Suffering Matters: NEPA, Animals, and the Duty to Disclose

David N. Cassuto  
*Elisabeth Haub School of Law at Pace University*

Tala DiBenedetto  
*Elisabeth Haub School of Law at Pace University*

Follow this and additional works at: https://digitalcommons.pace.edu/lawfaculty

Part of the [Administrative Law Commons](https://digitalcommons.pace.edu/lawfaculty), [Animal Law Commons](https://digitalcommons.pace.edu/lawfaculty), and the [Environmental Law Commons](https://digitalcommons.pace.edu/lawfaculty).

**Recommended Citation**  

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Law Faculty Publications by an authorized administrator of DigitalCommons@Pace. For more information, please contact dheller2@law.pace.edu.
Suffering Matters: NEPA, Animals, and the Duty to Disclose

David N. Cassuto* & Tala DiBenedetto**

I. INTRODUCTION ................................................................. 42
II. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) .... 43
    A. Background ................................................................................... 43
    B. NEPA Procedure ........................................................................... 43
    C. “Significantly Impacts the Human Environment” Under NEPA .... 45
III. ANIMAL SUFFERING ......................................................... 47
    A. Suffering Generally ....................................................................... 47
    B. Farmed Animals ........................................................................... 51
       1. Housing and Living Conditions ................................................ 52
       2. Procedures .................................................................................. 53
       3. Handling .................................................................................... 55
       4. Breeding .................................................................................... 55
       5. Transportation and Slaughter .................................................... 56
    C. Wildlife .......................................................................................... 57
       1. Wildlife Management and Predator Control on Federal Lands ..... 57
IV. MAJOR FEDERAL ACTIONS THAT CAUSE ANIMAL SUFFERING...
    59
    A. Loan Guarantees for CAFOs ........................................................ 59
    B. Wildlife Management on Federal Lands ........................................... 62
V. ANIMAL SUFFERING SIGNIFICANTLY IMPACTS THE HUMAN
ENVIRONMENT ................................................................. 63
    A. Animals are a Part of the Human Environment.......................... 63
    B. Actions that Cause Animal Suffering Significantly Impact the Human
        Environment ................................................................................. 64
       1. Farm Animals ............................................................................ 65
          i. Proximity to cultural/ecologically critical areas .................... 65
          ii. Likely to Involve Uncertain or Unknown Risks ................. 66
          iii. Precedential Effect ............................................................... 67
       2. Wild Animals ............................................................................. 67
          i. Proximity to cultural/ecologically critical areas .................. 67
          ii. Likely to be Highly Controversial ....................................... 68
          iii. May Threaten Endangered or Threatened Species (ESA) ... 69

* Professor of Law, Elisabeth Haub School of Law at Pace University, Class of 1946
  Visiting Professor of Environmental Studies, Williams College, Senior Counsel for
  International Affairs, Animal Legal Defense Fund; J.D. University of California, Berkeley
  Boalt Hall School of Law; Ph.D, Indiana University, B.A., Wesleyan University
** Research Assistant to Professor Cassuto and J.D. and Environmental Law Certificate
  Candidate at Elisabeth Haub School of Law at Pace University, Class of 2020. I would like
  to thank Professor Cassuto for his guidance and support, and for being a fierce advocate for
  animals.
I. INTRODUCTION

The National Environmental Policy Act (NEPA)\(^2\) requires the federal government to disclose potential environmental harms arising from agency actions. Animal suffering is an environmental harm, yet no court has ruled that its infliction triggers a reporting obligation under NEPA. This Article argues that animal suffering should be a cognizable environmental harm under NEPA, that considerations of animal suffering should factor into whether an agency must prepare an EIS—and should be discussed in the content of the EIS.

Part II of this Article introduces and explains the procedural requirements of NEPA. Part III discusses animal suffering—how it is defined, how laws deal with or fail to deal with issues of animal cruelty, and outlines the ways animals suffer as a result of federal actions. Part IV offers examples of major federal actions that cause animal suffering—including federal loan guarantees for Concentrated Animal Feeding Operations (CAFOs) and wildlife management practices, such as depredation, carried out by federal Wildlife Services (WS). Part V establishes that animals are a part of the “human environment” as defined by NEPA and that the harms inflicted on animals resulting from major federal actions constitute a “significant impact,” that should trigger NEPA review and warrant discussion in an Environmental Impact Statement (EIS). Finally, we argue that even if animal suffering alone were insufficient to trigger NEPA review, that suffering in conjunction with the various other environmental impacts associated with activities that cause animal suffering should trigger NEPA review regardless.

---

\(^1\) Ram Dass (@BabaRamDass), TWITTER (June 25, 2018, 8:40 PM), https://twitter.com/BabaRamDass/status/1011439008163991553.

II. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

A. Background

NEPA was enacted in 1970 to encourage harmony between humans and the environment, and to promote efforts that minimize environmental harms. In enacting the law, Congress recognized the profound impact of humans on the natural environment and the need to, among other things, “create and maintain conditions under which man and nature can exist in productive harmony.” Rather than direct government actors to do or refrain from doing a particular harmful act, NEPA instead compels all federal agencies to perform a thorough assessment any time it seeks to undertake an action that is likely to “significantly affect the human environment.” NEPA is a flexible statute, capable of incorporating a wide range of environmental harms, including animal welfare.

B. NEPA Procedure

Under NEPA, any “major” agency action that could significantly affect the human environment must be preceded by an EIS. These include actions with effects that may be major, and which might be “potentially subject to federal control and responsibility.” “Actions” also include “circumstances where responsible officials fail to act[,]” and that failure to act constitutes a reviewable “agency action” under the Administrative Procedure Act or other applicable law. Actions may also include new and continuing activities, projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals. This includes, for example, issuance of permits.

---

4 42 U.S.C. § 4331(a).
5 Id.
6 Sierra Club v. Babbitt, 65 F.3d 1502, 1505 (9th Cir. 1995) (emphasis added).
8 40 C.F.R. § 1508.18 (2019).
9 Id.
10 5 U.S.C. § 551(13) (2018) (“An ‘agency action’ includes the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act.”).
12 40 C.F.R. §§ 1508.18 (common categories of “agency actions” include: adoption of federal policy, adoption of formal plans, adoption of programs, approval of specific
approval of projects,\textsuperscript{14} and promulgation of rules.\textsuperscript{15}

In determining whether to prepare an EIS, the federal agency must first
determine whether the action falls under the “Categorical Exclusion
Criteria.”\textsuperscript{16} The Council on Environmental Quality (CEQ), which is itself a
creation of NEPA,\textsuperscript{17} has excluded certain types of agency actions from
NEPA review because the actions do not individually or \textit{cumulatively} have
a significant effect on the human environment.\textsuperscript{18} However, as a practical
matter, many actions that fall under Categorical Exclusions (CE) do have
significant environmental impacts. For example, oil drilling\textsuperscript{19} and timber
harvesting enjoy CE exemptions\textsuperscript{20} even as their environmental impacts have
often proven extensive.\textsuperscript{21}

If a federal agency determines that an action might have a significant
impact and does not meet the Categorical Exclusion Criteria, the agency
must prepare an Environmental Assessment (EA). The EA is a preliminary
study done to determine whether a longer, more extensive assessment is
required.\textsuperscript{22} If the EA yields a Finding of No Significant Impact (FONSI),

