respect to environmental justice under NEPA. The guidance interprets NEPA as implemented through the CEQ regulations in light of Executive Order 12898. It does not create any rights, benefits, or trust obligations, either substantive or procedural, enforceable by any person, or entity in any court against the United States, its agencies, its officers, or any other person.
APPENDIX A

GUIDANCE
FOR FEDERAL AGENCIES ON KEY TERMS IN
EXECUTIVE ORDER 12898

INTRODUCTION

Pursuant to Executive Order 12898 on Environmental Justice, Federal agencies are to make the achievement of environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations, low-income populations, and Indian tribes and allowing all portions of the population a meaningful opportunity to participate in the development of, compliance with, and enforcement of Federal laws, regulations, and policies affecting human health or the environment regardless of race, color, national origin, or income. To that end, set forth below is guidance for Federal agencies on key terms contained in Executive Order 12898.

This guidance is intended only to improve the internal management of the Executive Branch. It shall not be deemed to create any right, benefit, or trust obligation, either substantive or procedural, enforceable by any person, or entity in any court against the United States, its agencies, its officers, or any other person. Consequently, neither this Guidance nor the deliberative processes or products resulting from the implementation of this Guidance shall be treated as establishing standards or criteria that constitute any basis for review of the actions of the Executive Branch. Compliance with this Guidance shall not be justiciable in any proceeding for judicial review of Agency action.
TEXT OF EXECUTIVE ORDER 12898, "FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS," ANNOTATED WITH PROPOSED GUIDANCE ON TERMS IN THE EXECUTIVE ORDER

Section 1-1. IMPLEMENTATION.

1-101. Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Marianas Islands.

Low-income population: Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

Minority: Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Minority population: Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in

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30 Executive Order provisions are in standard font. Guidance is in bold font.
geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.

Disproportionately high and adverse human health effects: When determining whether human health effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable:

(a) Whether the health effects, which may be measured in risks and rates, are significant (as employed by NEPA), or above generally accepted norms. Adverse health effects may include bodily impairment, infirmity, illness, or death; and

(b) Whether the risk or rate of hazard exposure by a minority population, low-income population, or Indian tribe to an environmental hazard is significant (as employed by NEPA) and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and

(c) Whether health effects occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

Disproportionately high and adverse environmental effects: When determining whether environmental effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable:

(a) Whether there is or will be an impact on the natural or physical environment that significantly (as employed by NEPA) and adversely affects a minority population, low-income population, or Indian tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment; and
(b) Whether environmental effects are significant (as employed by NEPA) and are or may be having an adverse impact on minority populations, low-income populations, or Indian tribes that appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group; and

(c) Whether the environmental effects occur or would occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

1-102. Creation of an Interagency Working Group on Environmental Justice. (a) Within 3 months of the date of this order, the Administrator of the Environmental Protection Agency ("Administrator") or the Administrator's designee shall convene an interagency Federal Working Group on Environmental Justice ("Working Group"). The Working Group shall comprise the heads of the following executive agencies and offices, or their designees: (a) Department of Defense; (b) Department of Health and Human Services; (c) Department of Housing and Urban Development; (d) Department of Labor; (e) Department of Agriculture; (f) Department of Transportation; (g) Department of Justice; (h) Department of the Interior; (i) Department of Commerce; (j) Department of Energy; (k) Environmental Protection Agency; (l) Office of Management and Budget; (m) Office of Science and Technology Policy; (n) Office of the Deputy Assistant to the President for Environmental Policy; (o) Office of the Assistant to the President for Domestic Policy; (p) National Economic Council; (q) Council of Economic Advisers; and (r) such other Government officials as the President may designate. The Working Group shall report to the President through the Deputy Assistant to the President for Environmental Policy and the Assistant to the President for Domestic Policy.

(b) The Working Group shall:

(1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1-103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;

(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the
Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3-3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice,

(6) hold public meetings as required in section 5-502(d) of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies.


(a) Except as provided in section 6-605 of this order, each Federal agency shall develop an agency-wide environmental justice strategy, as set forth in subsections (b)-(e) of this section that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The environmental justice strategy shall list programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to, at a minimum: (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations; (2) ensure greater public participation; (3) improve research and data collection relating to the health of and environment of minority populations and low-income populations; and (4) identify differential patterns of consumption of natural resources among minority populations and low-income populations. In addition, the environmental justice strategy shall include, where appropriate, a timetable for undertaking identified revisions and consideration of economic and social implications of the revisions.

**Differential patterns of consumption of natural resources:** The term "differential patterns of consumption of natural resources" relates to subsistence and differential patterns of subsistence, and means differences in rates and/or patterns of fish, water, vegetation and/or wildlife consumption among minority populations, low-income populations, or Indian tribes, as compared to the general population.

(b) Within 4 months of the date of this order, each Federal agency shall identify an internal administrative process for developing its environmental justice strategy, and shall inform this Working Group of the process.
(c) Within 6 months of the date of this order, each Federal agency shall provide the Working Group with an outline of its proposed environmental justice strategy.

(d) Within 10 months of the date of this order, each Federal agency shall provide the Working Group with its proposed environmental justice strategy.

(e) Within 12 months of the date of this order, each Federal agency shall finalize its environmental justice strategy and provide a copy and written description of its strategy to the Working Group. During the 12 month period from the date of this order, each Federal agency, as part of its environmental justice strategy, shall identify several specific projects that can be promptly undertaken to address particular concerns identified during the development of the proposed environmental justice strategy, and a schedule for implementing those projects.

(f) Within 24 months of the date of this order, each Federal agency shall report to the Working Group on its progress in implementing its agency-wide environmental justice strategy.

(g) Federal agencies shall provide additional periodic reports to the Working Group as requested by the Working Group.

1-104. Reports to the President. Within 14 months of the date of this order, the Working Group shall submit to the President, through the Office of the Deputy Assistant to the President for Environmental Policy and the Office of the Assistant to the President for Domestic Policy, a report that describes the implementation of this order, and includes the final environmental justice strategies described in section 1-103(e) of this order.

Sec. 2-2. FEDERAL AGENCY RESPONSIBILITIES FOR FEDERAL PROGRAMS.

Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.
Sec. 3-3. RESEARCH, DATA COLLECTION, AND ANALYSIS.

3-301. Human Health and Environmental Research and Analysis.

(a) Environmental human health research, whenever practicable and appropriate, shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards.

Environmental hazard and substantial environmental hazard: For purposes of research, data collection, and analysis under Section 3-3 of the Executive Order, the term "environmental hazard" means a chemical, biological, physical or radiological agent, situation or source that has the potential for deleterious effects to the environment and/or human health. Among the factors that may be important in defining a substantial environmental hazard are: the likelihood, seriousness, and magnitude of the impact.

(b) Environmental human health analyses, whenever practical and appropriate, shall identify multiple and cumulative exposures.

Environmental Exposure: For purposes of research, data collection, and analysis under Section 3-3 of the Executive Order, the term "environmental exposure" means contact with a chemical (e.g., asbestos, radon), biological (e.g., Legionella), physical (e.g., noise), or radiological agent.

Multiple Environmental Exposure: For purposes of research, data collection, and analysis under Section 3-3 of the Executive Order, the term "multiple environmental exposure" means exposure to any combination of two or more chemical, biological, physical or radiological agents (or two or more agents from two or more of these categories) from single or multiple sources that have the potential for deleterious effects to the environment and/or human health.

