

**WHEN THE RUBBER MET THE ROAD . . . THEN THE WATER, FISH, AND WHALES: USING THE
ENDANGERED SPECIES ACT TO OVERCOME THE DILUTION OF THE CLEAN WATER ACT**

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I. INTRODUCTION

The turquoise waves ripple out from the shore, only disrupted by the lush greenery of Douglas fir trees that populate the distant islands. The scene turns from idyllic to exuberant as an immense black tail clears the water's surface. The air is filled with the high-pitched clicks and squeaks the killer whales use to chase salmon, a scene that could be viewed in Washington State for as long as anyone can remember. People travel the world to see this scene, but is it truly worth the journey? If only they knew the damage their journey was causing.

Little do these whale enthusiasts know that when their tires hit the road to bring them to see these killer whales, they are releasing toxins that are causing the decline of the species. These whales, which were once endemic in the waters of the Northwest, are now critically endangered. The whales are starving to death from the decimation of the salmon population due to a tire preservative called 6PPD.¹ The chemical is ubiquitously used in the tire industry and is probably in the tires of the vehicle you may have driven today.

Just as the whales and salmon are declining, so too are the ways to protect them. The case *Sackett v. EPA* has just been released from the Supreme Court's docket. *Sackett v. EPA* has once again narrowed the scope of the Environmental Protection Agency's (EPA) authority to protect our waterways.² This dilution of the Clean Water Act (CWA) has demonstrated the need for new methods to protect our environment and waterways. If the CWA is not protecting the water, then perhaps other acts such as the Endangered Species Act (ESA) can be used to protect them.

The ESA might be used to prevent a 6PPD from entering into our waterways. 6PPD is a preservative used in tires that, when mixed with water, turns into the toxic 6PPD-quinone.³

¹ Sarah McQuate, *Tire-related chemicals are largely responsible for adult coho salmon deaths in urban streams*, UW News, Dec. 3, 2020. <https://www.washington.edu/news/2020/12/03/tire-related-chemical-largely-responsible-for-adult-coho-salmon-deaths-in-urban-streams/> (last visited Jan. 15, 2023).

² *Sackett v. EPA*, 566 U.S. 120, 127 (2012).

³ McQuate, *Supra* note 1.

When tires hit the road, particles are released and wash into the groundwater and streams. As a result, 6PPD-quinone often kills salmon before they can spawn, which has a devastating effect on the Coho salmon population.⁴ Less salmon, in turn, has had a devastating effect on the population of Southern Resident killer whales, an endangered species that feeds on Coho salmon.⁵ According to the Marine Mammal Commission (MMC), “The ongoing decline of the Southern Resident killer whale population over the last 20 years is most likely due to three distinct threats: the decreased quantity and quality of prey, the presence of persistent organic pollutants, and disturbance from vessel presence and noise.”⁶ Washington State and Seattle’s local government are addressing the disturbance from vessel noises, this leaves pollutants and the killer whales’ food source to be addressed.⁷

The ESA states that it is “unlawful for any person to take an endangered species of fish or wildlife.”⁸ A take is defined in the Act as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” wildlife on the endangered or threatened species list.⁹ The terms harm and harass were not originally defined in the Act. A regulation was later issued to define harm to mean “significant environmental modification that has had the effect of actually injuring or killing wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavioral patterns, which include, but are not limited to, breeding, feeding or shelter.”¹⁰ In this case, the chemical 6PPD-quinone is modifying the environment resulting in the disruption of the killer whales’ feeding habits by depleting their food source. Securing injunctive

⁴ *Id.*

⁵ Southern Resident Killer Whale, Marine Mammal Commission, <https://www.mmc.gov/priority-topics/species-of-concern/southern-resident-killer-whale/> (Last visited on Sep. 25, 2022).

⁶ *Id.*

⁷ Washington State Government Southern Resident Orca Recovery, <https://orca.wa.gov/recommendation-category/vessels-disturb-orcas/> (Last accessed on Jan. 16, 2023).

⁸ Endangered Species Act, 16 U.S.C. §§1531-1544, 9 (a)(1)(B).

⁹ *Id.*

¹⁰ *Id.*

relief for polluters is harder under the harm provision than the take provision because death or injury must be intentional or the result of negligence under the traditional take mechanism.¹¹

Most successful injunctions under the ESA are accomplished through civil action.¹² Injunctive relief could be achieved in one of two ways. The first way is to file a civil suit against the United States government requiring it to regulate 6PPD's use in tires. Another option would be to file a civil suit against the tire manufacturers requiring them to use a different chemical to preserve their tires. This paper is about using the Endangered Species Act to overcome the shortfalls of the Clean Water Act in order to protect waterways, the environment, and the animals in them. Section II describes the erosion of the CWA through case law. The second part will discuss the history of the ESA and the cases that helped define it. The third part will address the Coho salmon in Washington state, and the chemical 6PPD-quinone. From here, the paper will move into section III, legal analysis, which will be composed of two parts. The first part will look at the Clean Water Act. The second part of the analysis section will focus on the ESA. Section IV will focus on how to utilize the ESA to bring civil suits to hold agencies accountable to regulate this pollutant, and to hold companies accountable for dumping. Section V is the conclusion, bringing the above together to show how the discussed laws can be used to protect the environment and waterways as the effectiveness of the Clean Water Act has been reduced.

II. BACKGROUND

A. *The history of the Clean Water Act and how it has been applied*

¹¹ ABA Guide, Endangered Species Act; Law, Policy, and Perspectives, 162 (Donald C. Baur & Ya-Wei Le 3rd ed. 2021).

¹² *TVA v. Hill*, 437 U.S. 153 (1978).

The Clean Water Act was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.”¹³ Before the CWA was enacted, the nation’s waterways were covered by a patchwork of acts that were specific to certain types of waterways.¹⁴ Since it was enacted, the Supreme Court has taken this to mean that EPA can regulate some of the nation’s water under certain conditions.¹⁵ The first major case before the Supreme Court on the CWA was *United States v. Riverside Bayview Homes, Inc.*, where the Court determined that the CWA applied to wetlands adjacent to navigable waters.¹⁶ Second is *Rapanos v. United States*, which almost narrowed EPA’s ability to regulate dumping.¹⁷ Third, the *Sackett v. EPA* decision was just released by the United States Supreme Court.¹⁸ Finally, we briefly discuss the decisions made outside of the CWA that do not protect wildlife and decisions made outside of the courtroom including EPA rulings, Presidential Executive Orders, and the current state of enforceability of the CWA.

The Rivers and Harbors Appropriation Act of 1899 was the first legislation enacted to regulate water pollution.¹⁹ The Act prohibited the construction of bridges and other structures while regulating the dumping of refuse material without the approval of the Army Corps of Engineers (Corps).²⁰ The Act did not, however, cover discharge unless it affected ships’ navigation.²¹ In 1948, the Federal Water Pollution Control Act was enacted, allowing the courts to grant relief for pollution.²² Interstate waters were subsequently protected under the Water Quality Act in 1965.²³

¹³ Clean Water Act, 33 U.S.C. §1251 et seq.

¹⁴ ABA Guide, *The Clean Water Act Handbook* 1 (Mark A. Ryan, 4th ed. 2018).

¹⁵ *Id.* at 13.

¹⁶ *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 124 (1985).

¹⁷ *Rapanos v. United States*, 547 U.S. 715, 272-278 (2006).

¹⁸ *Sackett* 566 U.S. at 127.

¹⁹ The Rivers and Harbors Appropriation Act of 1899, 33 U.S.C. §1251 *es seq.*

²⁰ ABA Guide, *supra* note 14, at 1.

²¹ *Id.*

²² Water Pollution and Prevention and Control Act, 33 U.S.C. § 1251 (1948).

²³ ABA Guide, *supra* note 14, at 1.

In 1972, prompted by the Cuyahoga River being so full of pollutants that it caught fire in downtown Cleveland, the CWA was passed, establishing the National Pollution Discharge Elimination System permit program.²⁴ An amendment was made in 1977 to address sixty-five toxic pollutants.²⁵ “The CWA is the principle law governing pollution control and water quality of the Nation's waterways. The object of the CWA is to restore and maintain the chemical, physical and biological integrity of the Nation's waters (33 U.S.C. 1251).”²⁶ The CWA gave EPA the authority to control pollution such as “setting wastewater standards for industry and water quality standards for all contaminants in surface waters.”²⁷ “The CWA made it unlawful for any person to discharge any pollutant from a point source into waters of the United States, unless a NPDES permit was obtained under its provisions.”²⁸

The Court’s interpretation of the CWA has changed over time. The first decision was handed down in 1985 with *Riverside Bayview Homes Inc.* In *Riverside*, a home builder filled in wetlands without receiving a permit from the Army Corps of Engineers (Corps).²⁹ The CWA prohibits dredged or fill materials from being discharged into “navigable waters” without a permit.³⁰ The Corps filed suit against *Riverside* for not obtaining a permit.³¹ The case went to the Supreme Court, where the Court ruled that “navigable waters,” defined as “waters of the United States” included adjacent freshwater wetlands.³² “‘Freshwater wetland’ was defined as an area that is ‘periodically inundated’ and is ‘normally characterized by the prevalence of vegetation

²⁴ *Id.* at 2.