\begin{itemize}
  \item \textsuperscript{13} Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989) (challenging the
  Forest Service’s issuance of a special use permit for development and operation of a ski
  resort on national forest land).
  \item \textsuperscript{14} N.C All. for Transp. Reform, Inc. v. U.S. Dep’t of Transp., 151 F. Supp. 2d 661
  (M.D.N.C. 2001) (challenging the approval of a beltway construction project).
  \item \textsuperscript{15} Humane Soc’y of U.S. v. Johanns, 520 F. Supp. 2d 8 (D.D.C. 2007) (challenging a
  final rule allowing for a fee-for-service ante-mortem horse inspection program).
  \item \textsuperscript{16} 40 C.F.R. § 1501.4(a) (2019).
  \item \textsuperscript{17} 42 U.S.C. § 4321.
  \item \textsuperscript{18} 40 C.F.R. § 1508.4 (2019) (emphasis added).
  \item \textsuperscript{19} 42 U.S.C. § 15942 (2018).
  \item \textsuperscript{20} Allows harvest of live trees not exceeding seventy acres with no more than half a mile
  of temporary road construction. National Environmental Policy Act Documentation Needed
  \item \textsuperscript{21} United States v. Dixie Carriers, Inc., 736 F.2d 180, 182 (5th Cir. 1984) (the federal
  government brought action to recover cleanup costs after a barge spilled approximately
  1,265,000 gallons of oil spilled into the Mississippi River); In re Oil Spill by Oil Rig
  2014) (the United States federal government, Louisiana, Alabama, and numerous private
  individuals and businesses brought action against the leaseholder of a deepwater oil drilling
  site, the owner and operator of Deepwater Horizon drilling rig, cementing and mudlogging
  services contractor, and the manufacturer of the right’s blowout preventer in relation to
  blowout at rig, which caused rig to capsize, discharging millions of gallons of oil into the
  Gulf of Mexico over eighty-seven days); Mahler v. U.S. Forest Serv., 927 F. Supp. 1559,
  1561 (S.D. Ind. 1996) (a resident brought suit challenging a United States Forest Service
decision to cut down fifty acres of forest for timber sale in the Hoosier National Forest).
  \item \textsuperscript{22} EPA, \textit{National Environmental Policy Review Process} (last visited Aug. 30, 2019),
\end{itemize}
the assessment process ends.\textsuperscript{23} If there is no FONSI, the agency undertakes an EIS. The EIS must document the environmental impact of the proposed action, any unavoidable adverse impacts, alternatives to the proposed action (including not undertaking the action at all), the relationship between the short-term uses of the environment and the maintenance/enhancement of long term productivity, and any irreversible and irretrievable commitments of resources that would be required.\textsuperscript{24} EISs form powerful tools for improving environmental outcomes by forcing discovery and disclosure of expected consequences of agency actions.\textsuperscript{25} In addition to promoting agency transparency and accountability, EISs serve as important catalysts for public participation in pressing environmental issues.\textsuperscript{26}

\textbf{C. “Significantly Impacts the Human Environment” Under NEPA}

The CEQ has enumerated ten factors to be used in determining whether an action significantly\textsuperscript{27} impacts the human environment:

1. Impacts that may be both beneficial and adverse;
2. The degree to which the proposed action affects public health and safety;
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial;

\textsuperscript{23} Id.
\textsuperscript{24} 42 U.S.C. § 4332(C).
\textsuperscript{25} \textit{See} SERGE TAYLOR, \textit{MAKING BUREAUCRACIES THINK: THE ENVIRONMENTAL IMPACT STATEMENT STRATEGY OF ADMINISTRATIVE REFORM} 251 (1984) (concluding that NEPA disclosure has forced agencies to confront and anticipate environmental concerns, resulting in a “relatively inexpensive environmental mitigation” in many cases).
\textsuperscript{26} \textit{See Disaster Averted: California’s Bolinas Lagoon}, PROTECT NEPA (Nov. 27, 2017), https://protectnepa.org/disaster-averted-californias-bolinas-lagoon. The US Army Corps of Engineers proposed dredging nearly 1.4 million cubic yards from the Bolinas Lagoon, a major habitat for several endangered species, in order to prevent silting. \textit{See id.} EIS showed that the Lagoon was not in danger of silting and that the proposed project would increase siltation and degrade water quality. \textit{See id.} The EIS protected the habitat, water quality, and saved taxpayers approximately $133 million. \textit{See id.} EIS conducted for a bridge replacement project showed threats to thirteen endangered fish. \textit{See id.} As a result of the EIS, agencies developed innovative technology that drastically reduced impacts to fish species.
\textsuperscript{27} The word “significantly” requires considerations of both context and intensity of the impact. \textit{See} 40 C.F.R § 1508.27 (2019).
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration;

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significant cannot be avoided by terming an action temporary or by breaking it down into small component parts;

8. The degree to which the action may adversely affect districts sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources;

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (“ESA”);

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.28

The CEQ regulations that guide compliance with NEPA note that “[h]uman environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.”29 The CEQ defines “effects” to include ecological, aesthetic, historic, cultural, economic, and social impacts.30

Few would contest that animals comprise an essential part of the human environment. As outlined below, their suffering implicates many of the CEQ criteria for significant impact. Activities that produce animal suffering tend to occur near areas of cultural and ecological significance, are likely to involve uncertain or unknown risks, have precedential effect, be highly controversial, threaten endangered and threatened species, and have substantial cumulative impacts. They also can significantly affect human health and safety and create a precedent for future, similar actions.

---

28 40 C.F.R. § 1508.27(b).
30 See 40 C.F.R. § 1508.8 (2020).
III. ANIMAL SUFFERING

A. Suffering Generally

All animals can and will suffer at some point in their lives. However, avoiding unnecessary suffering is a goal shared by humans and nonhumans alike.\(^{31}\) When humans impose needless suffering on animals, that act is often categorized as “animal cruelty.”\(^{32}\) One can inflict cruelty through affirmative acts like shooting, burning, or beating, or through some failure to act, such as failure to provide necessary care—like food, water, or veterinary attention.\(^{33}\)

Federally, the Animal Welfare Act sets no uniform standard for the “humane” treatment of animals and only applies to animals like cats, dogs, and primates, excluding rats, mice, and birds used for research and testing, and all animals used for food like cows, pigs, fish, and chickens.\(^{34}\) The Humane Methods of Livestock Slaughter Act (HMLSA), which declares a policy of “prevent[ing] needless suffering”\(^{35}\) merely requires that animals be “rendered insensible to pain by a single blow or gunshot or an electrical, chemical or other means that is rapid and effective, before being shackled, hoisted, thrown, cast, or cut [. . .]”\(^{36}\) Notably, these requirements apply only to livestock (cattle, calves, horses, mules, sheep, swine).\(^{37}\) They offer no protection for other animals that feel pain, such as chickens, turkeys, rabbits, and fish. None of these laws are fundamentally concerned with whether or how much an animal suffers, but rather with creating standards that arise from the manner in which the animals are used.

For example, in New Jersey Society for Prevention of Cruelty to Animals v. New Jersey Department of Agriculture,\(^{38}\) the plaintiffs collectively challenged New Jersey’s “humane” standards. In assessing whether the standards set forth in the regulations were humane, the Court acknowledged that its criteria were not based on what might constitute “humane” by any

\(^{31}\) According to Black’s Law Dictionary, suffering means “[t]o experience or sustain physical or emotional pain, distress, or injury.” Suffer, BLACK’S LAW DICTIONARY (11th ed. 2019).

\(^{32}\) See e.g. WASH. REV. CODE ANN. § 16.52.207(1)(a) (2020); GA. CODE ANN. § 16-12-4 (2020); TEX. PENAL CODE ANN. § 42.09(b)(2) (2019); FLA. STAT. ANN. § 828.12(2) (2019); ALASKA STAT. ANN. § 11.61.140(a)(1) (2019).\(^{33}\)


\(^{35}\) Id. § 1901 (2018).

\(^{36}\) Id. § 1902(a) (2018).

\(^{37}\) 955 A.2d 886 (N.J. 2008).\(^{38}\)

\(^{38}\) See id. at 905–06.
objective measurements, but rather on a number of other factors. The court declared that:

[T]he dispute before this Court has nothing to do with anyone’s love for animals, or with the way in which any of us treats our pets; rather, it requires a balancing of the interests of people and organizations who would zealously safeguard the well-being of all animals, including those born and bred for eventual slaughter, with the equally significant interests of those who make their living in animal husbandry and who contribute, through their effort, to our food supply.

In the end, our focus is not upon ... whether we deem any of the specifically challenged practices to be, objectively, humane. To engage in that debate would suggest that we have some better understanding of the complex scientific and technical issues than we possibly could have...

The New Jersey court recognized the existence of “complex scientific and technical” criteria for assessing whether certain practices are humane and yet chose not to apply them. Instead, it balanced the interests of humans wishing to protect animals with the interests of those who make their living from animals. As the court saw it, “humane” treatment must mitigate animal suffering only to the degree possible without interfering with producers’ bottom lines.

Few would deny that animals, including wild animals and farm animals, are capable of experiencing suffering and that they do suffer on factory farms and at the hands of federal agencies tasked with harassing or killing wildlife. However, the relative importance attached to animals’ experience varies with human attitudes and norms. It was once commonly assumed that animals did not suffer the way humans do. That notion has not withstood scientific scrutiny. Yet, little has been done to reconcile law and policy with the reality that deliberately inflicted animal cruelty constitutes a cognizable harm both to the animal and to the ecosystem.

---

39 Id. at 889.
40 See id.
41 See id.
42 See id.
43 See David N Cassuto & Amy M O’Brien, You Don’t Need Lungs to Suffer: Fish Suffering in the Age of Climate Change with a Call for Regulatory Reform, 5 CAN J. COMP. CONTEMP. L. 1, 3 (2019).
45 That animal cruelty is itself an actionable harm is borne out by the fact that all fifty states and the federal government have animal cruelty laws. See, e.g., TEX. PENAL CODE
Human suffering covers a broad range of emotional states including fear, boredom, exhaustion, pain, grief, thirst, and hunger. Yet, the legal threshold of “suffering” for nonhuman animals is much higher.