Cumulative Environmental Exposure: For purposes of research, data collection, and analysis under Section 3-3 of the Executive Order, the term "cumulative environmental exposure" means exposure to one or more chemical, biological, physical, or radiological agents across environmental media (e.g., air, water, soil) from single or multiple sources, over time in one or more locations, that have the potential for deleterious effects to the environment and/or human health.
(c) Federal agencies shall provide minority populations and low-income populations the opportunity to comment on the development and design of research strategies undertaken pursuant to this order.

3-302. Human Health and Environmental Data Collection and Analysis. To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. § 552a):

(a) each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(b) In connection with the development and implementation of agency strategies in section 1-103 of this order, each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public unless prohibited by law; and

Federal environmental administrative or judicial action includes any administrative enforcement action, civil enforcement action, or criminal enforcement action initiated by, or permitting or licensing determination undertaken by, a Federal agency to enforce or execute a Federal law intended, in whole or in part, to protect human health or the environment.

(c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are: (1) subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11001-11050 as mandated in Executive Order No. 12856; and (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law.
(d) In carrying out the responsibilities in this section, each Federal agency, whenever practicable and appropriate, shall share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

Sec. 4-4. SUBSISTENCE CONSUMPTION OF FISH AND WILDLIFE.

4-401. Consumption Patterns. In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

**Subsistence consumption of fish and wildlife:** Dependence by a minority population, low-income population, Indian tribe or subgroup of such populations on indigenous fish, vegetation and/or wildlife, as the principal portion of their diet.

**Differential patterns of subsistence consumption:** Differences in rates and/or patterns of subsistence consumption by minority populations, low-income populations, and Indian tribes as compared to rates and patterns of consumption of the general population.

4-402. Guidance. Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or wildlife. Agencies shall consider such guidance in developing their policies and rules.

Sec. 5-5. PUBLIC PARTICIPATION AND ACCESS TO INFORMATION.

(a) The public may submit recommendations to Federal agencies relating to the incorporation of environmental justice principles into Federal agency programs or policies. Each Federal agency shall convey such recommendations to the Working Group.

(b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations.
(c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

(d) The Working Group shall hold public meetings, as appropriate, for the purpose of fact-finding, receiving public comments, and conducting inquiries concerning environmental justice. The Working Group shall prepare for public review a summary of the comments and recommendations discussed at the public meetings.

Sec. 6-6. GENERAL PROVISIONS.

6-601. Responsibility for Agency Implementation. The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order.

6-602. Executive Order No. 12250. This Executive order is intended to supplement but not supersede Executive Order No. 12250, which requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Nothing herein shall limit the effect or mandate of Executive Order No. 12250.

6-603. Executive Order No. 12875. This Executive order is not intended to limit the effect or mandate of Executive Order No. 12875.

6-604. Scope. For purposes of this order, Federal agency means any agency on the Working Group, and such other agencies as may be designated by the President, that conducts any Federal program or activity that substantially affects human health or the environment. Independent agencies are requested to comply with the provisions of this order.

6-605. Petitions for Exemptions. The head of a Federal agency may petition the President for an exemption from the requirements of this order on the grounds that all or some of the petitioning agency's programs or activities should not be subject to the requirements of this order.

6-606. Native American Programs. Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.
Native American programs: Native American programs include those Federal programs designed to serve Indian Tribes or individual Indians, recognizing that such programs are to be guided, as appropriate, by the government-to-government relationship, the Federal trust responsibility, and the role of tribes as governments within the Federal system.

6-607. Costs. Unless otherwise provided by law, Federal agencies shall assume the financial costs of complying with this order.

6-608. General. Federal agencies shall implement this order consistent with, and to the extent permitted by, existing law.

6-609. Judicial Review. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving the compliance or noncompliance of the United States, its agencies, its officers, or any other person with this order.
Appendix C:

Department of Defense Strategy on Environmental Justice
DEPARTMENT OF DEFENSE

Strategy

on

Environmental Justice

March 24, 1995

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SUMMARY REPORT

INTRODUCTION

On February 11, 1994, President Clinton issued an Executive Order entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The measure requires Federal agencies to identify and address disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations.

The Department of Defense (DoD) has developed a strategy that identifies the major programs and areas of emphasis it believes can best meet the intent of the Executive Order, minimize any adverse effects on the human health and environment of minority and low-income populations, and carry out the defense mission. DoD's strategy is outlined in Section 2 of this document. The implementation plan outlined in Section 3 describes the specific steps DoD will take to execute this strategy.

DoD's strategy and implementation plan are designed to allow for change as DoD identifies new opportunities and initiatives and modifies or enhances existing or proposed initiatives. Aspects of the plan may change in response to new directions from the Administration and the Interagency Working Group on Environmental Justice (IWG) chaired by the Environmental Protection Agency (EPA). In addition, DoD plans to implement the Executive Order principally through its compliance with the provisions of the National Environmental Policy Act (NEPA).

DoD's strategy focuses on implementing institutional changes, rather than one-time projects, to ensure that a healthy and safe environment exists around DoD activities that are located in or near minority and low-income populations. To that end, DoD will operate in accordance with the following principles:

- *Promote partnerships with all stakeholders*
- *Identify the impacts of DoD activities on minority and low-income populations*
- *Streamline government*
- *Improve the day-to-day operations of installations*
- *Foster nondiscrimination in DoD programs*

Existing environmental and civil rights statutes provide opportunities to address environmental hazards and economic opportunities. DoD recognizes that application of
existing statutory provisions is an important part of its efforts to ensure that its programs, policies, and activities do not have the effect of excluding persons from participating in, denying persons the benefits of, or subjecting persons to discrimination under such programs because of their race, color, or national origin.

INTERNAL ADMINISTRATIVE PROCESS

In the 12 months since the Executive Order was issued, DoD has undertaken and completed many actions to establish a decision-making infrastructure through which to implement provisions of the Executive Order:

- DoD identified the Office of the Deputy Under Secretary of Defense (Environmental Security) to lead the development of the strategy and to oversee implementation provisions of the Executive Order. DoD also established a DoD-wide Committee on Environmental Justice (CEJ) to develop, help implement, and monitor DoD's environmental justice activities. The CEJ is made up of senior level staff who will guide the implementation of environmental justice within DoD. In addition, each of the DoD military departments and key defense agencies has identified an office that will execute the requirements and goals of the Executive Order within their department.

- DoD established mechanisms for working with the IWG and has actively participated on the task force committees established to assist the IWG in implementing the provisions of the Executive Order. DoD co-chairs the IWG Task Force Committee on Outreach.

DoD will continue to build a foundation to support the integration of environmental justice into its programs, policies, and activities. Specific actions are:

- DoD continue the CEJ as a formal forum for guiding the process for implementing the strategy.

- DoD will evaluate its progress toward implementing the Executive Order on an annual basis, using the framework of the Defense Environmental Quality Annual Report to Congress to collect information and report progress.

- DoD will establish an accountability system for identifying and monitoring environmental justice activities. DoD military departments, defense agencies, and defense field activities will hold periodic reviews to assess progress and share lessons learned. As part of their self-audits, each will conduct a review of its operations, activities, and land use to determine whether disproportionately high and adverse human health and environmental effects on minority and low-income populations living near the installation have been addressed.
DoD will use NEPA as the primary mechanism to implement the provisions of the Executive Order. When appropriate, environmental assessments, environmental impact statements, and records of decision will evaluate the potential environmental effects (including human health, economic, and social) of its actions on minority and low-income populations. To encourage efforts to streamline government and eliminate duplication, DoD will coordinate with other Federal agencies to improve data collection and research needed to support environmental analysis.