²⁵ *Id.*

²⁶ Us Department of the Interior, Clean Water Act (CWA), <https://www.boem.gov/environment/environmental-assessment/clean-water-act-cwa#:~:text=The%20CWA%20is%20the%20principle,1251>). (last visited Feb. 17, 2023)

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Riverside*, 474 U.S. at 124.

³⁰ Clean Water Act, 33 U.S.C. §1251 et seq.

³¹ *Id.*

³² *Riverside*, 474 U.S. at 124.

that requires saturated soil conditions for growth and reproduction.”³³ The Court ruled that the lower court erred when it found that the Corps could not require a permit for land that did not regularly flood because a wetland is defined by the vegetation and soil quality present on the land.³⁴ In this case these two factors categorized Riverside’s land as a freshwater wetland that was adjacent to navigable waters.³⁵

The Federal Appeals Court found that the Corps regulation violated the Fifth Amendment because they were not “narrowly construed,” so their actions constituted a “take.”³⁶ The Supreme Court overruled this finding because a take only occurs “if the ordinance does not substantially advance legitimate state interests . . . or denies an owner economically viable use of his land.”³⁷ The Court found that the existence of a permit system means that permission can be granted and therefore does not automatically mean that a take occurs.³⁸ Further, the Court found that even if a permit is not granted, the landowners can still use their land for other purposes.³⁹ The agency’s interpretation of the law was reasonable given the nature of water and how bodies of water effect each other, and therefore the decision should be given deference under *Chevron*.⁴⁰ This is a two-step test where the Court tries not to insert its judgment for the judgment of the agency.

In *Rapanos*, the Court narrowed the definition of “navigable waters” by stating that “navigable waters” only covered adjacent wetlands if they were continuously connected with water.⁴¹ In this case, John A. Rapanos backfilled the wetlands on a parcel of land he owned in Michigan so he could develop the property.⁴² The wetland was connected to the main body of

³³ *Id.*

³⁴ *Id.* at 130.

³⁵ *Id.* at 131.

³⁶ *Id.* at 127.

³⁷ *Agins v. Tiburon*, 447 U.S. 255, 260 (1980).

³⁸ *Riverside*, 474 U.S. at 126-127.

³⁹ *Id.*

⁴⁰ *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 842-845 (1984).

⁴¹ *Rapanos*, 547 U.S. at 272-278.

⁴² *Id.* at 719-720.

water through a series of drains and ditches.⁴³ The Court sent the case back down to the lower court to determine “whether the nearby drains and ditches contain continuous or merely occasional flows of water.”⁴⁴ If the drainage ditches were not continuously providing water flow then Rapanos would not require a permit to fill the wetlands through the CWA.⁴⁵ More importantly, defining Waters of the United States (WOTUS) in this way could legalize the dumping of chemicals in bodies of water that were not encompassed under this definition in the Clean Water Act.⁴⁶ “‘The discharge of a pollutant’ is defined broadly to include ‘any addition of any pollutant to navigable waters from any point source,’ § 1362(12), and ‘pollutant’ is defined broadly to include not only traditional contaminants but also solids such as ‘dredged soil, . . . rock, sand, [and] cellar dirt.’”⁴⁷ Meaning that if the body of water does not fit under the current definition of “navigable waters,” then EPA could not regulate the dumping of contaminants under the CWA. Some polluters took advantage of the ambiguity caused by the case to justify open dumping.⁴⁸

May 25, 2023, the *Sackett v. EPA* decision was released from the docket of the Supreme Court for the second time.⁴⁹ In the first case the Sacketts failed to apply for a permit from the Corps to fill in part of their land.⁵⁰ EPA determined that they violated the CWA because they altered their land without a permit.⁵¹ The CWA allows EPA to correct a violation by issuing a compliance order, initiating a civil enforcement action, or both.⁵² In this case, EPA first issued a compliance order to return the land to its original state, after the Sacketts failed to do so the

⁴³ *Id.*

⁴⁴ *Id.* at 729.

⁴⁵ *Id.*

⁴⁶ 33 U.S.C. § 1311(a).

⁴⁷ *Rapanos*, 547 U.S. at 723.

⁴⁸ Charles Duhigg & Janet Roberts, *Rulings Restrict Clean Water Act, Foiling E.P.A.*, N.Y. TIMES, Feb. 28, 2010. <https://www.nytimes.com/2010/03/01/us/01water.html>.

⁴⁹ *Sackett*, 566 U.S. at 127.

⁵⁰ *Id.*

⁵¹ *Id.* at 123.

⁵² *Id.* at 120-121.

agency initiated a civil enforcement action.⁵³ After the first case went through EPA’s channels of appeal, it then went through the federal court system all the way to the Supreme Court.⁵⁴ The issue in question, as Justice Scalia put it, was “[W]hether Michael and Chantell Sackett may bring a civil action under the Administrative Procedure Act, 5 U.S.C. § 500 et seq., to challenge the issuance by the Environmental Protection Agency (EPA) of an administrative compliance order under § 309 of the Clean Water Act, 33 U. S. C. § 1319.”⁵⁵ The Court found that there was no adequate remedy for the agency's decisions beyond APA review, and the CWA permitted that review.⁵⁶ The Court reversed and remanded the Court of Appeals judgment.⁵⁷

The *Sackett* case then found its way back through the district and circuit courts and went to the Supreme Court again.⁵⁸ The second case will determine if the Sacketts’ land is protected under the CWA, which would consequently require a permit from the Corps for its modification, and determine whether they are liable for their actions.⁵⁹ The Biden administration argued that a “restrictive version of the ‘continuous surface connection’ test articulated by the plurality . . . has no grounding in the CWA’s text, structure, or history.”⁶⁰ The administration argued that abandoning the significant nexus test would leave many adjacent wetlands not covered under the act.⁶¹ The question in the case is over the application of *Rapanos*.⁶² The Court of Appeals affirmed that the Sacketts’ land was governed under the CWA.⁶³ The Supreme Court ruled that federally protected wetlands only encompassed directly adjoining rivers, lakes, and other bodies

⁵³ *Id.* at 125.

⁵⁴ *Id.* at 131.

⁵⁵ 33 U. S. C. § 1319.

⁵⁶ *Id.* at 129.

⁵⁷ *Id.*

⁵⁸ *Sackett v. EPA Coverage*, SCOTUS blog, <https://www.scotusblog.com/case-files/cases/sackett-v-environmental-protection-agency/> (last visited Oct. 29, 2022).

⁵⁹ Brief of Respondent at 2, *Michael Sackett & Shantell Sackett v. Environmental Protection Agency*, U.S. (2022), 2019 WL 13026870 (2021) (No. 21-454).

⁶⁰ Brief for the Respondents at 17, *Sackett v. Env’tl Protection Agency*, (No. 21-454).

⁶¹ *Id.*

⁶² Brief of Respondent at 8, *Michael Sackett & Shantell Sackett v. Environmental Protection Agency*, U.S. (2022), 2019 WL 13026870 (2021) (No. 21-454).

⁶³ *Id.* at 7.

of water.⁶⁴ This is a much narrower interpretation the CWA which opens up many wetlands across the United States to being developed.⁶⁵ alternate protection of waterways and the broader environment should be investigated.

In *Solid Waste Agency of Northern Cook Cty. V. Army Corps of Engineers*, the Supreme Court determined that the Corps' denial of a permit for disposal was improper because they did not have jurisdiction to deny the permit.⁶⁶ In this case, a group of municipalities came together to build a disposal site on an abandoned gravel pit.⁶⁷ The Corps denied their petition because it was being used by migratory birds.⁶⁸ The Corps first could not regulate the quarry due to it being outside of the scope of navigable waters because it only seasonally ponded.⁶⁹ Further, the Court found that protecting wildlife was outside of the scope of the CWA and therefore not within the Corps' authority to regulate.⁷⁰ This decision translates to EPA and Corps not being able to prevent dumping in wildlife habitats purely on the basis of protecting them.

Also complicating the application of the CWA were the several published EPA and Corps guidelines, multiple signed Executive Orders, and exceptions made to the CWA. In 2008, EPA and Corps went through a rule-making process and issued the New Agency Guideline defining the CWA's jurisdiction.⁷¹ These guidelines lessened the CWA's control of some waterways, but most of its jurisdiction was unaltered. In 2015, the Clean Water Rule was issued in response to the above court cases by EPA and Corps under Obama.⁷² The Clean Water Rule

⁶⁴ Sackett v. Environmental Protection Agency, 598 U.S. ____ (2023).

⁶⁵ Albert C. Lin, The Supreme Court just narrowed protection for wetlands, leaving many valuable ecosystems at risk, PBS (May 27, 2023) <https://www.pbs.org/newshour/science/the-supreme-court-just-narrowed-protection-for-wetlands-leaving-many-valuable-ecosystems-at-risk>.

⁶⁶ *Solid Waste Agency v. United States Army Corps of Eng'rs*, 531 U.S. 159, 193 (2001).