The strongest anti-cruelty laws tend to be reserved for companion animals, while in the agricultural realm, the few legal protections that animals have are routinely ignored with little to no consequence. In fact, a number of states have enacted laws designed to prevent and limit accountability for animal cruelty violations.

The suffering agricultural animals endure is so severe that its exposure spurs widespread public outrage and calls for accountability. However, rather than address the methods themselves, many states have instead enacted laws protecting animal production facilities from public scrutiny. These “Ag-Gag” laws prohibit recording, photographing, or other reporting

---


47 “[M]ost state anti-cruelty statutes discriminate between those individuals who harm a domesticated or companion animal and those who injure non-domesticated animals. Thus, the killing of a rodent with a mousetrap inside private property is generally not considered a crime. However, causing the death of a pet hamster is. Another salient feature of modern anti-cruelty statutes is the tendency to afford heightened legal protection to dogs and cats.” Luis E. Chiesa, Why Is It A Crime to Stomp on A Goldfish? - Harm, Victimhood and the Structure of Anti-Cruelty Offenses, 78 Miss. L.J. 1, 10 (2008).

48 In addition to Ag-Gag laws designed to protect farmers and punish whistleblowers attempting to expose cruelty, some states limit potential liability by not requiring veterinarians to report signs of abuse. See, e.g., CAL. PENAL CODE § 597(f) (1998); FLA. STAT. ANN. § 828.12(3) (2000); IDAHO CODE § 25-3514A (2000). In Kentucky, veterinarians are prohibited by law from releasing information concerning a client’s animal without a court order or the client’s consent, meaning that veterinarians are prohibited from reporting instances of animal abuse or neglect. KY. REV. STAT. ANN. § 321.185(3)(b) (2016).

49 “Each video—all shot in the last two years by undercover animal rights activists—drew a swift response: Federal prosecutors in Tennessee charged the horse trainer and other workers, who have pleaded guilty, with violating the Horse Protection Act. Local authorities in Wyoming charged nine farm employees with cruelty to animals. And the egg supplier, which operates in Iowa and other states, lost one of its biggest customers, McDonald’s, which said the video played a part in its decision.” Richard A. Oppel Jr., Taping of Farm Cruelty Is Becoming the Crime, N.Y. TIMES (Apr. 6, 2013), https://www.nytimes.com/2013/04/07/us/taping-of-farm-cruelty-is-becoming-the-crime.html.
of conditions at these facilities. Lawmakers will often baldly state that the statute’s purpose is to stop animal activists from exposing the treatment of animals at industrial-scale farms. A number of such laws have been found unconstitutional and others are currently under challenge.

While a close analysis of the constitutionality of these laws lies outside the purview of this Article, we do note the irony that under some Ag-Gag laws, the penalty for exposing animal cruelty is more severe than the penalty for committing it. The secrecy of the industry and the favorable regulatory environment lead to few prosecutions.

One needs probable cause to enter a facility, but because CAFOs are so carefully isolated and guarded, it is difficult, if not impossible to acquire. Consequently, much illegal cruelty goes undiscovered, undocumented, and unpunished. Those few instances where animal cruelty is prosecuted do nothing to address the systemic cruelty within animal agriculture.

It bears emphasizing that not all cruelty is illegal. As long an economic justification can be found, many cruel acts are permitted under various

---

52 People for the Ethical Treatment of Animals, Inc. v. Stein, 737 F. App'x 122 (4th Cir. 2018).
54 In Idaho, the penalty for cruelty to animals is a fine up to $5,000 and imprisonment of not more than six months, while Idaho’s ag-gag law provides for a fine of up to $5,000 and up to one year in prison in addition to paying restitution in the amount of twice the value of damages resulting from their investigation. See, e.g., IDAHO CODE ANN. § 25-3520A(1) (2020); IDAHO CODE ANN. § 18-7042(3), (4) (2020). In Montana, undercover investigators could be liable for an amount of “an amount equal to three times all actual and consequential damages” along with court costs and attorney fees. See MONT. CODE ANN. § 81-30-104 (2019). The maximum penalty for cruelty to animals is up to one year in prison and a $1,000 fine along with veterinary costs. A person convicted of the offense of cruelty to animals shall be fined an amount not to exceed $1,000 or be imprisoned in the county jail for a term not to exceed 1 year, or both. See MONT. CODE ANN. § 45-8-211(2), (3) (2019). Excluded from the provisions of this law are “the use of commonly accepted agricultural and livestock practices on livestock.” See id. § 45-8-211(4)(b).
stated that govern the treatment of animals. However, we do not here argue that only illegal acts that cause suffering and are linked to federal agency actions are relevant under NEPA. Rather, since animals, whether on farms or in the wild, are part of the environment, harming them constitutes harm to the environment. The legality of the actions that cause the suffering is neither dispositive nor necessarily relevant for purposes of NEPA (or, at the state level, for the so-called “Baby NEPAs”).

Under NEPA, what matters is that cruel treatment causes animals to suffer. That suffering, while not currently legally cognizable, remains an environmental harm. Examples of such harms are numerous and well documented. The following sections offer an overview of suffering-based environmental harms and their relevance to the triggering criteria for NEPA review.

B. Farmed Animals

For reasons already noted, animal suffering is prevalent in the industrial agricultural system. Animals in industrial facilities (factory farms) are excluded from federal protection under the Animal Welfare Act or any other federal law. Some animals are minimally protected under the HMLSA and the Federal Meat Inspection Act, but these laws are of little consequence, both because they apply only at the end of the animals’ lives, and because they exempt most animals used for food, including fish and birds. The laws provide no guidelines as to how farm animals should be treated during the rest of their lives.

The vast majority of agricultural animals are kept in CAFOs, in which they are confined in closed quarters and unsanitary conditions. Cruel and

56 DAVID S. FAVRE & MURRAY LORING, ANIMAL LAW 122 (1983) (noting that because animals are considered personal property, interference with an owner’s property interest is only justified when the animal has some economic value to society, as well as to the owner).


62 Id.

63 Between 1982 and 1997 there was a 26% reduction in animal population on small farms, while there was a 58% increase in large farm operations. See ENVTL. PROTEC. AGENCY, DRAFT PROCEEDINGS OF THE WORKSHOP ON EMERGING INFECTIOUS DISEASE AGENTS AND ISSUES ASSOCIATED WITH ANIMAL MANURES, BIOSOLIDS AND OTHER SIMILAR BY-PRODUCTS (June 4, 2001). In 2017 there were 19,961 CAFOs in operation in the United
inhumane treatment and conditions are not limited to CAFOs, however, or only to the food system. Factory farming has moved beyond the exploitation of traditional farm animals such as cows, sheep, and pigs. Many other species, including deer, rabbit, ostrich, pheasant, quail, duck, frog, snail, lobster, fish, turtle, alligator, black bear, goose, kangaroo, rattlesnake, silkworm, chinchilla, fox, mink, and other wild animals are now factory-farmed.64

1. Housing and Living Conditions

Animals used for agriculture are generally subject to cramped, filthy living conditions in which they cannot engage in normal behaviors (turning around, standing, or sitting) or social activities (socializing, breeding normally, interacting normally with other members of their species). In addition, they are often neglected, with little to no access to adequate veterinary care. Tens of thousands and sometimes millions of animals compete for space, food, and water; breathe contaminated air; and live in their own waste.66

Laying chickens, for example, are kept in semi-darkness; most never see sunlight.67 They live in battery cages stacked on top of one another, in cages so small that they cannot spread their wings or turn around.68 Broiler chickens are confined in sheds in such large numbers that the air quality quickly deteriorates.69 The dearth of effective monitoring and the desultory veterinary care provided means that birds suffering from illness, broken limbs (because their limbs cannot support their oversized torsos),70 wounds, infections, or any of the many other health and safety hazards, are left in misery up until the moment of slaughter.71 As a result, chickens on factory farms endure dehydration, respiratory disease, bacterial infections,

---

64 Dr. Michael W. Fox, Eating with Conscience: The Bioethics of Food 164–65 (1997).
66 See id.
67 Id.
heart attacks crippling limb fractures, painful skin conditions, respiratory problems, pulmonary congestion, swelling, hemorrhage, and blindness.\textsuperscript{72}

Similarly, cows and pigs in industrial facilities are often kept in small iron crates to maximize space and reduce maintenance.\textsuperscript{73} Veal calves are raised in near total isolation, in narrow crates that inhibit virtually all movement\textsuperscript{74} The pork industry confines pregnant and nursing pigs in, “gestation crates,” which restrict them from even turning around.\textsuperscript{75} Since they are repeatedly impregnated until they can no longer bear young, sows spend anywhere from three to five years in these small, cramped crates.\textsuperscript{76} Those pigs not confined to gestation crates fare little better. A single football-field-sized hog house can contain up to 10,000 hogs.\textsuperscript{77} This confinement not only restricts them physically, but isolates them socially, and can lead to “insanity”-type behaviors such as pawing, biting, chewing the bars of their cages, etc.\textsuperscript{78}