DoD will strengthen the community relations plan (CRP) as a tool to understand the socioeconomic makeup of the populations in and around its operations. Installations will combine data gathered from interviews with members of the local community with information gathered from the U.S. Bureau of the Census and various databases maintained by the military departments, defense agencies, and other agencies such as the EPA and local and tribal governments. Where this information does not exist, DoD will coordinate with other Federal, state, local, and tribal governments to develop the data.

DoD will continue to maintain its data exchange and information network, known as the Defense Environmental Network Information Exchange (DENIX), to encourage sharing of data among all DoD facilities and provide information electronically to other Federal, state, local, and tribal agencies. DoD will make the information available to the public, whenever practicable and appropriate.

DoD will enhance existing or, as appropriate, develop new site-specific study mechanisms to identify high risk populations or populations. As discussed earlier, DoD will revise and reissue DoD guidelines on implementing NEPA to ensure that environmental justice considerations are documented in the NEPA process.

DoD installations will, through periodic updates to their installation master plans, assess how their operations and activities affect the communities located near DoD facilities.

DoD installations will, prior to applying for a variance from any local environmental requirements, evaluate each request to determine if such a variance will have a disproportionately high or adverse human health and environmental effect on minority and low-income populations.

DoD will review and revise as appropriate, all policy documents addressing procedures for the sale and disposal of surplus and off-specification DoD materials and supplies. The review will focus on the provision of safeguards (such as verification of buyer responsibility) to prevent such material from having disproportionately high and adverse human health and environmental effects on minority and low-income populations.
- DoD will administer environmental permitting, compliance, research, grant, and agreement programs to avoid, disproportionately high and adverse human health and environmental effects on minority and low-income populations.

- DoD will support efforts to develop and implement a coordinated strategy to conduct health research. Where appropriate, the DoD will include diverse segments of the population, such as minority and low-income populations and workers who may be exposed to substantial environmental hazards, in the development of research proposals. DoD will encourage the participation of these groups in the development of its research strategies. DoD also will review, as part of the development of integrated natural resource management plans, any risks associated with the consumption of fish and wildlife and other food gathered on DoD installations.

- DoD will integrate environmental justice training into education and outreach programs for appropriate DoD employees, including senior leaders. DoD will expand environmental and leadership training programs to ensure that DoD military personnel and civilian employees understand their obligation to address issues of environmental justice in their day-to-day activities.

- DoD will continue efforts to enhance diversity in the membership of Restoration Advisory Boards (RAB). Guidelines issued in August 1994 require that each RAB reflect the diversity of the communities in which RABs operate.

- DoD will improve existing outreach and communication systems to include environmental justice stakeholders. At a minimum, DoD installations will (1) provide translation of crucial public documents and conduct interpretation of hearings, (2) prepare documents using language that is non-technical, (3) ensure that document repositories are readily accessible to the public, (4) schedule meetings with the public at times and places that are convenient to members of the community, and (5) increase the use of community organizations and non-traditional news organizations that may be primary sources of information for minority and low-income populations.

**PUBLIC PARTICIPATION AND OUTREACH PROCESSES**

DoD recognizes that public involvement focuses on providing communities access to information on, and participation in, matters related to human health and the environment. To that end, DoD will continue to promote Restoration Advisory Boards (RAB) and Technical Review Committees (TRC) as forums for discussion about environmental cleanup activities at DoD. DoD also will develop new mechanisms to improve opportunities for minority and low-income populations to participate in decision-making processes that affect them. In addition, DoD will continue to promote public participation during the NEPA process to address potential human health and environmental effects from proposed major DoD actions, and public involvement in the development of integrated natural resource management plans. DoD will enhance existing mechanisms, such as the Legacy Resources Management Program, to encourage diverse stakeholder participation in DoD activities that affect human health and the environment.
MODEL PROJECTS AND PROGRAMS

- DoD has begun an initiative that will develop case studies of Army installations located in areas targeted for potential environmental justice concerns. Through the leadership of the Army, DoD will use existing data and programs and data collected by other sources, to analyze environmental justice impacts in the BRAC program, public participation in the cleanup program, and environmental analysis for the NEPA program. The initiative also will include the development of training opportunities and course material that can be broadened for inclusion into DoD’s training programs.

- Under the Joint Land Use Studies program, DoD works with local communities to develop a plan for implementing land use recommendations around a military installation. The fundamental objective of the JLUS program is to protect community health, safety and welfare, and the military mission.

- DoD has recently embarked on a program to post multilingual signs warning of potential environmental hazards in areas adjacent to cleanup sites. The Navy has taken the lead in this project to communicate possible risks associated with consuming fish and wildlife on DoD property undergoing environmental cleanup.

- Restoration Advisory Boards (RABs) are the cornerstone of DoD efforts to expand community involvement in decisions about cleanup at military bases. By bringing together people who reflect the many diverse interests within the community, a RAB can help identify issues of concern and reduce potential communication problems that could result in needless delays. In addition to providing input on cleanup activities, each RAB acts as a liaison between the community and the base.

- DoD is examining a proposal to develop a comprehensive Public Information and Outreach Strategic Guide that will provide specific guidance on all aspects of public information. The guide will focus on enhancing existing mechanisms, as well as developing new mechanisms for communicating with stakeholders. One proposed element takes advantage of the "information superhighway" to facilitate the exchange of information.

- The Legacy Resources Management Program was created to assist DoD in balancing the use of its lands for military training and testing with the protection of natural and cultural resources. The Legacy Program supports projects that promote an understanding of, and an appreciation for, natural and cultural resources, as well as promotes partnerships with Native American tribal governments.
SECTION 2
STRATEGY ON ENVIRONMENTAL JUSTICE

VISION

DoD will integrate the President's policy on environmental justice into its mission by ensuring that its programs, policies, and activities with potential disproportionately high and adverse human health or environmental effects on minority and low-income populations are identified and addressed. Affected communities will be partners in the process to address these concerns; together, we will build a foundation that reflects an awareness and understanding of environmental justice issues. In addition, DoD will annually evaluate progress in implementing and maintaining compliance with the provisions of the Executive order.

GOAL 1: IMPLEMENTATION

Establish a decision-making infrastructure to implement the provisions of the Executive Order

IDENTIFY AN INTERNAL ADMINISTRATIVE PROCESS FOR DEVELOPING THE STRATEGY

- Establish ODUSD(ES) as lead to staff strategy development and oversee implementation of the Executive Order (*Completed April 1994*).

- Establish a DoD-wide Committee on Environmental Justice under the Defense Environmental Security Council to coordinate and facilitate implementation of the Executive Order (*Completed May 1994*).

- Identify offices in each service branch that will execute the requirements and goals of the Executive Order. (*Completed May 1994*)

- Coordinate with agency General Counsel and the DoD Office of Equal Employment Opportunity to review legal implications of the Executive Order. (*Ongoing*)

ESTABLISH MECHANISMS FOR WORKING COOPERATIVELY WITH THE INTERAGENCY WORKING GROUP ON ENVIRONMENTAL JUSTICE (IWG)

- Select representatives from the DoD Committee on Environmental Justice to serve as members of the 10 Task Forces established to assist the IWG. (*Completed May 1994*)

- Select representative from the DoD Committee on Environmental Justice to co-chair the Outreach Task Force Committee of the IWG. (*Completed May 1994*)
IDENTIFY AN INTERNAL ADMINISTRATIVE PROCESS FOR MONITORING AND EVALUATING PROGRESS TOWARD IMPLEMENTING THE STRATEGY

- Complete a survey of DoD activities, studies, databases, agreements, and other information that could assist DoD and the IWG in meeting the goals of the Executive Order. *(Completed June 1994)*

- Evaluate implementation progress on an annual basis, including the conduct of internal interviews and take all the steps necessary to monitor compliance with the Executive Order.