⁶⁷ *Id.* at 162-163.

⁶⁸ *Id.* at 164.

⁶⁹ *Id.* at 163.

⁷⁰ *Id.* at 193.

⁷¹ GUIDANCE FOR 2006 ASSESSMENT, LISTING AND REPORTING REQUIREMENTS PURSUANT TO SECTIONS 303(D), 305(B) AND 314 OF THE CLEAN WATER ACT (EPA and Corps 2005).

⁷² Clean Water Rule: Definition of "Waters of the United States", 80 FR 37053 (July 13, 2015) (to be codified at 40 CFR part 23).

expanded the jurisdiction of the CWA. In 2017, President Trump signed an executive order aimed at undoing the Clean Water Rule that would roll back the expansion of the CWA.⁷³

In 2020, an Executive Order from President Trump called the Navigable Waters Protection Rule greatly reduced the number of waterways and wetlands that were protected by the CWA.⁷⁴ Further, it allowed for the Army Corps of Engineers to make regulatory determinations called jurisdictional determinations instead of getting a permit.⁷⁵ This resulted in the time it took for Corps to issue some decisions changing from months to less than 24 hours. In 2021, an Executive Order from President Biden and a court case called *Pasqua Yaqui Tribe v. U.S. Environmental Protection Agency* invalidated Trump's 2017 executive order.⁷⁶ EPA then issued a ruling for the current implementation of WOTUS.⁷⁷ One exception that has been built into the CWA was made for Concentrated Animal Feeding Operations.⁷⁸ This allows for unregulated dumping including "fertilizers and pesticides applied to row fields, animal waste from livestock operations, and sediment loading from tree farms."⁷⁹

The CWA is the main act that protects waterways and the environment. Though the Act used to have a broad definition of what waters were protected under WOTUS, it was narrowed in *Riverside*, and then further narrowed in *Rapanos*. The decision over what bodies of water are covered by the CWA rests on *Sackett*, which is currently on the docket at the United States Supreme Court. The CWA cannot be directly used to protect wildlife because of *Northern Cook*.

⁷³ Lisa Friedman & Coral Davenport, *Trump Administration Rolls Back Clean Water Protections*, N.Y. TIMES, Sep. 19, 2019.

⁷⁴ Environmental Protection Agency, <https://www.epa.gov/wotus/current-implementation-waters-united-states#Rapanos> (last visited on Nov. 23, 2022).

⁷⁵ Amena Saiyid, *Companies Eager to 'lock in' Trump Era-Water Rule Exemptions*, Bloomberg Law, Sep. 10, 2020.

⁷⁶ *Pasqua Yaqui Tribe v. United States EPA*, 557 F. Supp. 3d 949, 957 (D. Ariz. 2021).

⁷⁷ *Id.*

⁷⁸ Jan G. Laitos & Heidi Ruckriegle, *THE CLEAN WATER ACT AND THE CHALLENGE OF AGRICULTURAL POLLUTION* 1 (2013).

⁷⁹ *Id.*

All of the decisions and executive orders place the application of the CWA back to where it stood after *Rapanos*, until the Supreme Court publishes its decision on *Sackett*.

B. The History of Protecting Endangered Species

The Endangered Species Act (ESA) was enacted to consolidate the existing legislation being used to protect endangered species. A series of legislative actions were made in response to the loss of some of the United States' most iconic species. Since the ESA was enacted, the court's application of the Act has changed concerning its ability to protect endangered species. These cases are where the protection of endangered species currently stands, though it took passing a series of legislation to get there.

At the turn of the 20th century, there were virtually no protections in place for endangered species. For example, carrier pigeons were once so numerous that they blackened the sky.⁸⁰ The bird's disappearance from North America was so abrupt and striking that it caused the first significant federal wildlife regulation to pass in 1900.⁸¹ The Act was named after Lacey, the principal sponsor of the act.⁸² The Lacy Act's stated purpose was "to utilize this Department for the reintroduction of birds that have become locally extinct or are becoming so."⁸³ It also outlawed the shipment of wildlife in interstate commerce.⁸⁴ This started a series of legislation to be passed with similar objectives.

The Department of the Interior's Bureau of Sport Fisheries and Wildlife (Fish and Wildlife) was created in 1939 and began researching and performing conservation projects.⁸⁵ In 1940, the United States signed the Convention of Natural Protection and Wildlife Preservation in

⁸⁰ *Supra* note 11

⁸¹ *Id.*

⁸² *Id.* at 14.

⁸³ The Lacy Act, 46 CONG. REC. 4871 (Apr. 30, 1900).

⁸⁴ *Id.*

⁸⁵ ABA Guide, *Supra* note 11, at 14.

the Western Hemisphere.⁸⁶ Fish and Wildlife established the Committee on Rare and Endangered Wildlife Species.⁸⁷ The Committee made the first list of endangered species.⁸⁸

In 1969, the United States passed the Endangered Species Conservation Act, the first endangered species law with international implications.⁸⁹ It called for the compiling of an official list of endangered species and also prohibited the importation of endangered species.⁹⁰ The Act had no prohibition on the hunting or selling of domestic animals and avoided protecting wildlife habitats.⁹¹ The Endangered Species Act was enacted in 1973 to correct these issues.⁹² The class of endangered species was divided into two categories. The first is threatened species, a classification that results in flexible protections.⁹³ The second is endangered species, which are afforded automatic strict protections.⁹⁴ “It authorized the designation of ‘critical habitat’ for both endangered and threatened species and required federal agencies to ensure that their actions neither adversely modify critical habitat nor jeopardize the continued existence of any listed species.”⁹⁵ The Act was amended in 1982 which required that the secretary use the best scientific and commercial data available and that they designate critical habitats.⁹⁶ This is the governing legislation for protecting endangered species.

The first major take case after *TVA v. Hill* was *Sweet Home*, wherein Sweet Home fought the agency’s definition of harm under the ESA.⁹⁷ Sweet Home refers to the Plaintiffs organization called Sweet Home Chapter of Communities for a Great Oregon. The Secretary of

⁸⁶ Convention of Natural Protection and Wildlife Preservation in the Western Hemisphere, 56 Stat. 1354, T.S. No. 981, 161 U.N.T.S. No. 193 (entered into force Apr. 30, 1942).

⁸⁷ ABA Guide, *Supra* note 11, at 14-15.

⁸⁸ *Id.*

⁸⁹ Endangered Species Conservation Act, Pub. L. No. 89-669, §§ 1–3, 80 Stat. 926 (1996).

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 690 (1995).

the Interior of Fish and Wildlife stated that a take included “significant habitat modification or degradation where it actually kills or injures wildlife.”⁹⁸ On the other hand, Sweet Home stated that harm did not include habitat modification and degradation, and that it was beyond the authority of the ESA to regulate.⁹⁹ The Court found in favor of the Secretary’s decision and concluded that harm included habitat degradation.¹⁰⁰

Justice O’Connor’s concurrence stated that “the regulation is limited by its terms to actions that actually kill or injure individual animals.”¹⁰¹ In other words, the actor must have committed direct action causing the death of the animal. She also commented on causation stating that “even setting aside difficult questions of science, the regulation’s application is limited by ordinary principles of proximate causation.”¹⁰² This was the beginning of the use of Proximate Cause for the ESA, shifting the rulings away from the use of science and narrowing the controlling agencies’ regulatory powers. It also implemented “Foreseeability” which means that a reasonable person would likely foresee the outcome being the result of the action.¹⁰³ The reasonable person refers to a person that is “of average caution, care and consideration.”¹⁰⁴

The next case, *Animal Welfare Institute*, narrowed the definition of harm. The Institute brought an action against Beach Ridge Energy LLC.¹⁰⁵ The company failed to apply for an Incidental Take Permit (ITP), and their wind turbines were killing endangered bats.¹⁰⁶ In the ESA, harm is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” against an endangered species.¹⁰⁷ Further,

⁹⁸ *Id.*

⁹⁹ *Id.* at 693.

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 709

¹⁰² *Sweet Home*, 515 U.S. at 706.

¹⁰³ *Cochran v. Securitas Sec. Services USA, Inc.*, 59 N.E.3d 234 (App. Ct. 4th Dist. 2016).

¹⁰⁴ Jeffrey Johnson, *Reasonable Person Standard: legal Definition & Examples*, FORBES, Sep. 19, 2022.

¹⁰⁵ *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540, 541 (D. Md. 2009).

¹⁰⁶ *Id.* at 544.

¹⁰⁷ Endangered Species Act, 16 U.S.C. § 1532(19) (1973).

Fish and Wildlife Service passed regulation 50 CFR §17.3 that defined harass as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.”¹⁰⁸ The court enjoined Beech Ridge Energy from operating their turbines during certain times and required them to apply for an ITP.¹⁰⁹ This was a District Court case for the District of Maryland.