2. Procedures

Agricultural animals also undergo painful bodily invasions. These procedures are considered standard husbandry practices and thus exempt from most states’ cruelty laws.\textsuperscript{79} For example, cows, pigs, and sheep are commonly castrated without anesthetic. “Either a rubber ring is placed at the top of the scrotum to kill the tissue and cause the testes to fall off; a clamp is used to crush the spermatic cord so that it can no longer supply the scrotum; or the scrotum is cut open and the testes are removed by tearing, cutting, or twisting.”\textsuperscript{80} Unsurprisingly, this results in physical and

---

\textsuperscript{72} See Perry, supra note 68, at 118–19.
\textsuperscript{73} See id.
\textsuperscript{74} Gwendellyn Jo Earnshaw, Equity as a Paradigm for Sustainability: Evolving the Process Toward Interspecies Equity, 5 ANIMAL L. 113, 141 (1999).
\textsuperscript{75} Id.
\textsuperscript{76} Id.
\textsuperscript{78} Id.
\textsuperscript{80} Id.
psychological impacts, including kicking, rolling, stamping, restlessness, increased cortisol levels, chronic pain, inflammation, and infection, with some animals exhibiting abnormal behaviors up to 41 days later.\textsuperscript{81}

These same animals are also frequently have their tails docked. This means the animal’s tail is cut off using either a tight rubber ring that kills the tail and causes it to fall off, an electric docking iron that cuts and cauterizes the tail, an emasculator that cuts and crushes it, or a knife.\textsuperscript{82} Operators argue that this practice is required for hygiene and to protect the cows from fly strikes. However, the hygiene issues primarily concern farmers and workers who handle the cows and who don’t want to be hit in the face by “wet and nasty” tails.\textsuperscript{83} In the case of pigs, tail docking deters biting, a stress-induced behavior resulting from intensive confinement.\textsuperscript{84} Tail docking of sheep is also common and can lead to rectal prolapse.\textsuperscript{85} Cows and sheep raised for consumption often have their horns or horn buds removed by hot irons, caustic chemicals, cryosurgical tools, or just a knife or scoop.\textsuperscript{86} This, too, causes severe discomfort.\textsuperscript{87}

Branding is another common procedure that has been practiced for thousands of years.\textsuperscript{88} It involves using a hot iron burn the skin, leaving a permanent scar. Branding can also include ear tags, ear notches, back tags, neck chains, tail tags, freeze brands, and other methods.

Poultry birds are subject to a different set of procedures.\textsuperscript{89} Birds, like chickens, are very social and establish a pecking order. That order is disrupted when the birds are forced out of their natural social groups and

\textsuperscript{81} Id.

\textsuperscript{82} See id; Mark Peters, Dairies Curtailing Cow-Tail Cutting, \textit{WALL STREET JOURNAL} (Sep. 3, 2012), https://www.wsj.com/articles/sb1000140346657063637620487695204092264741806.

\textsuperscript{83} Levenda, supra note 79, at 109.

\textsuperscript{84} Id.


\textsuperscript{87} See Stafford & Mellor, supra note 86, at 344–46.


\textsuperscript{89} Id.
into overcrowded situations. In order to prevent them from pecking at each other, operators remove parts of their beaks. They generally do this using hot-blades, electrically or with the use of infra-red technology. Other techniques such as lasers, freeze-drying, and chemical retardation have also been used but are less common. “Beak trimming” can lead to long-term pain in the stump of the beak as well as pinched nerves. The American Veterinary Medical Association (“AVMA”) has acknowledged that the procedure is acutely painful yet the practice continues.

3. Handling

Many farmed animals are fed in ways that substantially impair their health and result in suffering. They are overfed or force-fed or starved. These practices save farmers time and money by speeding up growth, laying, or simply by fattening the animals to increase their yield. To produce foie gras, factory farmers force-feed ducks and geese by shoving a metal pipe down their throats two or three times each day. The practice of force-feeding can cause painful bruising, lacerations, sores, and organ rupture. The birds also become diseased; their livers swell up to ten times their normal size, making it difficult for them to move comfortably or walk.

4. Breeding

Roosters have little value to producers so male chicks often are discarded. One common practice involves throwing them into a meat
grinder, typically while they are still alive.\textsuperscript{95} Approximately 200 million male chicks are culled in this manner annually.\textsuperscript{96}

Dairy cows spend their lives in a constant cycle of breeding in order to keep them lactating. Calves are taken away within the first twenty-four hours after birth and used for veal, beef, or dairy.\textsuperscript{97} The cows are then milked multiple times a day until they are re-impregnated, continuing the cycle until the animal is spent. Once they no longer produce milk, the animals are slaughtered, usually for hamburger or pet food.\textsuperscript{98} In addition to the obvious physical toll, the emotional anguish experienced by mothers who have their babies taken away is substantial.\textsuperscript{99} Dairy cows often cry for days for their absent children.\textsuperscript{100}

5. Transportation and Slaughter

Transporting livestock is habitually done under brutal conditions. Pigs are especially prone to severe stress, but all animals can suffer overheating or freezing or dehydration from long transport.\textsuperscript{101}

Pigs and cows are also often subject to problematic slaughter processes, in which they are sometimes conscious as they are shackled, hoisted and skinned.\textsuperscript{102} Although the HMLSA requires that livestock be rendered

\textsuperscript{95} Id.
\textsuperscript{96} Id.
\textsuperscript{97} PETER SINGER, ANIMAL LIBERATION 136–37 (3d ed. 2002); Kathrin Wagner et al., Effects of Mother Versus Artificial Rearing During the First 12 Weeks of Life on Challenge Responses of Dairy Cows, 164 APPLIED ANIMAL BEHAV. SCI. 1 (2015).
\textsuperscript{98} “Across the globe, spent milk cows make up an important proportion of beef supply and it is in producer interests to maximise cull value.” THE CATTLE SITE, When Dairy Cows Become Beef Cows (Jun. 3, 2014), http://www.thecattlesite.com/articles/3941/when-dairy-cows-become-beef-cows.
\textsuperscript{99} Id.
\textsuperscript{100} BBC, ‘Some Mothers Will Bawl for Days’ (Sep. 10, 2018), https://www.bbc.com/news/av/uk-scotland-45439303/some-mothers-will-bawl-for-days (video showing a dairy farmer saying “[i]f the mother, well it varied. Sometimes they just walk over to the silage feed and started eating and you thought they hadn’t even noticed. Then there’s others that would bawl for days. And that was probably the distressing side of it.”); Ameena Schelling, Devastated Mother Cow Chases Truck Taking Her Baby Away, THE DODO (Sep. 21, 2015), https://www.thedodo.com/mother-cow-chases-baby-1360693533.html; Mary Bates, The Emotional Lives of Dairy Cows, WIRED (Jun. 30, 2014), https://www.wired.com/2014/06/the-emotional-lives-of-dairy-cows.
\textsuperscript{102} Id.
“insensible to pain”, the increased mechanization and speed of the slaughter line has led to imprecision and error.\textsuperscript{103}

Animals used for fur are also face problematic means of execution. One investigation of American fur farms showed animals killed by “neck-breaking; anal electrocution; gassing with hot, unfiltered truck exhaust, and stomping on the animals’ chests to crush their rib cages and cause suffocation.”\textsuperscript{104}

Outside of the cruelty inherent in standard procedures, frequent, well-documented instances of deliberate mistreatment go largely ignored and unpunished. These are not isolated incidents perpetrated by reckless employees, but rather a logical outgrowth of a system wherein animals have no meaningful legal protections. Undercover investigations have revealed downed dairy cows being jabbed with forklifts,\textsuperscript{105} workers stomping, kicking, neck twisting, and slamming chickens against walls, and many other such practices.\textsuperscript{106} In sum, the cruelty experienced by animals used in farming is not limited to each individual process or procedure, but compounded in one large system that ignores and rewards abuse.

C. Wildlife

1. Wildlife Management and Predator Control on Federal Lands

Farmed animals are not the only animals that suffer as a result of anthropogenic behavior. Wildlife is often abused, tortured, starved, and poisoned at the hands of humans. Like the suffering experienced by farm animals, these abuses go largely unnoticed.

Between 2000 and 2016, Wildlife Services killed at least two million mammals and fifteen million birds, primarily for predator control.\textsuperscript{107} The


\textsuperscript{105} Katie Cantrell, The True Cost of a Cheap Meal, 31 TIKKEN 20, 20 (2016).

