



LAWSUIT TO PROTECT SALMON FROM PESTICIDES UNDER THE ENDANGERED SPECIES ACT

Background Information on Pesticides and Salmon

Pesticides have profound effects on Northwest salmon and may be a serious factor in their decline.

- The US Geological Survey has found concentrations of pesticides in Pacific Northwest rivers and streams at levels that are associated with negative impacts on fish growth, development, behavior, and reproduction.
- Some pesticides are lethal to salmon, and large fish kills have occurred.
- Pesticides can impair swimming ability, cause abnormal sexual development, and cause skeletal deformities.
- Pesticides can indirectly affect fish by changing the aquatic environment, by reducing the food supply, and by eliminating vegetative cover used by young salmon.
- Pesticides can impair salmon's ability to transition from freshwater to seawater.

(More information on pesticides & salmon available at <http://www.pesticide.org/salpest.pdf>)

Background Information on the Economic Importance of Salmon

“Salmon and steelhead fishing was once a very valuable industry to the west coast economy. As recently at 1988, according to independent economic studies, salmon and steelhead fishing in Oregon, Washington, Idaho and Northern California brought in \$1.25 billion to the regional economy and supported an estimated 62,750 family wage jobs. Since then, many salmon runs have declined because of a combination of many factors including too many dams and widespread habitat loss. One likely fact that has received little scrutiny, however, is the long-term impact of increasing uses of agricultural chemicals and pesticides in many Northwest river systems.”

(“The Economic Imperative of Protecting Riverine Habitat in the Pacific Northwest,” Pacific Rivers Council Research Report No. 5 (January, 1992).)

Basis of Legal Action

The National Marine Fisheries Service (NMFS), the agency charged with carrying out the Endangered Species Act for listed salmon, has indicated serious concern about the effects of pesticides on salmon. In issuing its July 2000 salmon protection rules, NMFS stated that “concentrations of pesticides may affect salmonid behavior and reproductive success. Current EPA label requirements were developed in the absence of information about some of these subtle but real impacts on aquatic species such as salmonids.”

The Environmental Protection Agency must approve pesticides before they may be sold or used in the United States. The Agency has found that many pesticides have serious detrimental effects on fish, but has rarely taken any action to prevent that harm from occurring.

The Endangered Species Act requires that federal agencies ensure that any action they fund, authorize, or carry out will not jeopardize the survival of endangered species. The first step is a

LAWSUIT TO PROTECT SALMON FROM PESTICIDES UNDER THE ENDANGERED SPECIES ACT

consultation with the relevant expert agency (here, NMFS). EPA has failed to conduct consultations with NMFS to determine whether its pesticide regulations harm endangered salmon.

Key Elements of Lawsuit

Northwest Coalition for Alternatives to Pesticides, Washington Toxics Coalition, Pacific Coast Federation of Fishermen's Associations, and Institute for Fisheries Resources, represented by Earthjustice, filed suit in January 2001 to compel EPA to:

- consult with NMFS to determine whether EPA is authorizing pesticide uses that harm salmon and steelhead;
- take immediate protective actions, such as restrictions on pesticide use near water, to protect salmon from pesticide contamination;
- stop authorizing uses of pesticides that kill salmon, destroy their food sources, or severely degrade aquatic habitat.

The Court Ordered EPA to Begin Process of Curtailing Pesticide Uses That Harm Salmon

On July 2, 2002, a U.S. District Court in Seattle ordered the Environmental Protection Agency to begin the process of ensuring that use of 55 pesticides will not harm salmon in the Pacific Northwest. The environmental and commercial fishing group plaintiffs had targeted the 55 pesticides based on evidence that these pesticides can get into salmon streams at levels the cause harm to salmon or their habitat.

The Court found that “it is undisputed that EPA has not initiated, let alone completed, consultation with respect to the relevant 55 pesticide active ingredients” and that “EPA’s own reports document the potentially-significant risks posed by registered pesticides to threatened and endangered salmonids and their habitat.” According to the Court:

NMFS listed the Sacramento winter run chinook in 1989. During the 1990s, NMFS listed as threatened or endangered approximately 25 additional salmonids. Despite competent scientific evidence addressing the effects of pesticides on salmonids and their habitat, EPA has failed to initiate section 7(a)(2) consultation with respect to its pesticide registrations. . . . Such consultation is mandatory and not subject to unbridled agency discretion. The Court declares, as a matter of law, that EPA has violated section 7(a)(2) of the ESA with respect to its ongoing approval of 55 pesticide active ingredients and registration of pesticides containing those active ingredients.

The Court ordered EPA to initiate consultations on 55 pesticides by December 1, 2004. While the order does not reach beyond the 55 particular pesticides, the Court noted that it is reasonable for the agency to complete its review of all pesticides uses for their impacts on salmon by 2007, stating that “EPA will have had eighteen years since the first salmonid-species listing in 1989 to fulfill the mandates of the ESA.”

(The decision is available at <http://www.earthjustice.org>)

LAWSUIT TO PROTECT SALMON FROM PESTICIDES UNDER THE ENDANGERED SPECIES ACT

It Will Take Years for EPA to Comply Fully With the Court Order and the Endangered Species Act

The Court-ordered initiation of consultation with NMFS in no way guarantees speedy protection for salmon. NMFS must review the pesticides' impacts and determine whether they will jeopardize salmon survival and recovery, and it must also determine whether mitigation is required to avoid harming salmon or their habitat. Finally, EPA must implement NMFS' recommendations.

EPA has an abysmal record of delay in protecting salmon and other endangered species from harmful pesticides.