- Identify and develop a schedule for implementing several specific projects to address particular concerns identified during the development of the strategy.

- Establish an accountability system for identifying, tracking, and monitoring environmental justice activities.

- Integrate environmental justice training into education and outreach programs for appropriate DoD employees, including senior leaders.

GOAL 2: HUMAN HEALTH AND ENVIRONMENTAL RESEARCH, DATA COLLECTION, AND ANALYSIS

**Identify populations and communities that may be exposed to disproportionately high and adverse human health or environmental effects caused by activities under DoD's U.S. jurisdiction**

- Establish a strategy to gather existing demographic data within appropriate geographic areas.

- Establish an information resource management strategy to maintain demographic data within appropriate geographic areas.

- Enhance existing, or as appropriate, develop new site specific study mechanisms to identify high risk populations or communities.

**Identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of DoD programs, policies and activities on minority and low-income populations at DoD U.S. sites and facilities**

- Collect, maintain, and analyze information, whenever practicable and appropriate to assess and compare disproportionately high and adverse environmental and human health risks borne by populations identified by race, national origin, and income.

- Conduct, whenever practicable and appropriate, a systematic review of DoD U.S. programs, policies and activities to identify activities that may have a
disproportionately high and adverse environmental or human health effect on minority and low-income populations.

- Assess DoD's methods for determining changes to existing or additions of new military operations and siting of facilities such as sanitary landfills and wastewater treatment plants.
- Identify opportunities to avoid or mitigate disproportionately high and adverse human health and environmental impacts on minority and low-income populations and identify and undertake new or existing model demonstration programs to reduce such effects.
- Ensure that DoD programs and actions involving environmental permitting, compliance, research, grants, and agreements, are administered so as to identify and address, where appropriate, disproportionately high and adverse human health or environmental effects of DoD U.S. activities on minority and low-income populations.

Ensure that DoD environmental and human health research, whenever practicable and appropriate, includes diverse segments of the population

- Evaluate current risk assessment methodologies as they relate to affected communities, including cumulative and multiple exposures and/or synergistic effects.
- Review, and revise accordingly, guidance for appropriate inclusion of high risk populations in DoD's health-related research.

Identify the patterns of consumption for, and communicate the health risks to, populations who principally rely on fish and/or wildlife for subsistence at DoD U.S. installations

- Assess the cumulative exposures affecting human health.
- Assess the cumulative risks related to consumption of fish and/or wildlife.

GOAL 3: PUBLIC PARTICIPATION AND OUTREACH

Improve opportunities for minority and low-income communities to participate in and have access to information on DoD policies and practices that affect human health and the environment

- Identify DoD stakeholder groups and their environmental justice concerns and interests.
- Encourage stakeholder participation in the implementation of the Executive order.
• Improve existing outreach and communication systems to include Environmental Justice stakeholders.

• Enhance existing, or as appropriate, develop new mechanisms to encourage stakeholder participation in DoD activities that affect human health and the environment.

• Provide translation of crucial public documents and conduct interpretation of hearings, where practicable and appropriate. Communication should be clear and concise to facilitate comprehension.

GOAL 4: NONDISCRIMINATION-TITLE VI

Foster nondiscrimination in DoD-funded programs or activities that substantially affect human health or the environment as required by Title VI of the Civil Rights Act

• Review compliance with Title VI of the Civil Rights Act and develop adequate oversight to determine that programs and activities receiving DoD financial assistance that affect human health or the environment do not discriminate on the basis of race, color, or national origin.

GOAL 5: NATIONAL PERFORMANCE REVIEW

Promote the principles set forth in the Report of the National Performance Review: From Red Tape to Results: Creating a Government That Works Better and Costs Less, in the planning, development, and implementation of the provisions of the Executive Order

• Identify opportunities for interagency data collection, studies, and projects that could be used to meet the goals of Executive Order 12898.

• Utilize the Defense Environmental Network and Information Exchange (DENIX) to share information with other Agencies.

• Cooperate and work with other Federal agencies in the government-wide implementation of Executive Order 12898, to ensure efficient use of information data systems and to avoid duplication and waste of federal resources.
SECTION 3
IMPLEMENTATION PLAN

INTRODUCTION

On February 11, 1994, President Clinton issued an Executive Order entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The measure requires Federal agencies to identify and address disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations.

The preceding strategy identifies the major programs and areas of emphasis where the Department of Defense (DoD) believes it can best meet the intent of the Executive Order, minimize any adverse effects on the human health and environment of minority and low-income populations, and carry out the defense mission. This implementation plan outlines the specific steps DoD will take to execute this strategy.

DoD considers this plan to be a living document. It is designed to allow for change as DoD identifies new opportunities and initiatives and modifies or enhances existing or proposed initiatives. Aspects of the plan may change in response to new directions from the Administration and the Interagency Working Group on Environmental Justice (IWG) chaired by the Environmental Protection Agency (EPA). In addition, DoD plans to implement the Executive Order principally through its compliance with the provisions of the National Environmental Policy Act (NEPA). As such, elements of this plan may change based on changes in regulations for implementing NEPA.

This plan focuses on implementing institutional changes, rather than one-time projects, to ensure that a healthy and safe environment exists around activities that are located in or near minority and low-income populations. To that end, DoD will operate in accordance with the following principles:

- **Promote partnerships with all stakeholders**: DoD believes that establishing more meaningful dialogue with its stakeholders, particularly those at the state, local, and tribal level, will help it fulfill its environmental responsibilities and carry out its mission. DoD is doing this through greater community involvement with organizations such as Restoration Advisory Boards (RAB) that facilitate cleanup at military bases. Another example is the Legacy Resources Management Program which engages the community in projects that promote an understanding of, and an appreciation for, our nation's natural and cultural resources.

- **Identify the impacts of DoD activities on minority and low-income populations**: DoD will use the NEPA process to assess the effects proposed actions may have on minority and low-income populations. The NEPA requires DoD installations to collect and analyze data on the socioeconomic makeup of the populations that may be affected by proposed actions, as well as on any risks to human health or the environment posed by the proposed action.
- **Streamline government**: In keeping with the spirit of the National Performance Review to reinvent government rather than create additional layers of bureaucracy, DoD will rely on its existing processes and programs to implement the strategy. In addition, DoD will encourage increased cooperation between Federal agencies as key to reducing duplication and waste of Federal resources.

- **Improve the day-to-day operations of installations**: DoD believes that there are many opportunities in and around military installations where DoD can increase its public participation efforts. Using RABs (for cleanup activities) and other similar groups (for non-cleanup activities), DoD installations will actively involve populations in decisions about base operations which may affect the human health and environment of the local community. Installations will take affirmative steps to include members of minority and low-income populations in planning initiatives that affect these groups.

- **Foster nondiscrimination in DoD programs**: DoD recognizes that many existing laws, such as Title VI of the Civil Rights Act of 1964, provide opportunities to address environmental hazards in minority and low-income populations. DoD efforts in this area will focus on enforcement of basic provisions for non-discrimination in its programs.

