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## SAFE FOOD, QUALITY WATER AT ODDS E. coli outbreak adds to conflict By KEVIN HOWE Herald Staff Writer

Programs to conserve wildlife habitat and clean up agricultural water runoff may become victims of summer's E. coli outbreak.

Water and soil conservationists and wildlife habitat preservationists have long encouraged farmers and ranchers to follow eco-friendly practices, but these can compromise food safety, in the view of businesses that buy farm products.

E. coli-tainted spinach from the Central Coast was blamed for killing three people and sickening about 200 others in late August and September. Recently, about 70 people became ill with the bacteria after eating at East Coast Taco Bell restaurants.

The E. coli bacterium can be found in animal droppings that are difficult to wash off produce.

"It's not a new problem," said Cheryl Lambert, project coordinator for the Natural Resources Conservation Service office in Salinas.
"It's become more catalyzed since the outbreak in September."

Lambert and others in the conservation office were involved in a recently completed program to recruit farmers around Elkhorn Slough to use practices that enhance the quality of the slough's water.

Scientists are working to determine the risks to food safety and the proper countermeasures, she said, and growers "are proactively looking for a solution. Everybody's thinking along lines of doing something, rather than being defensive."

"There's a tension between measures that are designed to implement best management practices for water quality and practices to enhance food safety," said Monterey County assistant agricultural commissioner Bob Roach. "It's a conflict noted long before the spinach outbreak."

That conflict has been exacerbated, he said, by a move to develop even stricter food safety standards for agriculture in the wake of the E. coli scare.

Farm product buyers, he said, have long had a legitimate interest in and obligation to perform due diligence in everything they do to assure the food they sell to consumers is safe.

At the same time, county, state and federal officials have been promoting practices that enhance water quality, such as planting "filter strips" -- vegetated areas between fields -- that irrigation water can run through.

Vegetating waterways, Roach said, a practice promoted by the county Resource Conservation District, "can clean up water quite a bit" as the water moves through the plants, which trap sediments, remove nutrients and break down residues in the water.

"The problem is," he said, "they could also be attractive to wildlife, and wildlife intrusion in the fields is a big food safety concern."

The accepted mechanism for ensuring that safe food-growing processes are followed, Roach said, has been third-party food safety audits, which allow growers to document their efforts to protect the food supply and minimize the possibility of contamination.

In the absence of direct knowledge about what caused the E. coli contamination and how best to prevent it, he said, "people who audit food safety may look at a filter strip as opportunity for wildlife to inhabit, but we really don't know how big that risk is. It's an area where more research is going to be needed to make these two goals compatible."

Research may show what plants could be put into filter strips that won't attract wildlife, he said, which would mitigate the food safety issue. It would also make growers more comfortable about implementing water quality practices.

"We may even find that (food safety and water quality) are not incompatible, but complement each other," Roach said.

Until the issue is resolved, he said, growers "could be in a position of having to decide which standard to comply with."

Most farmers who have dealt with the Resource Conservation District have been working voluntarily during the past several years on water quality enhancement, said Melanie Beretti, watershed project manager for the district.

These practices include "grassing" farm roadways and furrows by planting grass in them to hold the soil as water flows through; plowing furrows to follow hillside contours to minimize runoff; contouring and planting stream banks; and other soil conservation techniques.

There have been discussions among farmers and water-quality officials, she said, about developing guidelines for the industry on proper practices and monitoring for microbial contamination of fields and produce before vegetables get to the table, and addressing the apparent conflict between food safety and water quality.

Third-party auditors, Beretti said, have shown "a lot of variability, auditor to auditor, shipper to shipper, on how the guidelines are interpreted."

Meanwhile, she said, farm regulation "has gone from guidelines to more mandated industry standards."

The Resource Conservation District and U.S. Department of Agriculture have been focusing on contamination of crops by E. coli 0157:H7, the strain that makes people sick.

A study by the University of California-Santa Cruz indicates that many conservation practices might actually be beneficial in reducing contamination, Beretti said. The district, she added, is trying to get funding for a study that would develop specific data through a survey of Central Coast farmers on the impact of food safety guidelines on water quality and the situations where E. coli contaminations occur.

One company hard-hit by the E. coli outbreak was Natural Selection Foods, which markets Earthbound Farm produce and other brands, and whose tainted spinach was involved in the September E. coli cases.

Natural Selection Foods has reacted by setting up a program to test every truckload of salad greens that comes in for processing, with plans to extend it to other produce, said company spokeswoman Samantha Cabaluna.

"We are people who care about the environment very deeply," she said, "but also food safety."

If fields where produce contaminated with bacteria can be isolated, Cabaluna said, it could allow farmers to continue to preserve wildlife habitat, rather than apply a blanket solution that would eliminate conservation-minded farmers as sources.

"What we're doing is really looking very carefully at the efficacy of different strategies, how effective is this approach or that," and to gather data by intercepting shipments and testing them before they go into production, she said. The testing, expected to take several months, will show which areas may be more at risk than others, she said.

Because Natural Selection Foods markets organic produce, Cabaluna said, farmers often include plants in rows that attract beneficial insects to fields along with their regular crops, so those insects can feed on plant pests and eliminate the use of pesticides.

"It's natural insect control," she said. "It's not possible for us to eliminate that habitat, or we couldn't do organic crops."

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