The final case, *Aransas Project v. Shaw*, was about the “take” of the Whooping Crane and the proximate cause of the decline in their numbers.¹¹⁰ The case was in the Fifth Circuit and the Supreme Court did not grant certiorari.¹¹¹ The following is the breakdown of the case:

- (1) private parties withdrawing water from rivers, which led to
- (2) a significant reduction in freshwater inflow into the estuarine ecosystem, which, in combination with drought effects, led to
- (3) increased salinity in the bay, causing
- (4) a reduction in the abundance of blue crabs and wolfberries upon which the cranes rely, resulting in
- (5) emaciation of the cranes,
- (6) engagement in stress behavior, and ultimately
- (7) the death of 23 cranes in the 2008–2009 wintering season.¹¹²

The Court found that “[a]pplying a proximate cause limit to the ESA must . . . mean that liability may be based neither on the ‘butterfly effect’ nor on remote actors in a vast and complex ecosystem.”¹¹³ In this case it was shown that the connection between Shaw’s actions and the birds’ deaths was too remote to hold them accountable.¹¹⁴

The ESA is the current legislation guiding the protection of endangered species. When applying the ESA to the current case, the definition of harm under *Sweet Home* will be used.

¹⁰⁸ Fish and Wildlife Regulations, 50 C.F.R. § 17.3.

¹⁰⁹ *Animal Welfare Inst.* 675 F. Supp. First page, 583 (2009).

¹¹⁰ *Aransas Project v. Shaw*, 775 F.3d 641, 645 (5th Cir. 2014).

¹¹¹ *The Aransas Project v. Shaw*, 576 U.S. 1035 (2015).

¹¹² ABA Guide, *supra* note 11, at 160-161.

¹¹³ *Id.*

¹¹⁴ *Id.* at 664.

Proximate cause will be applied because of *Animal Welfare*. Finally, the further refining of ESA was expanded on in *Aransas*. These rulings show where the protection of endangered species currently stands.

C. *Southern Resident Killer Whales*

The killer whales in the Northwest consist of a subspecies called the Southern Resident killer whales. Their populations are declining, and they have been declared critically endangered. The whales' reproductive habits were a significant factor in this status. Another reason they are going extinct is because the population lost a whole generation of whales to poaching for theme parks.¹¹⁵ The second reason is the presence of Persistent Organic Pollutants affecting their health.¹¹⁶ The third reason is the high noise levels that impair their ability to catch food and communicate. All of these threats are being addressed or have ceased. The problem that remains is that the killer whales are starving to death. The regulating agency that is commissioned with the protection of the killer whales is the National Marine Service.

Killer whales are found in every ocean, but have distinct populations and species.¹¹⁷ Killer whales are not whales at all, but rather a kind of dolphin.¹¹⁸ The subspecies in the Northwest of the United States is referred to as Southern Resident killer whales.¹¹⁹ They differ from other populations of killer whales because they only eat fish, have unique calls, and are not migratory.¹²⁰ The ESA protects species, subspecies, and distinct populations.¹²¹ Southern Resident killer whales are protected under the ESA. The population consists of three designated

¹¹⁵ Southern Resident Killer Whale Health Assessment, National Oceanic and Atmospheric Administration, <https://www.fisheries.noaa.gov/science-data/southern-resident-killer-whale-health-assessments> (Last visited on Sep. 25, 2022).

¹¹⁶ See also Persistent Organic Pollutants: A Global Issue, A Global Response, <https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response> (last visited 2.17.23)

¹¹⁷ Southern Resident Killer Whale, *Supra* note 5.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Killer Whale, National Oceanic and Atmospheric Administration, <https://www.fisheries.noaa.gov/species/killer-whale>. (Last visited on Sep. 25, 2022).

¹²¹ Endangered Species Act, 16 U.S.C. §§1531-1544.

Pods: J, K, and L. Unique to this subpopulation, most individuals spend their whole lives in their pod.¹²² The population used to consist of about 140 killer whales. Now it has fallen to around seventy-five individuals.¹²³ Female orcas have a life expectancy of fifty to ninety years. Male killer whales live from about thirty years to sixty years. Female killer whales reach sexual maturity in their teenage years, but offspring have a higher survival rate when the female is in her twenties. A female's reproductive period ends at around age forty. Their gestation period is around fifteen to eighteen months, and they typically only have one calf per pregnancy.¹²⁴ The dolphins have had a high infant mortality rate, contributing to their decline; and it is currently estimated at fifty percent.¹²⁵

The Southern Resident killer whales are facing extinction. One of the reasons is that in the 1960s and 1970s, juvenile whales were taken from their pods and placed in sea parks.¹²⁶ Southern Resident killer whales were added to the endangered species list in 2005.¹²⁷ Three major factors have been identified as causing the extinction of the dolphins. The first will be the focus of this note, which is the reduction of the whale's food quality and quantity.¹²⁸ "Insufficient prey has been identified as a factor limiting their recovery, so a clear understanding of their seasonal diet is a high conservation priority."¹²⁹

The second reason that the killer whales are going extinct is because of the presence of "persistent organic pollutants that could cause immune or reproductive system dysfunction."¹³⁰ The Stockholm convention was a global treaty that required countries to limit and reduce the use

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ Southern Resident Killer Whale Health Assessment, *supra* note 108.

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ M. Bradley Hanson et al., *Endangered predators and endangered prey: Seasonal diet of Southern Resident killer whales*, PLOS ONE, March 3, 2021.

¹³⁰ Killer Whale, *supra* note 112.

of Persistent Organic Pollutants (POP), and it came into effect in 2004.¹³¹ The final factor is the noise produced by vessels that disturb the dolphins' ability to echolocate their prey.¹³² The Northwest has launched a program called Quiet Sound to reduce the noise for killer whales.¹³³ "When large vessels slow their speed they reduce the amount of underwater noise they create and less underwater noise means better habitat for the endangered Southern Resident killer whales".¹³⁴ The slowness of the cleanup of POPs, as well as the fact that there is already action being taken to reduce noise, make working on protecting the dolphins' food source a high priority.¹³⁵

Chinook salmon constitute the main part of the dolphins' diet,¹³⁶ though the primary food source for the orcas changes throughout the year. For example, the main food source for the dolphins in October is Coho salmon, which represents 53.8% of their diet.¹³⁷ The depletion of the fish could hurt the killer whale's chance of survival if they lose such a vital food source, especially since Chinook salmon are already considered endangered.¹³⁸ With most of the issues affecting the killer whales being addressed except for the loss of their food source, their numbers continue to decline- thus, it has become essential for their survival to stop the decimation of the salmon populations.

D. Coho Salmon

¹³¹ Persistent Organic Pollutants: A Global Issue, A Global Response, Environmental Protection Agency, <https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response> (Last visited on Sep. 25, 2022).

¹³² When Killer Whales Hunt the King of Salmon, Smithsonian Institution, <https://ocean.si.edu/ocean-life/marine-mammals/when-killer-whales-hunt-king-salmon> (Last visited on Sep. 25, 2022).

¹³³ Tom Banse, *Big ships transiting North Puget Sound asked to slow down, quiet down for orcas*, OBP, Oct. 17, 2022.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ When Killer Whales Hunt the King of Salmon, *supra* note 123.

¹³⁷ M. Bradley Hanson et al., *supra* note 120.

¹³⁸ *Id.*

The whales primarily eat Coho salmon for part of the year; the population that will be discussed are indigenous to Washington State. Salmon are so ubiquitous with the local area that the Lummi Nation, a local tribe, is named after them.¹³⁹ The life of a salmon is complex and filled with different life stages that correlate with different locations, from streams to the ocean. Though they are not endangered in Washington outside of the Columbia River at the moment, due to pollutants from tires they may soon also join the endangered species list, pushing the killer whales further toward the brink of extinction.¹⁴⁰ The agency that regulates the Coho salmon is the National Marine Fisheries Service.

Salmon are sacred to local indigenous people, including the Lummi Nation. “In the Point Elliott Treaty of 1855, the Lummi, not yet devastated by smallpox and fur trappers and sawmills, gave up their lands in exchange for political sovereignty, reservations, and fishing and hunting rights in their ‘usual and accustomed’ places — the latter, an expansive promise of the treaty.”¹⁴¹ This shows how important fishing was to the Lummi Nation, who perform celebratory salmon ceremonies.¹⁴² Now that the salmon’s numbers dwindle, the tribe catches crabs and crustaceans instead of salmon.¹⁴³ “‘The bottom line is the Salish Sea and the whales and the tribes need more salmon,’ said Julius, the elected leader of the 6,500-member tribe. ‘We’re at the point now where we don’t have much time. We are possibly the last generation that can do anything about it.’”¹⁴⁴

Coho salmon hatch from eggs laid on stream beds, when they hatch they are alevins and soon after, fry.¹⁴⁵ Coho fry normally spend a year in freshwater before going to the open

¹³⁹ Tammy Kim, *Can This Tribe of ‘Salmon People’ Pull off one more win?*, N.Y. TIMES, Oct. 24, 2021.

¹⁴⁰ Salmon Status in Washington, Washington Government, <https://stateofsalmon.wa.gov/executive-summary/salmon-status/> (Last visited on Jan. 16, 2023).

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ Levi Pulkkinen, *A pod of orcas is starving to death. A tribe has a radical plan to feed them.*, THE GUARDIAN, Apr. 25th, 2019.