The following discussion corresponds to the goals outlined in Section 2.

**GOAL 1: IMPLEMENTATION**

DoD understands the importance of infusing an ethic of environmental justice throughout its day-to-day operations and activities. To that end, DoD will integrate principles of environmental justice into its programs, policies, and activities. Coupled with its goal to develop a highly qualified and well-trained environmental work force, DoD sees education and training as the foundation for infusing this ethic into its environmental programs.

In the 12 months since the Executive Order was issued, DoD has undertaken and completed many actions to establish a decision-making infrastructure through which to implement provisions of the Executive Order:

- DoD identified the Office of the Deputy Under Secretary of Defense (Environmental Security) to lead the development of the strategy and to oversee implementation provisions of the Executive Order. DoD also established a DoD-wide Committee on Environmental Justice (CEJ) under the Defense Environmental Security Council to develop, help implement, and monitor DoD's environmental justice activities. The CEJ is made up of senior level staff who will guide the implementation of DoD's strategy on environmental justice. In addition, each of the DoD military departments and key defense agencies has identified an office that will execute the requirements and goals of the Executive Order within its department.
• The CEJ actively worked with the DoD General Counsel and the DoD Office of Equal Employment Opportunity to ensure that the strategy incorporated the legal requirements of the Executive Order.

• DoD established mechanisms for working with the IWG and actively participated on the task force committees established to assist the IWG in implementing the provisions of the Executive Order. DoD co-chairs the IWG Task Force Committee on Outreach.

• DoD participated in the first interagency Public Meeting on Environmental Justice held in Atlanta, Georgia, on January 20, 1995.

DoD will continue to build a foundation to support the integration of environmental justice into its programs, policies, and activities. It will continue the CEJ as a formal forum for guiding the implementation process. DoD will expand environmental and leadership training programs to ensure that DoD military personnel and civilian employees understand their obligation to address issues of environmental justice in their day-to-day activities.

**Key actions:**

DoD will evaluate its progress toward implementing the Executive Order on an annual basis. Using the framework of the *Defense Environmental Quality Annual Report to Congress* to collect information and report progress, DoD will conduct internal reviews and take the steps necessary to monitor compliance with the Executive Order. The environmental quality report describes the achievements and initiatives in DoD's environmental quality programs for pollution prevention, conservation, technology, and education and training. The report is published in early spring each year and was developed to fulfill the requirements outlined in Executive Order 12856 and 10 U.S.C. Section 2706(b).

DoD will establish an accountability system for identifying and monitoring environmental justice activities. In general, accountability will be overseen through the environmental compliance review process discussed above. Specifically, DoD will identify military departments and key defense agencies that are leading or will lead the development and implementation of model projects and programs contained in the implementation plan. Each department or agency will hold periodic reviews to assess progress and share lessons learned. As part of their self-audits, DoD military departments, defense agencies, and defense field activities will conduct a review of installation operations, activities, and land use to determine whether disproportionately high and adverse human health and environmental effects on minority and low-income populations living near the installation have been addressed.

DoD will integrate environmental justice training into education and outreach programs for appropriate DoD employees, including senior leaders. To that end, DoD will develop a curriculum outline about environmental justice for incorporation into all DoD environmental training programs and appropriate DoD senior leadership courses. To ensure consistency in training between the various military departments and defense agencies, DoD will use the Inter-Service Environmental Education Review Board (ISEERB) which was established in...
1994 to integrate disparate DoD environmental education and training programs into a single school system that eliminates duplication and improves the quality of courses. To further expand awareness of environmental justice, DoD will create and disseminate to its military personnel and civilian employees a video that discusses issues of environmental justice and communicates DoD policy on environmental justice.

**GOAL 2: HUMAN HEALTH AND ENVIRONMENTAL DATA COLLECTION, ANALYSIS, AND RESEARCH**

DoD recognizes that a consistent and fully integrated approach to data management is key to assessing the impacts of its operations on local populations. To that end, DoD will use NEPA as the primary mechanism to implement the provisions of the Executive Order. When appropriate, environmental assessments, environmental impact statements, and records of decision will evaluate the potential environmental effects (including human health, economic, and social) of its actions on minority and low-income populations. To streamline government and eliminate duplication, DoD will coordinate with other Federal agencies to improve the data collection and research needed to support environmental analysis. To support that effort, DoD strongly encourages the effective use of existing databases and, if necessary, the development of new national databases.

DoD has identified three areas in which to address issues related to data collection, analysis, and research: (1) identifying minority and low-income populations that may be affected by DoD programs, (2) identifying and addressing programs that may affect minority and low-income populations, and (3) ensuring that environmental research reflects the diversity of populations.

**IDENTIFY POPULATIONS AND POPULATIONS THAT MAY BE EXPOSED TO DISPROPORTIONATELY HIGH AND ADVERSE HUMAN HEALTH AND ENVIRONMENTAL EFFECTS CAUSED BY ACTIVITIES UNDER DOD'S U.S. JURISDICTION**

Key to the NEPA process will be the identification of minority and low-income populations. DoD installations will strengthen the community relations plan (CRP) as a tool to understand the socioeconomic makeup of the populations in and around their operations. Installations will combine data gathered from interviews with members of the local community with data

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**MODEL PROJECTS/PROGRAMS**

**ENVIRONMENTAL EQUITY PROJECT**

The Department of Defense (DoD) has begun an initiative that will develop case studies of Army installations located in areas targeted for potential environmental justice concerns. Through the leadership of the Army, DoD will use existing data and programs, such as the Army's Economic Impact Forecast System and EPA databases, to provide a basis for analysis of environmental justice issues. The project also will examine data collected by other sources, including historically black colleges. The Army will use the data to analyze environmental justice impacts in the BRAC program, public participation in the cleanup program, and environmental analysis for NEPA. The initiative also will include the development of training opportunities and course material that can be broadened for inclusion into DoD's training program.
gathered from the U.S. Bureau of the Census and various databases maintained by the military departments, defense agencies, and other agencies such as the EPA and local and tribal governments. Where this information does not exist, DoD will coordinate with other Federal, state, local, and tribal governments to develop the information.

At a minimum, DoD military departments, defense agencies, and defense field activities will determine whether proposed actions will affect the environment and human health of minority and low-income populations. For those installations for which a potential impact has been identified, DoD proponents will develop data for any proposed major action that is subject to the provisions of NEPA or to the reporting requirements under the Emergency Planning and Community Right-To-Know Act.

Key actions:

- DoD military departments, defense agencies, and defense field activities will coordinate with other Federal agencies and state, local, and tribal governments to compile or develop demographic and socioeconomic data with respect to race, national origin, income level, and other appropriate information, as necessary. DoD proponents will use this information to assess whether any proposed action may have disproportionately high and adverse human health and environmental effects on minority or low-income populations. To the extent practicable, DoD will undertake these assessments during the NEPA or community planning processes.

- DoD will continue to maintain its data exchange and information network, known as the Defense Environmental Network Information Exchange (DENIX), to encourage sharing of data among all DoD facilities and provide information electronically to other Federal, state, local, and tribal agencies. DoD will make the information available to the public, whenever practicable and appropriate.

- DoD will enhance existing or, as appropriate, develop new site-specific study mechanisms to identify high risk populations or populations. As discussed earlier, DoD will revise and reissue DoD guidelines on implementing NEPA to ensure that environmental justice considerations are documented in the NEPA process.

