The Natural Resources Assessment Section within the Washington State Department of Agriculture (WSDA) works with the agriculture industry and regulators to protect Washington’s natural resources and the environment. This section’s activities focus on the effects of agricultural chemicals.

### Agricultural Land Use Mapping

WSDA has developed an agricultural land use geodatabase -- which is a way to store geographic information-- to assess the effects of agricultural production on Washington’s natural resources. This geodatabase can store, query and manipulate geographic information and spatial data used to identify agricultural land use in the state.

Our mapping specialists compile crop data using vehicles, GPS-equipped mobile devices, their knowledge of agricultural practices and crop identification skills.

They also gather data to inventory acreage in crop production and track land that has been taken out of agricultural production. We may use land-use data from other sources as well to identify agricultural land use, such as from the U.S. Department of Agriculture’s statistics service.

### Pesticide Use Data Collection

WSDA collects typical pesticide use data by crop in coordination with commodity groups, pesticide producers, and local and state agencies to comply with laws such as the Federal Insecticide, Fungicide and Rodenticide Act, Clean Water Act, and Endangered Species Act.

We obtain pesticide use data through discussions with volunteer working groups of growers, consultants and other industry representatives. Information that would personally identify working group members is not collected, and results of typical use are reported collectively.
WSDA uses this data to understand current and changing pesticide-use patterns and pest problems, as well as to guide our state's pesticide management strategy.

Participation of the working group offers a number of benefits, including:

- Supporting the crop industry.
- Understanding pesticide tools.
- Identifying successes in pest and pesticide management.
- Guiding future research as patterns change.

**Surface Water Monitoring for Pesticides**

Since 2003, WSDA has conducted annual monitoring to evaluate pesticide concentrations in surface waters.

Collecting data on where pesticides go and end up allows WSDA, pesticide users, federal agencies and others to:

- Develop strategies to minimize offsite movement.
- Identify opportunities to reach out to and educate the user community.
- Recommend best management practices.
- Make informed management decisions that protect species (including salmon) listed in the Endangered Species Act.
- Refine exposure assessments and model assumptions used to estimate risk assessments.
- Support the continued use of valuable pest management tools for agriculture.

Samples from our site monitoring are analyzed for an extensive list of insecticides, herbicides, fungicides, breakdown products and others.

For more information, visit our website at agr.wa.gov/AgScience