¹⁴⁵ The Salmon Lifecycle, National Park, Services, <https://www.nps.gov/olym/learn/nature/the-salmon-life-cycle.htm> (Last visited on Sep. 25, 2022).

ocean,¹⁴⁶ where they turn into parr. Coho salmon spend about 18 months at sea before returning to the river to spawn.¹⁴⁷ They return to the same rivers that they were born in, taking the long journey for the sole purpose of reproducing.¹⁴⁸ When they reach the stream, the females build up to seven nests called redds.¹⁴⁹ During this time, a single female can have between 2,500 and 7,000 eggs. The salmon, called kelts at this stage, die soon after they reproduce.¹⁵⁰

Given the number of eggs one female lays, it can be devastating for the salmon population to not be able to reach their spawning grounds. Further, only .1% of salmon make it back to the stream to spawn, so every fish killed before spawning can be disastrous to their population. The Coho salmon are affected by several factors including global warming, habitat loss, dam construction, and degraded water quality.¹⁵¹ Beyond this, scientists have noticed that the fish were dying in large numbers before they were spawning. The scientists set out to learn why and found that a chemical called 6PPD-quinone was the reason.¹⁵² Coho salmon are not currently endangered or threatened in Washington state outside of the Columbia River,¹⁵³ though 6PPD-quinone could change that. Returning Coho often gather at the mouths of streams and wait for the water flow to rise, such as after a rainstorm, before heading upstream.¹⁵⁴ Rainstorms and floods are when the levels of 6PPD-quinone are the highest.¹⁵⁵ Stopping this chemical from entering our waterways could stop the extinction of the salmon, and subsequently the endangered Southern Resident killer whale.

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ Coho Salmon, National Oceanic and Atmospheric Administration, <https://www.fisheries.noaa.gov/species/coho-salmon> (Last visited on Sep. 25, 2022).

¹⁵² McQuate, *Supra* note 1.

¹⁵³ Coho Salmon, *supra* note 145.

¹⁵⁴ Coho Salmon, Washington Department of Fish and Wildlife, <https://wdfw.wa.gov/species-habitats/species/oncorhynchus-kisutch#desc-range> (last visited on Sep. 25, 2022).

¹⁵⁵ McQuate, *Supra* note 1.

E. 6PPD-quinone

Local universities, including Washington State University Puyallup and the University of Washington, started noticing that the salmon were dying off when they returned to the rivers, but before they were able to spawn.¹⁵⁶ The universities teamed up to figure out what was killing the salmon.¹⁵⁷ The universities looked at over three thousand chemicals and narrowed it down to one major chemical, 6PPD-quinone.¹⁵⁸ It causes the fish to turn on their sides and turn in circles; it makes it look like they are desperately gasping for air. This matched what was happening in the lab when they exposed the fish to the same chemical.¹⁵⁹ California and Washington have started to take action to ban the chemicals use in tires.

6PPD is used as a tire preservative that prevents tires from cracking and extends their use.¹⁶⁰ The chemical is in tires all over the world. When cars are driving on roads, pieces of the tires that contain this preservative break off onto the road.¹⁶¹ These particles then get washed into waterways when it rains.¹⁶² When 6PPD is mixed with water it creates 6PPD-quinone.¹⁶³ When there is high rain it sweeps this chemical into rivers and streams coinciding with salmon's return to the rivers to spawn.¹⁶⁴ This causes the fish to die before they are able to spawn, depleting the

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ Zhenya Tian et al., *A ubiquitous tire rubber-derived chemical induces acute mortality in coho salmon*, *Science* 10.1126 (2020).

¹⁵⁹ California Department of Safer Consumer Products, <https://www.youtube.com/watch?v=aTe-qlh-xQY> (Last visited on Sep. 25, 2022).

¹⁶⁰ News Release, California Department of Toxic Substance Control, California Proposes Requiring Tiremakers to Consider Safer Alternative to Chemical that Kills Coho Salmon. (May 23,2022).

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *Id.*

population.¹⁶⁵ Washington state has started some clean-up projects, including cleaning up thousands of tires that were dropped into the ocean as fish housing.¹⁶⁶ The chemical has also recently been shown to negatively affect Chinook Salmon which is the Southern Resident killer whales' main food source during different parts of the year.¹⁶⁷

There is no current workable alternative to 6PPD because the chemical is used throughout the process of making tires and there has not been much research performed on workable alternatives.¹⁶⁸ The University of California Berkeley published a report about the alternatives to using 6PPD in tires.¹⁶⁹ The four alternatives that they suggest include: the modification of 6PPD; using food preservatives called gallates; using a plant-based polymer called Lignin; and developing an alternative rubber formulation.¹⁷⁰ The report found that “[o]f the four alternative schemes discussed in this report, no single solution can be deemed optimal due to the vast amount of safety and performance testing required following tire reformulation.”¹⁷¹ Though the report goes on to state that “among the four options we have considered herein, modification of 6PPD will likely result in the easiest industry replacement option.”¹⁷² The U.S. Tire Manufacturers Association admits that it is likely that 6PPD’s bioproduct is hurting the Coho salmon but has not worked to find an alternative to the chemical.¹⁷³ Given the harm from the chemical in tires and the association's knowledge, steps

¹⁶⁵ McQuate, *Supra* note 1.

¹⁶⁶ Partnerships fuel removal of toxic tires from Washington’s waters, Department of Ecology Washington State, <https://ecology.wa.gov/Blog/Posts/June-2022/Tackling-tire-debris-in-Washington-s-waters> (last visited on Dec. 11, 2022).

¹⁶⁷ Scientists Discover Silent Threats to Pacific Coast Salmon Populations, National Park Services, <https://www.nps.gov/articles/000/scientists-discover-silent-threats-to-pacific-coast-salmon-populations.htm> (Last visited on Sep. 25, 2022).

¹⁶⁸ ELIZABETH BOXER ET AL., SAVING COHO SALMON: ALTERNATIVES FOR 6PPD IN TIRE MANUFACTURING 38 (2021)

¹⁶⁹ *Id.* at 1.

¹⁷⁰ *Id.* at 5.

¹⁷¹ *Id.* at 38.

¹⁷² *Id.*

¹⁷³ U.S. Tie Manufactures Association, 6PPD and Tire Manufacturing, <https://www.ustires.org/6ppd-and-tire-manufacturing> (last visited Mar. 7, 2023).

should be taken to require the tire companies to be actively working, trying, and testing alternatives.

As the application of the CWA becomes more unpredictable, other means must be found to save the environment, the waterways, and all the species that live in them. This is where the application of the ESA can be used to stop the dumping of chemicals into streams. In this case, the goal is to save the Southern Resident killer whale from extinction by stopping them from starving to death. One of their main food sources for part of the year is Coho Salmon, which are being killed by the dumping of a tire preservative that occurs every time people drive. The chemical 6PPD becomes toxic when combined with water, and results in the decimation of the killer whales' food source, which this note will address.

III. LEGAL ANALYSIS

A. *Clean Water Act*

In the past, the CWA could have been used to stop the dumping of 6PPD. The EPA could have added 6PPD to the restricted list of chemicals and banned it from being put into products. Though it would have been covered under the ruling in *Riverside*, the CWA's coverage was greatly narrowed in *Rapanos*. The case currently before the Supreme Court, *Sackett*, could have a ruling that ranges from leaving waterway protection as it stands today, or more likely, will greatly reduce protections.

The Clean Water Act was enacted to protect the Waters of the United States (WOTUS), though this definition has changed over time as cases find themselves working their way through the court system.¹⁷⁴ In *Riverside*, the definition of WOTUS was broad.¹⁷⁵ As Justice Scalia put it, this meant that "The Corps has also asserted jurisdiction over virtually any parcel of land containing a channel or conduit. . . through which rainwater or drainage may occasionally or

¹⁷⁴ Clean Water Act, 33 U.S.C. §1251 et seq. (1972).

¹⁷⁵ *Riverside*, 474 U.S. at 123.

intermittently flow. On this view, the federally regulated ‘waters of the United States’ include storm drains, roadside ditches.”¹⁷⁶ Though this quote was tongue-in-cheek, this could be the standard for the power that EPA has to regulate waterways through the CWA. *Riverside* makes it easy for the EPA to regulate the chemical dumping of 6PPD into the roadside ditches and storm drains that lead to waterways where the Coho salmon live.¹⁷⁷

In 2006, the EPA’s ability to regulate toxic dumping was dramatically narrowed by *Rapanos*.¹⁷⁸ The Court tried to shift the focus of the ruling to include navigable waters.¹⁷⁹ There was no majority opinion because the vote was 4-1-4 with Justice Thomas writing a concurrence.¹⁸⁰ The split in the Court made the ruling confusing to the lower courts and it has been applied sporadically among them. In some rulings, the toxin could be covered while in others it would not be depending on how the court defined WOTUS.