IDENTIFY AND ADDRESS, AS APPROPRIATE, DOD PROGRAMS, POLICIES AND ACTIVITIES THAT MAY HAVE DISPROPORTIONATELY HIGH AND ADVERSE HUMAN HEALTH AND ENVIRONMENTAL EFFECTS ON MINORITY AND LOW-INCOME POPULATIONS AT DOD U.S. SITES AND FACILITIES.

DoD's primary means for addressing any disproportionately high and adverse human health and environmental effects on minority and low-income populations at DoD sites and facilities will be implemented in connection with the NEPA process. All major federal actions are subject to the NEPA process which involves assessing any potential effects to the physical and human environment. In documents prepared under NEPA, DoD will discuss the impacts of its proposed actions on minority and low-income populations.
Another means for addressing environmental justice concerns is through the master plans prepared by each installation. In preparing the master plans, DoD installations will assess how their operations and activities affect the communities located near DoD installations. During periodic updates to the master plans, the installations will evaluate whether there are any adverse impacts of its operations or activities on any minority or low-income populations with respect to human health and the physical environment.

**Key actions:**

- In the development of NEPA documents or installation master plans, DoD military departments, defense agencies, and defense field activities will collect, maintain, and analyze information for assessing whether these activities or proposed actions have disproportionately high and adverse environmental and human health effects on minority or low-income populations. For example, DoD military departments, defense agencies, and defense field activities will use the NEPA process when determining changes to existing, or additions of, new military operations and the siting of facilities such as sanitary landfills and wastewater treatment plants.

- DoD military departments, defense agencies, and defense field activities also will identify opportunities to avoid or mitigate disproportionately high and adverse human health and environmental impacts on minority and low-income populations and identify and undertake new or existing model demonstration programs to reduce such effects. For example, installations will, prior to applying for a variance from any local environmental requirements, evaluate each request to determine if such a variance will have a disproportionately high or adverse human health and environmental effect on minority and low-income populations. Similarly, DoD will review and revise as appropriate, all policy documents addressing procedures for the sale and disposal of surplus and off-specification DoD materials and supplies. The review will focus on the provision of safeguards (such as verification of buyer responsibility) to prevent such material from having disproportionately high and adverse human health and environmental effects on minority and low-income populations.

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**MODEL PROJECTS/PROGRAMS**

**JOINT LAND USE STUDIES PROGRAM (JLUS)**

Under the JLUS program, DoD works with local populations to develop a plan for implementing recommendations for land use around a military installation. The fundamental objective of the JLUS is to protect community health, safety and welfare, and the military mission.

Public involvement is an essential part of this process. The JLUS program was developed in 1985 to provide technical and financial incentives for local communities to help resolve potential conflicts between DoD mission objectives and community growth patterns.
DoD military departments, defense agencies, and defense field activities involved with environmental permitting, compliance, research, grants, and agreements, will identify and address, where appropriate, disproportionately high and adverse human health and environmental effects of these actions on minority and low-income populations. The DoD proponent will administer environmental permitting and compliance programs to avoid, whenever practicable and appropriate, disproportionately high and adverse human health and environmental effects on minority and low-income populations.

ENSURE THAT DOD ENVIRONMENTAL AND HUMAN HEALTH RESEARCH, WHENEVER PRACTICABLE AND APPROPRIATE, INCLUDES DIVERSE SEGMENTS OF THE POPULATION AT HIGH RISK FROM ENVIRONMENTAL HAZARDS, SUCH AS MINORITY POPULATIONS, LOW-INCOME POPULATIONS, AND WORKERS WHO MAY BE EXPOSED TO SUBSTANTIAL ENVIRONMENTAL HAZARDS.

DoD’s principal proponents for conducting environmental and human health research are: (1) the Office of the Assistant Director of Defense, Research, and Engineering, which is responsible for coordinating research and development programs DoD-wide; (2) the Office of the Assistant Secretary of Defense for Health Affairs, which is responsible for DoD health policies, programs, and activities; and (3) the counterpart agencies within the Military Departments, including the Army Center for Health Promotion and Preventive Medicine, Navy Environmental Health Center, and the Air Force Office of the Surgeon General. In addition, DoD works with the Agency for Toxic Substances and Disease Registry (ATSDR) under a cooperative agreement to determine the risks to human health and the physical environment that might arise from DoD activities.

DoD recognizes that health research provides an opportunity for Federal, state, local, and tribal governments to work together to eliminate duplication and reduce costs. DoD will support efforts to develop and implement a coordinated strategy on health research. Where appropriate, the DoD proponents identified above will include diverse segments of the population, such as minority and low-income populations and workers who may be exposed to substantial environmental hazards, in the development of research proposals. DoD will encourage the participation of these groups in the development of its research strategies. DoD also will review, as part of the development of integrated natural resource management

MODEL PROJECTS/PROGRAMS

ENVIRONMENTAL WARNING SIGNS

The Department of Defense has recently embarked on a program to post multi-lingual signs warning of potential environmental hazards in areas adjacent to cleanup sites. The Navy has taken the lead in this project to communicate possible risks of consuming fish and wildlife on property undergoing environmental cleanup. One program posts signs along the shoreline of Hunters Point Naval Shipyard in San Francisco, CA, in four languages: English, Spanish, Vietnamese, and Chinese. Specifically the signs warn against the consumption of shellfish taken from the waters in the area, as well as warn against potential environmental hazards in the area.
plans, the risks associated with the consumption of fish, wildlife, and other food gathered on DoD installations.

**Key actions:**

- DoD health research proponents will evaluate current risk assessment methodologies as they relate to affected populations, including cumulative and multiple exposures and/or synergistic effects.

- DoD health research proponents will develop guidance to include high risk populations in DoD's health-related research.

- For DoD installations and activities located in areas where populations rely on fish and or wildlife for subsistence, the respective proponents will:

  ⇒ Consider, during the NEPA process or the development of integrated natural resource management plans, the cumulative exposures and risks related to different patterns of consumption of fish and/or wildlife and the impact of DoD operations on fish and/or wildlife.

  ⇒ Communicate to affected populations the risks associated with differential patterns of consumption of fish and/or wildlife. DoD will broaden efforts to post environmental warning signs in English, as well as in other languages appropriate for the community in which the signs will be posted.
GOAL 3: PUBLIC PARTICIPATION AND OUTREACH

DoD recognizes that public involvement focuses on providing communities access to information on, and participation in, matters related to human health and the environment. To that end, DoD will continue to promote Restoration Advisory Boards (RAB) and Technical Review Committees (TRC) as forums for discussion about environmental cleanup activities at DoD installations. RABs are a recent addition to DoD’s efforts to provide opportunities for communities to provide input into cleanup activities at military installations. Guidelines issued in August 1994 require that each RAB reflect the diversity of the communities in which RABs operate.

DoD also will develop new mechanisms to improve opportunities for minority and low-income populations to participate in decision-making processes that affect them. In addition, DoD will continue to promote public participation during the NEPA process to address potential human health and environmental effects that may result from proposed major DoD actions. DoD will encourage public involvement in the development of integrated natural resource management plans.

DoD will enhance existing mechanisms, such as the Legacy Resources Management Program, to encourage diverse stakeholder participation in DoD activities that affect human health and the environment. The Legacy program, of which public awareness and education is a major component, promotes an understanding of, and access to, significant natural, cultural, and historical resources.