\textsuperscript{106} PETA, Thousands of Chickens Tortured by KFC Supplier (Feb. 19, 2019), http://www.kentuckyfriedcruelty.com/u-pilgrimspride.asp.

\textsuperscript{107} See Rachael Bale, This Government Program’s Job is to Kill Wildlife, NAT’L GEOGRAPHIC (Feb. 12, 2016), https://www.nationalgeographic.com/news/2016/02/160212-Wildlife-Services-predator-control-livestock-trapping-hunting (The Wildlife Services has
agency describes its work in Orwellian terms, declaring that its mission is to “provide Federal leadership and expertise to resolve wildlife conflicts to allow people and wildlife to coexist.” 108 Wildlife Services uses controversial practices to carry out its culls, including poisoned bait, neck snares, leghold traps, 109 aerial gunning, and cyanide traps. 110 These methods often kill non-target species such as dogs, cats, and endangered species including bald eagles, salmon, and ocelots. 111

Traps, which are commonly used as a means of predator control on federal lands, cause serious and sometimes fatal injuries, including joint dislocations, severed tendons and ligaments, broken bones and gangrene. 112 As the animals struggle against the trap, they may break their teeth right down to the jawbone from biting the device, or chew off their limbs while attempting to escape. 113 Additionally, non-target animals caught in leghold traps and then released may be so severely injured that they cannot survive. 114

Recently, the Trump administration reauthorized M-44 cyanide bombs for use in wildlife culls. 115 These bombs kill thousands of animals every year including 6,579 animals in 2018 alone, more than 200 of which were non-target species. 116 Following complaints and pressure from conservation

---

110 Bale, supra note 107.
113 “A study conducted at the University of Minnesota Raptor Research and Rehabilitation Center showed that 21 percent of all eagles admitted to the center over an 8-year period had been caught in leghold traps. Of these birds, 64 percent had sustained injuries that proved fatal. Survivors typically require amputation of the trapped limb.” Id.
114 Id.
115 ENVTL. PROTEC. AGENCY, SODIUM CYANIDE: INTERIM REGISTRATION REVIEW DECISION CASE NUMBER 8002 (2019).
organizations, EPA withdrew its reauthorization application.\textsuperscript{117} However, four months later, the agency announced that it would move forward with reauthorization with only a few minor additional restrictions.\textsuperscript{118}

IV. MAJOR FEDERAL ACTIONS THAT CAUSE ANIMAL SUFFERING

No standards precisely define when “federal participation transforms a state or local project into a NEPA-triggering federal action.”\textsuperscript{119} Generally, courts consider: “(1) the degree to which the given action is funded by the federal agency, and (2) the extent of the agency’s involvement and control in the action.”\textsuperscript{120} Thus, major federal actions extend beyond direct actions taken by federal agencies (as in the case of wildlife management). They encompass an array of activities that indirectly produce environmental harms including funding and permitting local, state or private projects.

The courts recognize that but for these affirmative acts by the federal government, many projects could not come to fruition. However, many of those activities also indirectly (proximately) cause animal suffering. Some of these are discussed below.

A. Loan Guarantees for CAFOs

The Farm Service Agency (FSA), a part of the United States Department of Agriculture (USDA), helps farms obtain loans from specific USDA-approved commercial lenders.\textsuperscript{121} While the lender is technically the FSA’s customer, the FSA reimburses lenders in the event that the lender suffers a


\textsuperscript{118} \textit{Env'tl. Protec. Agency, EPA Announces Revised Interim Decision for M-44 Predator Control Devices} (Dec. 5, 2019), https://www.epa.gov/newsreleases/epa-announces-revised-interim-decision-m-44-predator-control-devices. Those restrictions include a 600-foot buffer around residences (unless there is written permission from the landowner), increasing the buffer from public pathways and roads, and one additional sign within 15 feet of a device.

\textsuperscript{119} Almond Hill Sch. v. U.S. Dep’t of Agric., 768 F.2d 1030, 1039 (9th Cir. 1985) (citation omitted); see generally 40 C.F.R. § 1508.18 (providing guidelines and examples for “major” federal actions).

\textsuperscript{120} Cascadia Wildlands v. U.S. Dep’t of Agric., 752 F. App’x 457, 458 (9th Cir. 2018) (citing Ka Makani ‘O Kohala Ohana Inc. v. Water Supply, 295 F.3d 955, 960 (9th Cir. 2002)).

loss.\textsuperscript{122} Other loans are funded directly by the FSA. Those funds come directly from annual Congressional appropriations as part of the USDA budget.\textsuperscript{123} Courts have previously held that the FSA’s participation in the process through which an agricultural producer secures loans constitutes a major federal action under NEPA.\textsuperscript{124}

Even the regulatory language that explains FSA involvement in obtaining loan guarantees reflects the government’s support of animal agriculture. The FSA claims that its lending practices are consistent with the agency’s goals of “providing economic opportunity through innovation, helping rural America thrive; [and] promoting agriculture production;”\textsuperscript{125} and aligns with its mission of “fostering a market-oriented, economically, and environmentally sound American agriculture . . . . ”\textsuperscript{126} If an agency action forms an integral component of its ability to fulfill its mission, it seems beyond dispute that such an action could and should be susceptible to NEPA review. The question then becomes whether such actions have significant effects on the environment. Courts have concluded that they do.

In \textit{Buffalo River Watershed Alliance v. Department of Agriculture},\textsuperscript{127} environmental groups claimed that the FSA and the Small Business Administration (SBA) guaranteed loans to C & H Hog Farms without adequately assessing the proposed facility’s environmental impact.\textsuperscript{128} After the Arkansas Department of Environmental Quality approved C & H for 6,500 hogs,\textsuperscript{129} the company applied for approximately $3.6 million in loans from Farm Credit Services of Western Arkansas.\textsuperscript{130} Farm Credit required further assurances before making the loans, so it and C & H applied for loan guaranties from two federal agencies.\textsuperscript{131} “First, the Small Business Administration guaranteed roughly seventy-five percent of $2.3 million” in loans “without evaluating the impact the farm might have on the

\textsuperscript{122} See id.
\textsuperscript{123} See id.
\textsuperscript{126} Id.
\textsuperscript{128} Id. at *1.
\textsuperscript{129} The next largest farm had roughly 400. Id.
\textsuperscript{130} See id.
\textsuperscript{131} Id.
environment.” The FSA considered backing a second loan but first undertook an EA.

The FSA consulted with FWS about the potential impacts of the project on endangered species in the area. FWS “responded that the endangered Gray Bat lived in caves and foraged” near the site. It suggested potential mitigation measures and highlighted areas for further investigation, cautioning that its response was purely informational and not “a blessing.” The FSA completed its EA without any proposed alternative locations and no mention of the bat. It concluded without explanation that mitigation measures were not required. The EA was used as the basis for FSA’s FONSI, and the agency subsequently “guaranteed ninety percent of another $1.3 million loans from Farm Credit to C & H.” Environmental groups brought suit, alleging that the agencies failed to take the requisite hard look at the environmental impacts under NEPA.

While the FSA argued that it did not have to undertake an EIS because guaranteeing a loan need not trigger NEPA review, the Court held otherwise. It found that NEPA did indeed require the SBA to look hard at environmental issues before guaranteeing such loans. The Court noted that “[t]he legal premise of each guaranty was that C & H couldn’t otherwise obtain financing on reasonable terms.” “C & H had to, and did, borrow $3.6 million to start this farm. These statutes, coupled with the necessity of the large loans, [made] it substantially unlikely that C & H would have come into being absent the guaranties.” “Without the guaranties, there would’ve been no loans. Without the loans, no farm.” Consequently, FSA’s loan guarantee for C & H constituted a major federal action, and FSA had an obligation to consider the environmental impacts of the CAFO on the community and the surrounding environment.

This precedent was recently modified by a Trump Administration rule categorically excluding FSA funding of medium-sized CAFOs. Prior to 2016, FSA performed environmental analyses to assess the impact of

\[\text{References}\]

132 Id.
133 Id.
134 Id.
135 Id.
136 Id. at *2.
137 Id.
138 See id.
139 See id. at *5.
140 Id.
142 Id.
143 81 Fed. Reg. at 51274.
government loans or loan guarantees to medium CAFOs before loans or loan guarantees were approved. The new rule excluding FSA funding from NEPA review has been challenged by environmental groups who argue that performing environmental analyses before approving loan guarantees provides a necessary “check on the negative externalities of industrial animal feeding operations.”

It further provides important information regarding risks and allows for public participation prior to the loan’s disbursement. Guaranteeing loans for CAFOs containing 124,999 chickens is no less a major federal action than guaranteeing loans for CAFOs containing 125,000. These facilities produce major environmental impacts and significantly impact humans, animals, and other components of the natural environment.