Given the past rulings and the recent change in the court, it is hard to tell where *Sackett* will leave the interpretation of the CWA. The trial court found that the Sacketts’ lands were covered under the CWA¹⁸¹ and the district court affirmed.¹⁸² The Sacketts first went to the Supreme Court to see if they could challenge the EPA’s action against them, and now they are at the Supreme Court to challenge the merits of the case. The issue before the Court is “Whether the U.S. Court of Appeals for the Ninth Circuit set forth the proper test for determining whether wetlands are ‘waters of the United States’ under the Clean Water Act, 33 U.S.C. § 1362(7).”¹⁸³ The court is specifically looking at whether the water has to be continuous to be considered WOTUS. For example, if there is even a small strip of land between a large wetland and the

¹⁷⁶ *Rapanos*, 547 U.S. at 722.

¹⁷⁷ *Id.*

¹⁷⁸ *Rapanos*, 547 U.S. at 723.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.* at 757.

¹⁸¹ *Sackett* 566 U.S. *Id.* at 130.

¹⁸² *United States v. Rapanos* 376 F.3d 629 (6th Cir. Mich. 2004).

¹⁸³ SCOUTUS blog, <https://www.scotusblog.com/case-files/cases/sackett-v-environmental-protection-agency/> (last visited Nov. 24, 2022).

ocean then it may not be considered WOTUS because it is not continuous, though it would have been before this ruling. If the scope of EPA's power is lessened under the CWA, then the water quality, the environment, and the species that live in it will suffer.

B. Endangered Species Act

With the uncertainty over the CWA's ability to protect waterways and the environment, new mechanisms should be pursued that protect them. We turn to the ESA to try to find a solution for the ever-growing gap in enforcement created by the courts. This section will first look at the ESA itself, and then how the courts have applied it to three main cases. The first case is *Sweet Home v. Sweet Home Chapter of Cmty.*¹⁸⁴ The second, *Aransas Project v. Shaw*, helped refine *Sweet Home*.¹⁸⁵ The third, *Animal Welfare Institute v. Beech Ridge Energy* further defined harm. This section will also look at the harass provision. Each case will be applied to the chemical dumping of 6PPD.

The ESA stated that it is "unlawful for any person to take an endangered species of fish or wildlife." In this case, the take refers to the endangered Southern Resident killer whales. They are a listed species because of the population lost from starvation and the resulting high infant mortality rate. This causes the harm and harass provision to be applicable. The harm provision is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."¹⁸⁶ The harass provision is defined as, "significant environmental modification that has had the effect of actually injuring or killing wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavioral patterns, which include, but are not limited to, breeding, feeding or shelter."¹⁸⁷

¹⁸⁴ *Sweet Home*, 515 U.S. at 691.

¹⁸⁵ *Aransas*, 775 F. Supp. at 656.

¹⁸⁶ H.R. Rep. No. 412, 93d Cong. 1st Sess. 11 (1973), reprinted in 1973 U.S.C.C.A.N. 2989.

¹⁸⁷ *Id.*

The first case, *Sweet Home*, addresses that harm provision. This case addresses whether an actual kill or harm to a species constitutes a take, if habitat modification is included, and if a take requires intentionality.¹⁸⁸ The Court found that “Harm in the definition of 'take' in the Act means an act which actually kills or injures wildlife.”¹⁸⁹ This settled if a “likely take” could be a “take,” but there has to be an “actual harm” to the animals for the action to be defined as a “take.”¹⁹⁰ Concerning the harm provision, the Court found habitat modification was part of Congress’s original intent when drafting the bill.¹⁹¹ In this case, the chemical 6PPD-quinone is being introduced as a pollutant into the environment from tires. 6PPD-quinone modifies the environment by killing the Coho salmon and disrupting the killer whales’ feeding habits by depleting their food source. In further defining take under the harm provision, the Court stated that “Congress intended 'take' to apply broadly to cover indirect as well as purposeful actions.”¹⁹² Injunctive relief is easier to achieve under the harm provision because the death or injury does not require intentionality.¹⁹³ The dumping is not intentional, but a take still occurs.

Justice O’Connor’s concurrence suggested the use of proximate cause in *Sweet Home*— an example of where it was used is in the Fifth Circuit case *Aransas Project v. Shaw*.¹⁹⁴ SCOTUS stated that proximate cause “requires the causal factors and the result to be reasonably foreseeable.”¹⁹⁵ In other words, it must be foreseeable that a take will occur.¹⁹⁶ The federal trial court found that there was causation as proven by the scientific data.¹⁹⁷ This was overturned by the Fifth Circuit Court which stated, “Every link of this chain depends on modeling and

¹⁸⁸ *Sweet Home*, 515 U.S. at 691.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.* at 693.

¹⁹² *Babbitt*, 515 U.S. at 704.

¹⁹³ *Id.* at 692-693.

¹⁹⁴ *Sweet Home*, 515 U.S. at 697.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* at 660.

estimation. At best, the court found but-for causation.”¹⁹⁸ This case was a Fifth Circuit Court of Appeals case meaning that it is only binding to the Fifth Circuit, though there has been a total of eight courts that have also cited this case for its use of causation. There were no cases countering the ruling. In this case, the evidence of causation of the take of the endangered dolphins and the chemical in tires is overwhelming.¹⁹⁹ There were over 3,000 possible chemicals tested to see which was killing the salmon, and they narrowed it down to one.²⁰⁰ The *Sweet Home* standard for proximate cause could be a little harder to prove.²⁰¹ In this case the causation can be broken down into the following steps:

1. The tire preservative comes off of the tires onto roads and 6PPD is released.²⁰²
2. The chemical is then combined with rainwater where it turns into toxic chemical 6PPD-quinone and then washes into streams.²⁰³
3. The tire preservative kills Coho salmon.²⁰⁴
4. There are not enough salmon for the endangered species to eat, so the Southern Resident killer whale dies from starvation.²⁰⁵

The first step is when tires hit the road and particles are released.²⁰⁶ The tire companies readily admit to putting this chemical in their tires. Second, the production of the chemical 6PPD-quinone is a recognized chemical reaction.²⁰⁷ The third step could perhaps be a stretch for someone such as Justice O’Conner.²⁰⁸ Though, this is also backed by the reasonable person standard, given that encountering 6PPD-quinone produces a visible reaction in the fish that is identical during laboratory testing and when the fish encounter the chemical in the streams.²⁰⁹

¹⁹⁸ *Id.*

¹⁹⁹ McQuate, *Supra* note 1.

²⁰⁰ *Id.*

²⁰¹ ABA Guide, *supra* note 11, at 162-163.

²⁰² McQuate, *Supra* note 1.

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ Southern Resident Killer Whales, *Supra* note 5.

²⁰⁶ McQuate, *Supra* note 1.

²⁰⁷ *Id.*

²⁰⁸ *Sweet Home*, 515 U.S. at 697.

²⁰⁹ *Id.*

This includes the fish swimming on their sides in circles, seeming to gasp for air.²¹⁰ The evidence is clear enough that some states have already moved to ban the substance, and no one has tried to contest the chemical being the salmon's cause of death including the tire manufactures.²¹¹ Although other factors contribute to the decline of the Coho salmon, nothing has such a clear devastating connection to the death of the fish as this chemical.²¹²

The final step of causation involves how food loss affects the endangered dolphins. The main reason that the Southern Resident killer whales are going extinct is because there is not a large enough food supply for them to have a full, adequately healthy diet.²¹³ This results in a high infant mortality rate, because the mothers are not gaining the critical mass they need to produce a healthy calf that will survive into adulthood.²¹⁴ This is worsened by the loss of food in critical months such as in October when the Coho salmon become the endangered whales' most important food source.²¹⁵ Simply put, if the chemical was not released into the environment, the resident killer whales would have more food, be healthier, and have a higher survival rate. This case differs from *Shaw* because there was a long chain of causation and complex scientific data used to prove that the action of the government resulted in a take of the Whooping Cranes.²¹⁶ Here the chain is simple, straight forward, and enough to make any reasonable person concerned about the consequences of the continual release of 6PPD into the environment.

The last case is *Animal Welfare Institute v. Beech Ridge Energy*, which further defined harm and refined the degree of certainty required to constitute a preponderance of the evidence.²¹⁷ The commentary in this regulation explains that harm cannot be speculative.²¹⁸ “The

²¹⁰ McQuate, *Supra* note 1.

²¹¹ Jared Blumenfeld, 6PPD-in-Tires-_NOPA-wo-hearing-1 1 (2022).

²¹² McQuate, *Supra* note 1.

²¹³ Sothern Resident Killer Whales, *Supra* note 192.

²¹⁴ *Id.*

²¹⁵ *Id.*

²¹⁶ *Aransas Project*, 775 F.3d at 659.

²¹⁷ *Animal Welfare*, 675 F. Supp. 2d at 541.

²¹⁸ *Id.* at 562.