Key actions:

- DoD will identify DoD stakeholder groups and their environmental justice concerns and interests. For example, for those DoD installations for which a community relations plan (CRP) is required, each installation will strengthen its plan by identifying all stakeholders, particularly minority and low-income populations.

- DoD will enhance existing or, as appropriate, develop new mechanisms to encourage stakeholder participation in DoD activities that affect human health and the environment. DoD will continue to encourage stakeholder participation in RABs and similar groups.

MODEL PROJECTS/PROGRAMS

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<th>RESTORATION ADVISORY BOARDS (RAB)</th>
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<td>RABs are the cornerstone of DoD efforts to expand community involvement in decisions about cleanup at military bases. By bringing together people who reflect the many diverse interests within the community, a RAB can help identify issues of concern and reduce potential communication problems that could result in needless delays. In addition to providing input on cleanup activities, each RAB acts as a liaison between the community and the base.</td>
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The Department of Defense is examining a proposal to develop a comprehensive Public Information and Outreach Strategic Guide that will provide specific guidance on all aspects of public information. The guide, to be developed primarily for use by DoD installations, will focus on enhancing existing mechanisms to encourage stakeholder participation but also includes the development of new mechanisms to broaden communication to all stakeholders.

One element of the proposed strategy takes advantage of the "information superhigh-way" to seek input from, and keep stakeholders informed of, DoD activities. Other elements include the:

- Design and creation of an on-line network linking DoD and such environmental justice stakeholders as historically black colleges and universities and Native American colleges
- Design and development of an "on demand telefax" capability to provide virtual real-time telefaxed responses to stakeholders

DoD will improve existing outreach and communication systems to include environmental justice stakeholders. At a minimum, DoD will provide translation of crucial public documents and conduct interpretation of hearings, where practicable and appropriate. Documents will be written for the target audience. Each should be clear and concise, using language that is non-technical and illustrative to facilitate comprehension. DoD installations will ensure that document repositories are readily accessible to the public and schedule meetings with the public at times and places that are convenient to members of the community. In addition, installations will increase their use of community organizations and non-traditional news organizations that may be primary sources of information for minority and low-income populations. These expanded outreach efforts will include churches, community centers, tribal governments, schools, and other organizations that serve minority and low-income populations.

**GOAL 4: NONDISCRIMINATION-(TITLE VI)**

Existing environmental and civil rights statutes provide opportunities to address environmental hazards in minority and low-income populations. DoD recognizes that application of existing statutory provisions is an important part of its efforts to ensure that its programs, policies, and activities do not have the effect of excluding persons from...
participating in, denying persons the benefits of, or subjecting persons to discrimination under such programs because of their race, color, or national origin. In accordance with DoD Directive 5500.1, *Nondiscrimination in Federally Assisted Programs*, DoD will foster nondiscrimination in its programs or activities that substantially affect human health or the environment.

**Key action:**

- Review compliance with Title VI of the Civil Rights Act to confirm that programs and activities receiving DoD financial assistance that affect human health or the environment do not discriminate on the basis of race, color, or national origin.

**GOAL 5: NATIONAL PERFORMANCE REVIEW**

The National Performance Review (NPR) was an intensive six-month study of the Federal government conducted in 1993 that had as its goal: moving from red tape to results to create a government that works better and costs less. A key element of the recommendations of the NPR focuses on Federal agencies working in cooperation to provide consistent direction and avoid duplication and waste of Federal resources. To that end, DoD will identify opportunities where it can work with other Federal agencies to collect data, conduct studies, and implement projects that can be used to meet the goals of the Executive Order. DoD will promote the principles set forth in the *Report of the National Performance Review: From Red Tape to Results: Creating a Government That Works Better and Costs Less*, in the planning, development, and implementation of the provisions of the Executive Order.

**Key actions:**

- Identify opportunities for interagency data collection, studies, and projects that could be used to meet the goals of the Executive Order.

- Expand and broaden access to the Defense Environmental Network and Information Exchange (DENIX) to encourage sharing of information with other agencies.

- Cooperate and work with other Federal agencies in the government-wide implementation of Executive Order, to ensure efficient use of information data systems and to avoid duplication and waste of Federal resources.

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**MODEL PROJECTS/PROGRAMS**

**LEGACY RESOURCES MANAGEMENT PROGRAM**

The Legacy Program was created in November 1990 to assist DoD in balancing the intensive use of its lands for military training and testing with the protection of natural and cultural resources. The Legacy Program supports projects that promote an understanding of, and an appreciation for, natural and cultural resources, as well as promote partnerships with Native American tribal governments.

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*Appendix I  
Page 21*
ATTACHMENT A

E.O. 12898 of February 11, 1994 and accompanying Presidential Memorandum

ATTACHMENT B

LIST OF ACRONYMS

ATSDR Agency for Toxic Substances and Disease Registry
CEJ Committee on Environmental Justice
CRP Community Relations Plan
DENIX Defense Environmental Network and Information Exchange
DoD Department of Defense
E.O. Executive Order
EPA Environmental Protection Agency
ISEERB Inter-Service Environmental Education Review Board
IWG Interagency Working Group on Environmental Justice
JLUS Joint Land Use Studies Program
NEPA National Environmental Policy Act
NPR National Performance Review
ODUSD(ES) Office of the Deputy Under Secretary of Defense (Environmental Security)
RAB Restoration Advisory Board
TRC Technical Review Committee
Appendix D:

Principles of Environmental Justice

WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth, to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves, to ensure environmental justice, to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

The Principles of Environmental Justice (EJ)

1) Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2) Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3) Environmental Justice mandates the right to ethical, balanced and responsible use of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4) Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.

5) Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

6) Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7) Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.

8) Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.

9) Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

10) Environmental Justice considers governmental acts of environmental injustices a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11) Environmental Justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12) Environmental Justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13) Environmental Justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14) Environmental Justice opposes the destructive operations of multinational corporations.

15) Environmental Justice opposes military occupation, repression and exploitation of land, peoples and cultures, and other life forms.

16) Environmental Justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experiences and an appreciation of our diverse cultural perspectives.

17) Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth’s resources and to produce as little waste as possible, and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

More info on environmental justice and environmental racism can be found online at www.ejnet.org/ej

Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted these 17 principles of Environmental Justice. Since then, the Principles have served as a defining document for the growing grassroots movement for environmental justice.
Appendix E:

Case Study Interview

Interview with Richard Thelin, Special Counsel for USMC Western Area Counsel Office
Erin:

Here are my answers to your questions. If you need more, or have follow-up questions, please let me know. Happy to help.

Rich

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-----Original Message-----
From: Adams Civ Erin M
Sent: Tuesday, February 04, 2014 10:59 AM
To: Thelin CIV Richard W
Subject: RE: Environmental Justice Case Study

Thank you, Rich:

I have a few questions on 3 EISs that the Marine Corps has sponsored since 2012. All three have signed RODs to ensure this case study does not influence or impact the status of the action.

Here are my questions - please feel free to expound or add information that may be valuable to my research.

1. Is it important for the Marine Corps to consistently implement CEQ guidance in the NEPA process?
Answer: CEQ is the ultimate source for guidance on the NEPA process. Each Federal agency has developed its own NEPA procedures, based on CEQ's guidance. Being consistent with such guidance is likely to help the Federal agency survive any court challenge to the implementation of its NEPA process in any particular case. Therefore, consistently implementing CEQ guidance is to the agency's benefit.

2. Are the NEPA project managers and coordinators involved with EISs aware of the Department of Defense (DoD) Strategy and CEQ policy on environmental justice?