B. Wildlife Management on Federal Lands

Courts have similarly found that agency actions to control wildlife are subject to NEPA review. Wildlife management practices including predator control programs are carried out by Wildlife Services (not to be confused with the U.S. Fish and Wildlife Service), a federal agency within the U.S. Department of Agriculture. Although some instances where the agency had limited involvement and control were not subject to NEPA review, courts generally have found that culls carried out by Wildlife Services constitute major federal actions and require an EIS.

For example, in Wildlands v. Woodruff, a Washington district court held that Wildlife Service’s participation in a wolf depredation program in Washington state constituted a “major federal action,” and that the agency

---

144 FSA currently defines “medium CAFO” by cross-referencing EPA Clean Water Act regulations. Thus, a “medium CAFO” is a facility that confines the following number of animals per species indoors for 45 days or more each year: 200 to 699 mature dairy cows, 300 to 999 cattle other than mature dairy cows, 750 to 2499 pigs over 55 pounds, 16,500 to 54,999 turkeys, and (at non-liquid manure management facilities) 37,500 to 124,999 chickens other than laying hens. See 40 C.F.R. § 122.23(b)(1), (6).
146 Id.
147 Id.
148 See Bale, supra note 107.
149 See Cascadia Wildlands v. U.S. Dep’t of Agric., 752 F. App’x 457, 460 (9th Cir. 2018) (“Because the district court correctly concluded that Wildlife Services’ participation in the Oregon Wolf Plan is not a ‘major federal action,’ NEPA does not apply.”).
150 151 F. Supp. 3d 1153 (W.D. Wash. 2015).
failed to observe its NEPA obligations by not preparing an EIS. Wildlife Services argued that it had little discretion and therefore no EIS was necessary. However, the court found that the agency did have the discretion to decide whether and under what circumstances to engage in wolf removal. Consequently, the agency’s participation in the Wolf Management Program constituted a major federal action that significantly impacted the environment and merited an EIS.

While the scope and nature of agency involvement is always a relevant factor, agency participation in activities that negatively impact animal populations can clearly trigger NEPA review. Yet to be determined, however, is whether animal suffering is a cognizable negative impact. In the section that follows, we argue that it is (or should be).

V. ANIMAL SUFFERING SIGNIFICANTLY Impacts the Human Environment

A. Animals are a Part of the Human Environment

The phrase “human environment” in NEPA is sufficiently expansive to encompass animal welfare and for impacts to farmed animals and wild animals to trigger the need for an EIS. Animals’ very existence, whether on farms, in cages or in the wild, is inextricably linked to the economic, social, and ecological landscape. Animals form part of both what is traditionally understood as the natural environment (i.e. forests, oceans, or other areas considered “wilderness”), and of the environment that humans construct (domesticated or non-domesticated animals living in structures made by humans). It follows that regulation of animals has historically fallen under the purview of environmental law.

151 Id. at 1167 (evaluating the ten factors set forth in 40 C.F.R. § 1508.27(b) to determine whether the agency’s actions significantly impacted the human environment).
152 Id. at 1164–65 (evaluating the ten factors set forth in 40 C.F.R. § 1508.27(b) to determine whether the agency’s actions significantly impacted the human environment).
153 See Hendrickson v. Wilson, 374 F. Supp. 865, 881 (W.D. Mich. 1973) (“The element of the human or natural environment could be any of three categories: biological; including such sub-categories as human, animal, plant, and aquatic; physical and chemical, which would include factors associated with impacts on water, air, and land; and social, including impacts on community as well as individuals.”) (emphasis added); see also Sierra Club v. U.S. Army Corps of Eng’rs, 701 F.2d 1011, 1049 (2d Cir. 1983) (halting a project that would impact several species of fish due to an inadequate EIS); U.S. FISH & WILDLIFE SERV., NATIONAL ENVIRONMENTAL POLICY ACT, ENDANGERED SPECIES ACT, AND HABITAT CONSERVATION PLANS (2012) (“NEPA considers the impacts of a federal action on the human environment, for example: . . . nonlisted species as well as ESA-listed fish and wildlife.”).
Agencies including the United States Department of Agriculture (USDA), the Animal and Plant Health Inspection Service (APHIS), FWS, the National Oceanic and Atmospheric Administration (NOAA), and the BLM\textsuperscript{154} regulate the management of both farm animals and wildlife. While wild animals more often form the subject of NEPA litigation, farm animals are no less a part of the environment. Harm to any animals—domestic or wild—is harm to the environment and should be recognized as such under NEPA.

B. Actions that Cause Animal Suffering Significantly Impact the Human Environment

Agency actions that cause animal suffering under the CEQ’s own criteria. First, activities that produce animal suffering tend to occur in close proximity to areas of cultural and ecological significance.\textsuperscript{155} Human contemplation of that suffering constitutes aesthetic harm, a judicially recognized trigger for NEPA review.\textsuperscript{156} Second, these actions likely involve uncertain or unknown risks, particularly with respect to the impacts of declining genetic diversity on the continued survival of animal species used in agriculture.\textsuperscript{157} Third, activities that facilitate animal suffering, such as providing federal loan guarantees for CAFOs, can have precedential effects and can prove highly controversial.\textsuperscript{158} Many wildlife management practices

\begin{footnotes}
\item[155] See infra Part V.B.1.i & Part V.B.2.i.
\item[156] See, e.g., Lujan v. Defs. of Wildlife, 504 U.S. 555, 562 (1992) (holding that “the desire to use or observe animal species, even for purely aesthetic purposes, is a cognizable interest for standing purposes.”); Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 181 (2000) (holding that plaintiffs demonstrated that they suffered injury-in-fact through the lessening of their “aesthetic and recreational values”); WildEarth Guardians v. Ashe, No. CV-15-00019-TUC-JGZ, 2016 WL 3919464, at *5 (D. Ariz. May 16, 2016) (holding that plaintiffs Plaintiff organizations have asserted a valid recreational, aesthetic, and scientific interest in observing and studying the Mexican gray wolf in the wild, which are clearly “cognizable” for the purposes of establishing injury in the environmental context).
\item[157] See infra Part V.B.1.ii.
\item[158] See infra Part V.B.1.iii.
\end{footnotes}
are also controversial, have uncertain effects, and cause aesthetic harm as well.\textsuperscript{159} In the case of wildlife management, we also see considerable dispute as to the efficacy of the practices\textsuperscript{160} while also placing endangered and threatened species at risk.\textsuperscript{161} All of the above-mentioned practices have cumulative impacts, including biodiversity loss and climate change. Finally, the animals themselves have substantial cultural importance, which means that their harm alone can be a significant impact.

1. Farm Animals

i. Proximity to cultural/ecologically critical areas

Agency actions that produce animal suffering are often close to areas of cultural and ecological significance. Harassment, harm, killing, or removal of animals from these areas causes obvious physical harm to the animals and aesthetic harm to the humans that witness it. As noted previously, aesthetic harms are cognizable under NEPA.\textsuperscript{162} Courts have found aesthetic injury based on harm to animals.\textsuperscript{163} When that harm occurs in areas of cultural, historic, or ecological significance, it compounds the negative impact to the human environment. While cases acknowledging contemplation of animal suffering as an aesthetic harm most often pertain to wildlife,\textsuperscript{164} the reasoning is equally applicable to factory farms. The
harm (suffering) is identical and there is no credible argument that these facilities do not form part of the human environment.


ii. Likely to Involve Uncertain or Unknown Risks

An EIS “is mandated where uncertainty may be resolved by further collection of data . . . or where the collection of such data may prevent speculation on potential . . . effects.”\(^{165}\) For agricultural animals, suffering is not just inflicted through mistreatment and poor living conditions. It is also the byproduct of years of selective breeding practices that physically transform the animals in harmful ways and jeopardize the survival of the species.\(^{166}\) For example, overbreeding and dwindling genetic diversity limits the ability of farm animals to adapt to environmental changes.\(^{167}\) This decreased resilience endangers their continued existence, particularly in light of the looming threat of climate change.\(^{168}\)

\(^{165}\) Wildlands v. Woodruff, 151 F. Supp. 3d 1153, 1165 (W.D. Wash. 2015) (citing Native Ecosystems Council v. U.S. Forest Serv., 428 F.3d 1233, 1240 (9th Cir. 2005)).