FWS stated that it inserted the term ‘actually’ before ‘kills or injures’ because ‘existing language could be construed as prohibiting the modification of habitat even where there was no injury.’”²¹⁹ In this case it means that there must be fish actually dying and these fish are the food source of the endangered killer whales. There is actual harm to their feeding habits because there is such a high death rate of the Coho salmon from 6PPD-quinone.²²⁰

The preponderance of the evidence is the standard used to prove a take.²²¹ *Animal Welfare* used the Ninth Circuit court case *Marbled Murrelet v. Pacific Lumber Co.*’s definition of the preponderance of the evidence as a “reasonable certainty of imminent harm.”²²² The court also stated that absolute certainty was not required to prove a take.²²³ Finding that “To require absolute certainty, as proposed by Defendants, would frustrate the purpose of the ESA to protect endangered species before they are injured and would effectively raise the evidentiary standard above a preponderance of the evidence.”²²⁴ In *Beach Ridge* the court found that there was “virtual certainty” that the wind turbines were taking the endangered Indiana bats. The *Beech Ridge* case is a First Circuit district court case, meaning that it is not binding, but it was still cited by eight courts.²²⁵ Only one case, *Nextera Energy Re., LLC* countered its ruling and it was overturned. The court would likely find the same in this case because there were over 3,000 chemicals tested, and it was determined that 6PPD was the chemical causing the harm to the salmon, and consequently the killer whales.²²⁶

Another provision that could be used to stop the dumping of 6PPD is the harass provision in the ESA. Harass is defined by Fish and Wildlife as “an intentional or negligent act or omission

²¹⁹ *Id.*

²²⁰ McQuate, *Supra* note 1.

²²¹ *Marbled Murrelet v. Pacific Lumber Co.*, 83 F.3d 1060, 1066 (9th Cir. 1996).

²²² *Id.* at 1068.

²²³ *Animal Welfare*, 675 F. Supp. 2d 564.

²²⁴ *Id.*

²²⁵ *Friends of Merrymeeting Bay v. Nextera Energy Res., LLC*, No. 2:11-cv-38-GZS, 2013 U.S. Dist. LEXIS 5063 (D. Me. 2013).

²²⁶ McQuate, *Supra* note 1.

which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.”²²⁷ This provision could be used to address 6PPD in tires because the dumping hinders the reproduction of the Coho salmon by killing them before they can spawn. Further, it disrupts the feeding of the Southern Resident killer whales by depleting their food source. Though these claims are often dropped because of the stricter requirements that “harass” has compared to “harm,” in this case they should still be used.²²⁸ This is because to harass does not specifically address habitat modification, where harm does. In this case, it is not necessary to show that there is habitat modification because the chemical is having a direct impact on the Coho salmon and consequently the Southern Resident killer whales.

The ESA is a tool that can be used to protect the food sources and environment of endangered species. In this case, the death of the salmon falls under *Sweet Home*’s definition of “harm” to the killer whales because they are included within the destruction of habitat.²²⁹ Under *Aransas*’ proximate cause standard, the dumping of the chemical should be stopped because it causes the extinction of the Southern Resident killer whales.²³⁰ The preponderance of the evidence standard from *Animal Welfare* is passed because there is actual harm caused by the death of the salmon, and subsequently the endangered dolphins. The harass provision could also be used to stop the dumping of 6PPD. This case could result in the ESA being used to stop the dumping of 6PPD.

IV. RECOMMENDATION OF FILING CIVIL SUITS THROUGH VICARIOUS LIABILITY AND DIRECT ACTION

²²⁷ 50 C.F.R § 17.3, *accord id.* §222.102; NMFS, Biological Opinion on the Continuing Operation of the Pacific Coast Groundfish Fishery, NWR2012876, at 120 n.7 (Dec. 7, 2012) (defining harass “consistent with the [FWS’s] interpretation of the term”).

²²⁸ ABA Guide, *Supra* note 11, at 158.

²²⁹ *Babbitt*, 515 U.S. at 691.

²³⁰ *Aransas*, 775 F. Supp. at 656.

Under section 11 of the ESA, “‘any person’ may bring a citizen suit in federal district court to enjoin anyone who is alleged to be in violation of the ESA or its implementing regulations.”²³¹ The goal is to get injunctive relief from the tire manufacturers that are putting 6PPD into their tires through a civil suit. In *Animal Welfare*, the court found that civil suits can be used to prevent future harm.²³² “The court therefore concludes that the citizen-suit provision includes within its scope wholly-future violations of the statute.”²³³ In this case, the goal would be to stop the chemical from getting into the environment and killing the Coho salmon. This may be accomplished through the use of vicarious liability.²³⁴ When the agency should be performing an action to stop a take and it is not, then it can be held liable for that take. EPA should restrict the use of 6PPD in tires and because it has not, it can be held accountable for the results of the chemical’s use. The tire companies could also be directly sued for injunctive relief for putting the tire preservative in their tires. Further, the Agency of Transportation should be restricting the import of tires with this chemical in it to avoid it being liable for the take that it causes. The outcome of a civil suit against the EPA, Department of Transportation, or the tire companies for a take of the Southern Resident killer whales could end in injunctive relief, with the tire manufacturers not being able to use this chemical in their tires.

EPA is not the governing agency when it comes to working with either the Coho salmon or the Southern Resident killer whales, but they are still required to consult the ESA under section seven. Further, section 7 of the ESA, called Federal Agency Actions and Consultations, states that “Each Federal agency shall . . . ensure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of

²³¹ 16 U.S.C. § 1540(g).

²³² *Animal Welfare*, 675 F. Supp. 2d at 560.

²³³ *Id.*

²³⁴ ABA Guide, *Supra* note 11, at 162-163.

such species.”²³⁵ This means that an agency must first ensure that it is in compliance with the ESA and its action is not causing a take. This has been upheld in the courts. “Courts have repeatedly held government officers liable for violating the take prohibition when the officers authorized activities undertaken by others that caused a take.”²³⁶ In this case the chemical 6PPD is known to cause not only the death of endangered species but also the food stock of endangered species.

The toxicity of 6PPD means that the EPA should already be regulating it. EPA has a rating system that grades the toxicity of chemicals by establishing an aquatic life criteria (ALC), or ALC.²³⁷ The ALC is based off of how likely a chemical is to kill aquatic life. At this moment there is not an ALC for 6PPD. A toxicity assessment of the chemical states that “compare the LC50 for Coho exposed to 6PPD-quinone with that of the most sensitive test organisms used to derive ALC. Among the ‘very highly toxic’ chemicals for which we have ALC, the toxicity of 6PPD-quinone is similar to that of the most toxic of 12 chemicals.”²³⁸ This means that EPA should already be regulating this chemical by its own standards. On top of this, EPA should be consulting with the secretary in charge of the ESA to make sure that its actions are not killing endangered species pursuant to the ESA. In this case, the Department of Toxic Substance Control has deemed the chemical a priority product, which means it should be regulated.

The EPA should restrict the use of 6PPD and the Department of Transportation should stop importing tires that contain this chemical because it is toxic to the environment. The Department of Toxic Substance Control (DTSC) has determined that 6PPD is a priority

²³⁵ Endangered Species Conservation Act, Pub. L. No. 89-669, §§ 1–3, Sec 7 (a)(2) (1996).

²³⁶ Seattle Audubon v. Sutherland, No. CV06-1608MJP, 2007 WL 1300964, at *9 (W.D. Wash. May 1, 2007).

²³⁷ SHENYA TIAN ET ALL, 6PPD-QUINONE: REVISED TOXICITY ASSESSMENT AND QUANTIFICATION WITH A COMMERCIAL STANDARD 6 (2022).

²³⁸ *Id.*

product.²³⁹ A priority product is “A product-chemical combination identified in regulations adopted by DTSC that has the potential to contribute to significant or widespread adverse impacts to humans or the environment.”²⁴⁰ There are two requirements for a chemical to be categorized as a priority product, per the Safer Consumer Products: “(1) There must be potential public and/or aquatic, avian, or terrestrial animal or plant organism exposure to the Candidate Chemical(s) in the product; and (2) There must be the potential for one or more exposures to contribute to or cause significant or widespread adverse impacts.”²⁴¹ This means that 6PPD should be regulated by other agencies.

The Department of Transportation did not consult the secretary to see if their actions were affecting endangered species. All tires that are imported must comply with strict safety standards 49 CFR § 571.²⁴² These standards do not include the restriction of 6PPD, which is devastating endangered species populations.²⁴³ Though it may seem like a burden on industry to stop this import, a first circuit court found that “the balance of hardships and the public interest tips heavily in favor of protected species.”²⁴⁴ The agency should not be importing these tires without consulting the secretary, which opens them up to vicarious liability and may permit injunctive relief.²⁴⁵

The test for injunctive relief has four parts.²⁴⁶ The first part is that the plaintiff has suffered irreparable injury. In this case, the decimation of the Coho salmon and in consequence the death of the endangered killer whales constitute the injury. The second part is that the

²³⁹ Safer Consumer Products, Product - Chemical Profile for Motor Vehicle Tires Containing N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) 3 (2022).

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² Federal Motor Vehicle Safety Standards; Tires, 49 C.F.R. § 571 (2007).

²⁴³ *Id.*

²⁴⁴ *Strahan v. Coxe*, 127 F.3d 155, 160 (1st Cir. 1997).

²⁴⁵ Endangered Species Conservation Act, Pub. L. No. 89-669, §§ 1–3, Sec 7 (a)(2) (1996).