- Even though salmon have been listed as threatened and endangered species for over a dozen years, EPA had not begun any consultations on pesticide impacts on listed salmon, prior to the Court's order in July.
- In 1989, the Fish and Wildlife Service found that dozens of pesticides would jeopardize the survival of endangered fish and other species and prescribed mitigation, including streamside buffers in which the pesticides cannot be applied. Thirteen years later, EPA still has not implemented the measures to protect the fish and other endangered species.
- In 1989, EPA proposed an Endangered Species Protection Program -- but in 2002, EPA still has no final program to protect endangered species from harmful pesticides. EPA has delayed putting buffers and other protections in place until it adopts a final, formal program.

(The plaintiffs' November 26, 2002 motion for further injunctive relief details EPA's long delayed salmon protections. The brief is available at www.earthjustice.org.)

Environmental and Fishing Groups Seek Interim Protections to Reduce Pesticide Contamination of Salmon Streams

The groups are seeking the following interim protections during the time it will take for EPA to stop authorizing uses of pesticides that harm salmon:

- a 100-yard no-spray zone to protect salmon from aerial applications of pesticides near salmon streams;
- a 20-yard no-spray zone to protect salmon from ground applications of pesticides near salmon streams; and
- a ban on homeowner (non-licensed) use in urban areas of certain pesticides likely to harm salmon.

Pesticides Will Harm Salmon in the Absence of Interim Protections

Because of their toxicity, the 55 pesticides in this case are likely to harm salmon or salmon habitat when they reach salmon streams.

- EPA has documented fish kills from many these pesticides, even when used according to the EPA-approved label.
- EPA has found that these pesticides contaminate streams under the current EPA-authorized uses.
- US Geological Survey has detected many of these pesticides at levels that cause harm to fish and their habitat.

LAWSUIT TO PROTECT SALMON FROM PESTICIDES UNDER THE ENDANGERED SPECIES ACT

(The Toxic Coalition's brief summarizes EPA's findings and the USGS detections. The brief is available at www.earthjustice.org. EPA's regulatory risk assessments and decisions are available at <http://www.epa.gov/pesticides/reregistration/status2.htm>; USGS reports are available at <http://water.usgs.gov/>)

The Environmental Protection Agency, the Fish and Wildlife Service, and State Governments Have Employed the Requested Mitigation Measures.

As part of its yet-to-be-completed Endangered Species Protection Program, EPA has been working with states to develop county-by-county plans to shield endangered species from harmful pesticides. Until EPA finalizes its program, these plans, called county bulletins, remain purely voluntary.

Buffers are the most common mitigation measures in EPA's county bulletins. The following buffer schemes comprise over 90% of the buffer scenarios:

Aerial Buffer	Ground Buffer
½ mile	¼ mile
¼ to ½ mile	100 yards
200 yards	40 yards
100 yards	20 yards

The lawsuit is seeking what government agencies have previously agreed is a practical way to protect endangered species: protective buffers. The lawsuit asks for the low end of the EPA-endorsed buffer scheme, a 20-yard buffer for ground applications and a 100-yard buffer for aerial applications. (Bulletins available at < <http://www.epa.gov/espp/usa-map.htm>>)

There is widespread support for the use of buffers to reduce pesticide contamination of salmon streams:

- The 1989 Biological Opinion by the Fish and Wildlife Service proposed buffers every time the agency found jeopardy to an endangered aquatic species. The range of buffers is similar to what has emerged in the county bulletins. The lawsuit seeks the low end of the mitigation that the Fish and Wildlife Service deemed necessary to protect endangered species.
- The Washington Department of Fish and Wildlife has proposed streamside buffers to protect salmon and other stream-dependent species.
- California county bulletins developed to protect salmon and other species from pesticides use 200-yard buffers for aerial spraying and 40-yard buffers for ground applications.
- An expert assessment, commissioned by EPA, NMFS, and the Fish and Wildlife Service to prescribe minimum salmon habitat safeguards, endorsed streamside buffers to reduce pollution of salmon streams. (Spence, et. al., 1996, *An Ecosystem Approach to Salmonid Conservation*)

Urban Areas Require Special Measures to Protect Salmon

Urbanization has dramatically altered natural runoff patterns, rendering streamside buffers less effective. When it rains, water picks up pesticides and flows quickly over paved streets and

LAWSUIT TO PROTECT SALMON FROM PESTICIDES UNDER THE ENDANGERED SPECIES ACT

sidewalks into storm drains, which, in turn, often deliver the polluted water directly into salmon habitat.

US Geological Survey frequently detected more than a dozen pesticides in the urban watersheds of Puget Sound, the Willamette Basin, and the Sacramento River, often at levels toxic to fish. USGS found that many of these pesticides have high retail sales in home and garden stores.

The lawsuit asks that 13 pesticides frequently detected by USGS in urban salmon streams be applied only by certified applicators, who have specialized training to apply pesticides to minimize pollution of streams and harm to endangered species.

(Among the USGS sources used for urban detections are: Pesticides Detected in Urban Streams During Rainstorms in King and Snohomish Counties, Washington 1998 (2000); Pesticides in Selected Small Streams in the Puget Sound Basin, 1987-1995 (1997); Distribution of Dissolved Pesticides & Other Water Quality Constituents in Small Streams, & their Relation to Land Use, in the Willamette River Basin, Oregon, 1996 (1997); Pesticides in Surface Water Measured at Selected Sites in the Sacramento River Basin, California, 1996-1998).

Fact sheet developed by Washington Toxics Coalition, Northwest Coalition for Alternatives to Pesticides, Pacific Coast Federation of Fishermen's Associations, and Earthjustice.

November 27, 2002