\(^{166}\) Today, because of specialized breeding, chickens weigh about two-thirds more than they did in the 1960s. See Jeanine Bentley, U.S. Per Capita Availability of Chicken Surpasses That of Beef, USDA (Sep. 20, 2012), https://www.ers.usda.gov/amber-waves/2012/september/us-consumption-of-chicken (the average chicken weighs 5.8 pounds versus 3.4 pounds in 1960). 90% of broiler chickens have trouble walking as a result of selective breeding and spend up to 95% of their lives sitting down because their legs cannot support their tremendous weight. See Werner Bessei, Welfare of Broilers: A Review, 62 World’s Poultry Sci. J. 455 (Sep. 2006), https://www.cambridge.org/core/journals/world-s-poultry-science-journal/article/welfare-of-broilers-a-review. We have also seen this sort of genetic engineering in turkeys. The American turkey has been bred to weigh an average of thirty pounds, while in 1929 the average turkey only weighed 13.2 pounds. See Eliza Barclay, Can Breeders Cure What Ails Our Breast-Heavy Turkeys?, NPR (Nov. 27, 2014), https://www.npr.org/sections/thesalt/2014/11/27/366850401/could-turkey-breeders-cure-the-ailments-of-our-big-breasted-birds. Like in chickens, selective breeding has resulted in difficulty standing to support their immense weight in addition to other skeletal and heart problems. See Poultry Sci. Ass’n, Turkey Genome Sequencing Project is Providing an Important Tool for Poultry Industry and Basic Research (Nov. 24, 2014), https://www.poutryscience.org/pr112414.asp.


\(^{168}\) A reduction of genetic diversity is coupled with a reduction of the species’ capacity to adapt to new diseases, warmer temperatures, or new food sources. Id.
iv. Precedential Effect

Another important factor in determining whether a federal action significantly impacts the human environment is “[t]he degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.” The Trump administration rule excluding loan guarantees to medium CAFOs from NEPA review has a clear precedential effect. It applies to all future approvals for medium CAFOs, irrespective of potential environmental impacts.

While precedential effect alone “is generally insufficient to demonstrate a significant environmental impact unless approval of the project is binding on future decisions regarding other actions[,]” non-binding precedential effects can still support the need for an EIS. Federal loan guarantees for large CAFOs creates precedent for future loan approvals, thereby facilitating future significant environmental impacts, including animal suffering.

2. Wild Animals

i. Proximity to cultural/ ecologically critical areas

In the case of wildlife, witnessing human-inflicted animal suffering in the animals’ habitats constitutes aesthetic injury under NEPA. In Fund for Animals v. Norton, plaintiffs brought suit under NEPA, the Migratory Bird Treaty Act, and the APA regarding the issuance of a permit by FWS to the State of Maryland that allowed the killing of 525 mute swans in and around the Chesapeake Bay. Plaintiffs asserted irreparable harm premised on the violation of their procedural rights under NEPA. The Court granted plaintiffs’ motion for a preliminary injunction, finding that they had sufficiently established that the actions of FWS would cause irreparable aesthetic harm by stripping them of their ability to view, interact with, study, and appreciate mute swans.

The court relied on Fund for Animals v. Clark and Fund for Animals v. Espy.
In Clark, the Court’s issued a preliminary injunction in part due to plaintiffs’ having demonstrated irreparable harm arising from defendants’ “failure to comply with NEPA and the aesthetic injury the individual plaintiffs would suffer from seeing or contemplating . . . bison being killed in an organized hunt.” The Court additionally held that Plaintiffs raised “substantial questions” with respect to whether the lethal take of the swans would have significant “[i]mpacts that may be both beneficial and adverse,” that FWS failed to consider.

In Espy, the court enjoined the removal of bison from the herd because the aesthetic harm the plaintiffs would suffer resembled the way “a pet owner enjoys a pet, so that the sight, or even the contemplation, of [mis]treatment in the manner contemplated . . . would inflict aesthetic injury.”

The plaintiffs in Norton claimed the harm arose from FWS’s failure to take a “hard look” and not sufficiently enabling public involvement in environmental decision-making. The Court agreed, finding that FWS provided sparse information regarding the proposed action or its potential environmental impacts and insufficient time to comment on the Draft EA.

These cases establish that animal suffering in areas of important cultural or ecological significance constitutes a cognizable harm under NEPA. Indeed, animals are often the reason an area has cultural or ecological significance.

### ii. Likely to be Highly Controversial

An action is “highly controversial” under the CEQ’s NEPA intensity factors when a dispute exists as to the size, nature, or effect of the federal action, and/or the evidence casts doubt on the reasonableness of the agency’s conclusions. Wildlife culls are controversial not only because of the strong opposition to them, but also due to widespread disagreement among experts as to their efficacy. For example, killing an adult male mountain lion “tends to lead to more rather than fewer attacks on

---

176 Id. at 220 (citing Fund for Animals v. Clark, 27 F. Supp 2d 8, 14 (D.D.C.1998)).
177 Id. at 233.
178 Id. (citing Fund for Animals v. Espy, 814 F.Supp. 142, 151 (D.D.C.1993)).
179 Id. at 226.
180 Id.
181 In Def. of Animals v. U.S. Dep’t of Interior, 751 F.3d 1054 (9th Cir. 2014) (citing 42 U.S.C. § 4332(2)(C)); 40 C.F.R. § 1508.27(b)(4); Sierra Club v. U.S. Forest Serv., 843 F.2d 1190, 1193 (9th Cir. 1988).
livestock.” Culling wolves and black bears lead to similar results. In the case of coyotes, studies show that culls lead to greater numbers of pups surviving in their litters. Thus, though “Wildlife Services has killed nearly a million coyotes in the past decade,” coyote populations rarely decrease. Given these results and the surrounding controversy, it is not surprising that courts have found culls controversial and worthy of an EIS.

iii. May Threaten Endangered or Threatened Species (ESA)

In addition to generating controversy, actions that cause animal suffering can threaten endangered or threatened species. Controversial methods of wildlife culling, including leg traps, engender substantial criticism for many reasons, including the threat they pose to endangered species. According to Senator Cory Booker, who introduced a bill that would ban the use of body-gripping traps in National Wildlife Refuges:

The use of body-gripping animal traps in federal wildlife refuges is contrary to the very mission and purpose of these protected areas. These cruel traps don’t distinguish between targeted animals and protected animals, endangered species or pets, and are a safety hazard to people. It’s past time to remove this antiquated and inhumane practice from federal wildlife refuges.

Currently, steel-jaw leghold traps (which are banned in over 100 countries), strangulation snares, and “other body-hold devices” are used on the “vast majority” of Federal Wildlife Refuge Lands. These areas are meant to protect and conserve wildlife and provide a home to 300 endangered and threatened species. There have been numerous cases of endangered species, such as bald eagles, wolves, and lynxes getting...
caught in traps. Since harming an endangered species amounts to a statutory harm under the Endangered Species Act and is illegal absent a federally issued take permit, it follows that it would qualify as a significant environmental harm under NEPA as well.\footnote{WildEarth Guardians v. U.S. Fish & Wildlife Serv., 342 F. Supp. 3d 1047 (D. Mont. 2018), appeal dismissed, No. 18-36091, 2019 WL 1423695 (9th Cir. Feb. 6, 2019); Ctr. for Biological Diversity v. Otter, No. 1:14-CV-258-BLW, 2018 WL 539329, at *2 (D. Idaho Jan. 24, 2018).} It also follows that takes of endangered species constitute significant environmental impacts requiring NEPA review.\footnote{16 U.S.C. § 1538(a)(1) (2018) (makes it unlawful for any “person” to take or harm a listed species without a permit. The definition of person under the ESA includes “any officer, employee, agent, department, or instrumentality of the Federal Government.” 16 U.S.C. § 1532(13) (2018)).}

\textit{iv. Cumulative Impacts}

Cumulative impacts on the environment “result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions[.]”\footnote{40 C.F.R. § 1508.7.} In determining whether a project will have a “significant” impact on the environment, an agency must consider “whether the action is related to other actions with individually insignificant but cumulatively significant impacts.”\footnote{40 C.F.R. § 1508.27(b)(7).} If so, the agency must pursue an EIS.\footnote{See Blue Mts. Biodiversity Project v. Blackwood, 161 F.3d 1208, 1214 (9th Cir. 1998).}

Predator control and wildlife culls diminish biodiversity and weaken the overall ecological health of communities. Predators like wolves are essential to the maintenance of biodiversity and ecosystem health and resilience.\footnote{See Tala DiBenedetto, \textit{Wolf Delisting is Premature and not Based in Science}, DEFENDERS OF WILDLIFE (Jul. 12, 2019), https://defenders.org/blog/2019/07/wolf-delisting-} Wolves help maintain healthy ungulate populations by

\footnote{Wildlife Services is directed to refrain from using M-44 devices in areas where federally endangered or threatened species might be adversely affected (determined in consultation with FWS) unless it has been addressed by FWS in “special regulations” pursuant to the ESA, requirements imposed in incidental take permits, or any other agreement with FWS. \textit{ANIMAL & PLANT HEALTH INSPECTION SERV., M-44 USE & RESTRICTIONS} 5–6 (Feb. 27, 2018), https://www.aphis.usda.gov/wildlife-damage/directives/pdf/2.415.pdf. However, for reasons outside the scope of this Article, Wildlife Services is not held to account for the harm its practices cause to endangered species on the federal level. See id. Nevertheless, the environmental harm is undeniable. See id.
preying on the weak and diseased. Their presence also helps prevent overgrazing, which improves habitat and facilitates biodiversity.\textsuperscript{197} When culls decrease predator numbers, prey populations increase. This leads to erosion, vegetation loss, overpopulation, and other impacts.\textsuperscript{198} It again seems clear that these agency actions are worthy of NEPA review.