²⁴⁶ *Winter v. NRDC, Inc.*, 555 U.S. 7, 20 (2008).

remedies available at law are inadequate to compensate for the injury.²⁴⁷ The plaintiff will be “likely to suffer irreparable harm in the absence of preliminary relief.”²⁴⁸ In this case the injury is aesthetic, scientific, recreational, educational, and economic. In this case, you cannot put a value on an endangered species. If there was an award of monetary compensation, the injury would still occur. The third is “that the balance of equities tips in [their] favor.”²⁴⁹ This means that between the two parties there is an imbalance, and the power is in the hands of the opposing party. A citizen does not have the power on their own to stop tire manufacturers from using 6PPD in their tires without directly suing them, but the Agency does. The imbalance means it does pass this portion of the test. The final element is that “an injunction is in the public interest.”²⁵⁰ The prevention of the extinction of one of the most iconic creatures in the nation is in the public interest. The local indigenous tribes would also be positively affected because of their sacred connection with the Coho salmon.

Vicarious liability can be used to receive injunctive relief from the tire manufacturers, preventing them from using the preservative 6PPD in their tires.²⁵¹ The courts have applied vicarious liability to agencies inconsistently. Theoretically, “when the government operates in a regulatory arena, to the extent that it issues a permit for or otherwise authorizes an activity that can result in a take, the agency is liable for any such take.”²⁵² Vicarious liability could be the mechanism by which agencies are held accountable for their action or inaction by everyday citizens.²⁵³ Even simply having the risk of being held accountable through this mechanism could encourage positive outcomes from the agencies.²⁵⁴

²⁴⁷ *Id.*

²⁴⁸ *Id.*

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ ABA Guide, *supra* note 11, at 162-163.

²⁵² *Id.*

²⁵³ *Id.*

²⁵⁴ *Id.*

The court cases have come out on either side of the vicarious liability issue and they are district court cases meaning they are not binding on other courts.²⁵⁵ For example, in *Red Wolf Coal v. N.C. Wildlife Res. Comm'n* “A recent district court order granted a preliminary injunction to plaintiffs who claimed that the North Carolina state wildlife agency was liable for unauthorized take.”²⁵⁶ The take resulted from the agency authorizing the killing of coyotes in the area where the endangered red wolves reside. There was likely misidentification of the wolves compared to the coyotes, which resulted in a take.²⁵⁷ The court in *Strahan v. Pritchard* found that while the agency could be held liable for the loss of endangered whales from being caught in fishing nets, it would not be.²⁵⁸ The district court found that the agency was not responsible for the take of the whales.²⁵⁹ Further, in *Loggerhead Turtle v. Cnty. Council of Volusia Cnty.*, the court found that the agency was not accountable for the take of endangered sea turtles in part because they had no obligation to regulate the actions of the beachfront property owners.²⁶⁰ In *Aransas Project*, they did not address the issue despite the case coming in front of several courts.²⁶¹ Overall, trying this approach would be worth it to test the outcome. If courts start ruling that agencies can be accountable in this way, it could have a positive impact on citizens’ ability to hold agencies accountable.²⁶²

Another option for injunctive relief would be to sue the tire manufacturers themselves. The application of injunctive relief still applies— as in *Animal Welfare*, an organization or individual can sue companies to stop them from putting the preservatives in their tires. In this

²⁵⁵ *Id.*

²⁵⁶ *Red Wolf Coal v. N.C. Wildlife Res. Comm'n*, No. 2:13-CV-60-BO, 2014 WL 1922234 (E.D.N.C. May 13, 2014).

²⁵⁷ ABA Guide, *supra* note 11, at 162-163.

²⁵⁸ *Strahan v. Pritchard*, 473 F. Supp. 2d 230, 241 (D. Mass. 2007).

²⁵⁹ *Id.*

²⁶⁰ *Loggerhead Turtle v. Cty. Council of Volusia Cty.*, 148 F.3d 1231, 1258 (11th Cir. 1998).

²⁶¹ ABA Guide, *Supra* note 11, at 162-163.

²⁶² *Id.*

case, the twelve main manufacturers make almost all of the tires in the United States.²⁶³ 6PPD is in virtually all tires on the road, and to prevent it from entering the ecosystem of the salmon, all manufacturers have to discontinue its use. The other challenge to this tactic is that tires are shipped into the United States from all over the world, thus needing regulation.

The biggest hurdle to overcome to present a civil suit in court is covering the jurisdictional requirement of standing.²⁶⁴ In Federal court, the plaintiff must show that they have standing to bring a case forward in that court.²⁶⁵ In *Lujan* the Court stated that the “irreducible constitutional minimum of standing” has three requirements:

- (1) actual or imminent injury that is concrete and particularized;
- (2) a causal connection between the injury and the conduct complained of; and
- (3) likelihood that a favorable decision will redress the injury.²⁶⁶

This is under the civil suit provision meaning that; “the prudential standing doctrine that a plaintiffs' grievance must fall within the zone of interests protected by the statute does not apply to the ESA due to the Act's citizen-suit provision.”²⁶⁷

The injuries that can come from the loss of the endangered Southern Resident killer whale can be combined. Ideally an organization can be formed, or an already existing organization can be used. In this case, it would not be difficult to find people and organizations willing to show that they have standing to accomplish this injunctive relief. It would be ideal to have a group of people that can show different aspects of standing, including locals who grew up with the whales, whale-watching business owners, tourists, the local tribes, and other concerned individuals. Several injuries can be used in this case including aesthetic, scientific, recreational, educational, and loss of profit. The first part of the test for standing can be broken down into two

²⁶³ What's Treading, U.S. Tire Manufacturers Association, <https://www.ustires.org/> (last visited on Dec 11th, 2022).

²⁶⁴ ABA Guide, *Supra* note 11, at 250-55.

²⁶⁵ *Id.*

²⁶⁶ *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

²⁶⁷ *Animal Welfare* 675 F. Supp. 2d at 559 (quoting *Bennett v. Spear*, 520 U.S. 154, 162-66 (1997)).

prongs.²⁶⁸ The first prong is that the injury is actual or imminent. In this case, the whale-watching ships go out every summer full of tourists to see these endangered species.

Organizations such as Wild Orca solely exist to save killer whales.²⁶⁹ This organization and others study this endangered species year-round. Local residents of Washington go and see the Southern Resident killer whales in the wild on a regular basis. All of these activities make the injury actual and imminent. The second prong of the first part of injury-in-fact is that the injury is concrete and particularized.²⁷⁰ Without whales to watch then locals, tourists, scientists, and whale watching tours will not have an opportunity to see and study the animals.

The second part of injury-in-fact is that there is a causal connection between the injury and the conduct complained of.²⁷¹ The orcas are almost extinct due to a depleted food source, so killing the remaining fish at a high rate will directly cause the decline of the species. The death of the Coho is caused by the chemical 6PPD—a chemical that the Department of Transportation imports without consulting the secretary in charge of the ESA. The EPA also should be regulating this chemical because they are required to regulate chemicals toxic to fish. There is a government report stating that this chemical are just as toxic to aquatic life as the top twelve most toxic chemicals. The final part of injury-in-fact is that a favorable decision will reduce the injury.²⁷² In this case, the tire manufacturers stopping the use of 6PPD in their tires will save the Coho and other salmon. The U.S. Tire Manufacturers Association openly agrees that 6PPD is likely causing death and harm to Coho salmon.²⁷³ In turn, it will save the Southern Resident killer whales, meaning that the court will likely find that the case has standing.

²⁶⁸ *Lujan*, 504 U.S. at 560-61.

²⁶⁹ Wild Orca, <https://www.wildorca.org/> (Last visited Nov. 28, 2022).

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ U.S. Tire Manufacturers Association, 6PPD and Tire Manufacturing, <https://www.ustires.org/6ppd-and-tire-manufacturing> (last visited Mar. 7, 2023).

A citizen suit is a viable option for compelling the EPA to regulate 6PPD under the ESA to stop the death of the salmon because they are a major food source of the endangered Southern Resident killer whales. This can be accomplished by using vicarious liability. The use of vicarious liability could result in injunctive relief of the manufacturers no longer being able to put this preservative in their tires. The biggest hurdle to overcome is whether the parties have standing, though this should be achievable. Meaning that if this case found itself in the right court, it could save the Endangered Southern Resident killer whales.

V. CONCLUSION

The fate of EPA's ability to regulate pollutants in our waterways through the Clean Water Act is uncertain. The volatility of EPA's application of the CWA is the result of the Supreme Court's rulings, Administrative Rulings, and Presidential Executive Orders. Therefore, we need to move beyond the CWA and find other means to protect the environment and waterways. The harm provision of the Endangered Species Act can be used to show a take of the endangered Southern Resident killer whales. The tire preservative 6PPD is causing large-scale devastation of the Coho salmon, which is one of their main food sources. The ESA can be used to prevent this take, as seen in previous court cases.

The way to stop the tire companies from using 6PPD is to get injunctive relief through the court system. This can be accomplished through vicarious liability because the EPA is allowing its use, and therefore is responsible for the consequences of it being in the environment. The biggest hurdle will be to find a group that has standing. Eliminating the chemical 6PPD from the environment will save the Southern Resident killer whales.