Answer: I believe that regular NEPA practitioners are fully aware of the need to consider the environmental and health impacts of a particular project on minority and low-income populations. Knowing how to do that is probably another matter and is usually left up to the contractor to do. I believe most NEPA contractors are adept at pulling this information and analysis together.

3. How well does the Marine Corps consult with minority and poor populations surrounding their facilities? Any specific efforts to identify and communicate with these groups?

Answer: This is a difficult question to address directly. This is because nearly all Marine Corps projects subject to NEPA take place on Marine Corps land, with the environmental and health impacts also contained within Marine Corps property. While our NEPA documents must comply with public participation requirements, there is usually no need to specifically identify minority and low-income populations separate from the local population as a whole. One case that I know of is that of the renovation and expansion of the Naval Special Warfare Group's Camp Billy Machen on the Chocolate Mountain Aerial Gunnery Range. The Camp is adjacent to the community of Niland, which has both a minority and low-income population. While the impacts of the project did not go beyond our boundaries, we made the draft EA available to the local community, including Spanish language announcements. As is typical for such installation inclusive projects, no public comments were received.

4. For Landex EIS - for the OHV user group, the EIS doesn't mention any demographic (income or ethnicity) analysis. Is demographic analysis of user groups impacted by the proposed action necessary for a complete EJ analysis?

Answer: In general, no, though I suppose there could be a situation where it might. So, it is fact dependent on a case-by-case basis. In the land expansion case, it was not necessary as any health or environmental impacts to OHV users would be the same for all OHV users regardless of their ethnicity or economic status. Therefore, there would be no disproportionate impacts on minority or low-income OHV users, which is what EJ analysis is all about.

5. For the CPEN BWI EIS - This project covered a massive geographical area. Why was there only one scoping meeting and one DEIS open house? Should there have been public meetings in Oceanside and Fallbrook too? Could the decision to have one in San Clemente isolate poor or minority groups from participating in the scoping and open house process?

Answer: This project encompassed two water/wastewater infrastructure projects completely within the limits of Camp Pendleton. All impacts were also contained within the boundaries of Camp Pendleton. As such, it was anticipated that there would be little public interest in the projects. The one scoping meeting that was held, in San Clemente, was attended by four people, including a member of the Pauma Band of Mission Indians. No comments were submitted by the attendees. Only one Federal agency
submitted comments during the scoping period. A similar situation existed for the DEIS. Attendance at the hearing was minimal, and only seven comments were received during the comment period, including one from a Native American Tribe. The decision to base the scoping and DEIS hearing in San Clemente was made since the bulk of the projects, and their impacts, were proposed for the northern area of Camp Pendleton. Finally, since all the impacts were contained within the Base, there would not be any health or environmental impacts, disproportionate or otherwise, on minority or low-income populations outside the Base boundary.

6. For the CPEN BWI EIS - The ROD does not address how comments from Native Americans and the public influenced the preferred alternative decision. The ROD states it was an operational decision. How were the Native American and public comments used in making the choice of alternative, if at all?

Answer: All public comments, as few as there were, were considered in the overall decision making process. As for the Native Americans, their comments were instrumental in determining the exact locations of these linear projects as they helped identify areas of concern. Additionally, Native American monitors were on site throughout any ground disturbing activity during the implementation of the project. Finally, the Tribes were parties to the NHPA Section 106 Programmatic Agreement between Camp Pendleton and the SHPO for these projects.

7. I am recommending that the USMC develop a methodology on how to conduct an environmental justice analysis under NEPA. A methodology will give the USMC specific guidelines on consistently interpreting environmental justice policy and conducting analyses based on CEQ and EPA guidance. Would this be useful?

Answer: Yes, I think it would be useful. The fact is that EJ is probably not given the depth of analysis that it probably should be. This is because most Marine Corps projects take place on Marine Corps property with few, if any, impacts off the installation. As such, there are almost always no disproportionate health or environmental impacts to minority or low-income populations. Even so, the Marine Corps as a whole could probably benefit from an established methodology for everyone to follow. The conclusions would be unlikely to change much from what they are now, but having such a methodology would ensure that such potential impacts would not fall through the cracks. It would also help people to actually think about EJ issues, which would be good.

Many thanks for your help with my research.

Cheers,
Erin

Erin Adams
Air Resources Manager
NREA
MAGTF/TTC, MCAGCC
Twentynine Palms, CA

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DSN: 230.7726
FAX: 760-830-5718
Email: erin.adams@usmc.mil
Erin:

I would be glad to participate in your research study. You are free to use my name and attribute quotations as necessary.

Rich Thelin

Mr. Richard W. Thelin
Special Counsel, Land Use Law
Western Area Counsel Office
MCB Camp Pendleton, CA
DSN 365-5491
760-725-5491
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-----Original Message-----
From: Adams Civ Erin M
Sent: Tuesday, February 04, 2014 10:00 AM
To: Thelin CIV Richard W
Subject: Environmental Justice Case Study

Dear Mr. Thelin,

I am a graduate student at Duke University. I am conducting a studying on how well the Marine Corps has implemented environmental justice policies. You are being asked to participate in this study to help me better understand the implementation of environmental justice policies in the Marine Corps. Your expertise on NEPA and environmental justice are key components to helping me to establish if current environmental justice policies and policy implementation are effective within the Marine Corps. This study involves answering a few questions. This will take about 30 minutes of your time. You can give
me your answers verbally or email them to me. Your responses to the interview questions will be used in a research paper that is a requirement to complete a master’s degree in environmental management at Duke University.

It is completely up to you to participate in this study. You may withdraw at any time and skip any question you prefer not to answer. I do not anticipate any risks to you as a participant. I would like to identify you by name and attribute quotations to you in my final research paper. You do have the option to have your identity kept confidential.

If you consent to participating, please respond back to this email to confirm your consent. The email and time stamp will serve as your signature. I would like to identify you by name and attribute quotations to you in my final research paper. If you wish to keep your identifying information confidential - indicate so in your responding email.

Please feel free to ask any questions about me, my research or the interview at any time. You can reach me at the following:

Erin Adams
Duke Environmental Leadership
Masters of Environmental Management
Candidate for 2014’
571-606-1255
erin.adams@duke.edu

My Duke University faculty advisor is Deborah Gallagher, PhD. She can be reached at deb.gallagher@duke.edu.

This survey has been reviewed and approved by the Institutional Review Board for the Protection of Human Subjects. If you have any questions about your rights as a participant in this research, please contact the Duke University Office of Research Support at ors-info@duke.edu.

*Please keep a copy of this consent form email for your personal records.

Sincerely,
Erin Adams
Air Resources Manager
NREA
MAGTFTC, MCAGCC
Twentynine Palms, CA

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DSN: 230.7726
FAX: 760-830-5718
Email: erin.adams@usmc.mil
Appendix F:

Case Study Evaluative Score Matrix
<table>
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<tr>
<th>CEQ Criteria</th>
<th>CEQ Requirements</th>
<th>Sub-criteria Assessment</th>
<th>Overall Criteria Assessment</th>
<th>Sub-criteria Assessment</th>
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<tr>
<td>Public Participation</td>
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The table above illustrates the adequacy and adequacy of the data, analysis, and mitigation plans for the baseline and FEIS documents. The adequacy of the analysis and mitigation plans was determined based on the information provided in the documents. The data was found to be adequate for the project, and the analysis was found to be adequate as well. The mitigation plans were also found to be adequate. The overall assessment was excellent, indicating that the project was well-planned and executed.
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