\textit{v. Wildlife is A Cultural Resource}

In addition to their economic and ecological value, animals have historic and cultural value as well. Animals are inextricably woven into American culture. We see this in the traditions of indigenous tribes,\textsuperscript{199} popular culture—which uses animals to represent everything from sports teams (e.g. the Denver Broncos) to America itself (the bald eagle). NEPA specifically includes cultural and historic properties as part of the human environment and the CEQ has released guidance on how to coordinate NEPA review with review under the National Historic Preservation Act (NHPA).\textsuperscript{200} The NHPA provides for NEPA-like review of federal undertakings that affect any “district, site, building, structure, or object that is included, or eligible for inclusion, in the National Register.”\textsuperscript{201}

Courts have acknowledged that wildlife can qualify for protection under the NHPA as “historic property.”\textsuperscript{202} In \textit{Dugong v. Rumsfeld},\textsuperscript{203} plaintiffs brought an action to enjoin the construction of a U.S. military base in Okinawa that threatened dugong habitat.\textsuperscript{204} Plaintiffs sued under the NHPA instead of NEPA because NEPA cannot be applied extraterritorially.\textsuperscript{205} The

\begin{footnotesize}
\begin{enumerate}
\item Id.
\item See id.
\item See Complaint at 29, Hopi Tribe v. Trump, No. 17-CV-2590 (TSC), 2019 WL 2494161 (D.D.C. Mar. 20, 2019) (a group of Native American tribes challenged the Trump administration’s decision to decrease the size of the Bears Ears National Monument). “As a people whose culture is derived from a deep connection to the Monument lands, and to the animals that share that land, the Navajo people have remained dedicated participants in the creation of the Monument.” Id. at *6.
\item Id. at *1.
\end{enumerate}
\end{footnotesize}
court denied defendants’ motion to dismiss because it determined that under the NHPA, dugongs could be considered “cultural property.”

Since animals qualify as a cultural resource under NHPA, there is no basis to deny a similar classification under NEPA as well. Furthermore, because Section 106 of NHPA is an independent statutory requirement, compliance with NEPA through a Categorical Exclusion would be insufficient to satisfy NHPA. Consultations under NHPA could be used to determine whether there would be an adverse effect to historic properties, which would trigger the need for an EA or EIS, either alone or in combination with other environmental effects.

_Dugong_ did not rely on the ecological or monetary value of wildlife; it rather focused on the animals’ cultural importance. Such recognition when applied domestically should prompt consideration of the cultural significance of wildlife as one of several factors favoring the preparation of an EIS for actions threatening wildlife.

C. Connected Actions

When preparing an EA or an EIS, agencies must consider all “connected actions,” “cumulative actions,” and “similar actions.” Actions are “connected” if they trigger other actions, cannot proceed without previous or simultaneous actions, or are “interdependent parts of a larger action and depend on the larger action for their justification.” Even if animal suffering alone is insufficient in certain circumstances to trigger NEPA review, that suffering considered in conjunction with the many other concurrent ecological impacts that accompany it to make clear the need for an EIS.

1. Farm Animals

The environmental impacts of large-scale animal agriculture are vast and well-documented, as are its impacts on human health and welfare. As

---

209 40 C.F.R. § 1508.25(a) (2020).
210 _Id._
211 See, e.g., Nat’l Pork Producers Council v. U.S. E.P.A., 635 F.3d 738 (5th Cir. 2011); Dakota Rural Action v. U.S. Dep’t of Agric., No. CV 18-2852 (BAH), 2019 WL 144013 (D.D.C. Apr. 1, 2019); Nicholas A. Fromherz, _From Consultation to Consent: Community_
discussed previously, such operations often rely on or result from agency actions. What follows is a brief overview of some of the environmental impacts of industrial agriculture.17

i. Air Pollution

Industrial agriculture is responsible for approximately one-third of all human-caused greenhouse gas production.213 Methane, which is produced by ruminants (such as cows, sheep, and goats), traps heat in the atmosphere twenty times more effectively than CO2,214 and a single adult cow can emit 176 to 242 pounds of methane per year.215 Manure produced by pig production also results in GHG emissions.216 The decomposing manure also emits high levels of volatile organic compounds, particulate matter, methane, ozone, ammonia, and hydrogen sulfide, all of which cause harmful health and environmental impacts.217

ii. Water Pollution

CAFOs contribute significantly to water pollution. Runoff carries waste into waterways, contaminates groundwater, and overflows into rivers. During flooding, decomposing animal carcasses render rivers uninhabitable.

---


213 David N. Cassuto & Sarah Saville, Hot, Crowded, and Legal: A Look at Industrial Agriculture in the United States and Brazil, 18 ANIMAL L. J. 185, 189 (2012).


215 Cassuto & Saville, supra note 213, at 190.


217 Id.
for aquatic life and toxic to humans.²¹⁸ Runoff from CAFO pollution releases nitrates, arsenic, and antibiotics into drinking water, which can cause serious public health issues. Any of these impacts would be significant either by themselves or in tandem.²¹⁹

iii. Land Degradation

Animal agriculture also causes significant land degradation. Overgrazing, compaction, and erosion are common, while conversion of grasslands to monoculture crops for animal feed further diminishes biodiversity.²²⁰ Notably, of the more than one-third of U.S. land used for pasture, twenty-five percent is administered by the federal government.²²¹ Once again, the environmental impacts are clear and the federal involvement undeniable.

iv. Climate Change

Emissions from large-scale animal agriculture form one of the main drivers of climate change.²²² EPA statistics attribute approximately nine percent of GHG emissions to agriculture.²²³ However, former U.S. Secretary of Energy Steven Chu has noted that the aggregated emissions caused by animal agriculture, including emissions from fertilizer use, soil disruption, and land-use changes, when weighted for lifetime and potency, exceed those of the energy sector.²²⁴

²¹⁹ Id.
²²³ ENVTL. PROT. AGENCY, SOURCES OF GREENHOUSE GAS EMISSIONS (last visited Jan. 14, 2019), https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions (noting that GHG emissions from agriculture “come from livestock such as cows, agricultural soils, and rice production”).
v. Financial Impacts and Environmental Justice

Negative impacts from actions that cause animal suffering extend to human communities as well. CAFOs generate toxic odors and cause insect populations to vector. Property values often drop, undermining the financial stability of communities. These impacts are often borne by low-income communities, and primarily people of color. Such environmental justice concerns can and should trigger NEPA review.

All of the above-mentioned impacts happen in tandem with enormous animal suffering. While that suffering alone merits NEPA review, the accompanying effects further underscore the importance of a full NEPA review.

VI. CONCLUSION

Animals and their wellbeing are a crucial part of the human environment, whether in the wild or in industry. Simply stated: harm to animals is harm to the environment. And that harm constitutes an environmental impact worthy of NEPA review. Even if considerations of animal welfare alone were insufficient, the cumulative impacts of industrial agriculture and wildlife control rise to the level of significant impact.

Finally, if those who inflict needless suffering on animals were required to disclose their actions as well as potential alternatives to them, the American public would confront a long-obscured, ugly reality. Past disclosures of animal mistreatment galvanized public pressure for reform. However, those past disclosures were limited to single instances at specific sites. If the scale and ubiquity of such practices were revealed, it could catalyze important reforms to practices that can only be described as barbaric. We believe such reforms are both morally and environmentally urgent. NEPA may well provide a way forward.

---

225 See Labrayere v. Bohr Farms, 458 S.W.3d 319 (Mo. 2015).
226 One study found that 92.2% of those living near and 78.9% of those living far from CAFOs believed the odor from manure was a problem. See UNDERSTANDING CONCENTRATED supra note 212, at 3.
227 Id.
228 See Wendee Nicole, CAFOs and Environmental Justice, the Case of North Carolina, 121(6) ENV. HEALTH PERSPECTIVES 182, 182 (2013); Christine Ball-Blakely, Cafos: Plaguing North Carolina Communities of Color, 18 SUSTAINABLE DEV. L. & POL’Y 1, 4 (2017).