

Resource Concerns

WATER

Pesticides

Soil

Water

Excess Water

Insufficient Water

Water Quality
Degradation

Nutrients

Pesticides

Pathogens

Salts

Petroleum and
Heavy Metals

Sediment

Elevated Water
Temperature

Air

Plants

Animals

Energy

Water Quality Degradation - Pesticides

Pest control chemicals are transported to receiving waters in quantities that degrade water quality and limit use for intended purposes.

What is it?

The term “pesticide” is a composite term that includes all chemicals that are used to kill or control pests. Pesticides can be harmful to people and the environment. Part of the problem is the toxicity of some pesticides, but even more important is the sheer volume of pesticides used in this country every year. Some of this pesticide finds its way to our water, air, and soil.

Why is it important?

Protecting ground and surface water from chemical pollutants is a national initiative. Water is an exceptionally valuable natural asset. The health and livelihood of Americans depends on the availability of a safe drinking water supply. Equally important is the role of water quality on fish and aquatic ecosystems. Indirect benefits of water quality are provided by recreational boating, sport fishing, swimming, relaxation, and natural beauty.

What can be done about it?

The ecological impacts of pesticides in water are determined by their toxicity, persistence, degradates, and environmental fate. The use of Integrated Pest Management strategies and techniques involving prevention, avoidance, monitoring, and suppression are effective means to reduce the risks associated with pesticide use. A risk assessment tool can be used to identify risks and guide the mitigation of off-site pesticide hazards. Mitigating practices include residue management, cover crops, conservation crop rotation, and Integrated Pest Management.

Pesticides at a Glance

Problems / Indicators - Pesticide use in the farm/ranch operation	
Causes	Solutions
<ul style="list-style-type: none"> Pesticide use in sensitive watersheds Use of pesticides with intermediate or higher hazard risk 	<ul style="list-style-type: none"> Residue management Cover crops Conservation crop rotation Integrated pest management strategies Alternative pest suppression strategies Conservation buffers Proper use and storage Drainage water management