Don Walker knows he can’t count on the rain. In a good year, the Horse Heaven Hills receives only seven inches of precipitation — about enough to grow 26 bushels of wheat per acre.

While this yield could be considered a disaster in other parts of the state, it’s an acceptable crop for farmers here.

Ironically, the third generation dry land farmer knows there is something he can count on, however — the wind.

But with the wind comes the potential for erosion, dust — and danger. And in a dry year of four inches of rain or less, the potential for erosion increases tremendously. Under those conditions, maintaining the soil is a very difficult proposition.

During the 53 years he’s lived here, Mr. Walker has seen a lot of dust storms. But a few years ago, he saw — firsthand — how a dust storm could bring more than mere nuisance and inconvenience.

The year before had been a particularly dry year, resulting in low crop residues. “Even fields with minimum tillage were vulnerable to any wind erosion that year,” Mr. Walker recalls. On this particular day in 2003, the wind howled — whipping the light sandy, recently cultivated soil from many parts of the Horse Heaven Hills and surrounding areas. A few fields adjacent to a nearby highway were getting hit especially hard.

Like a blanket of dense fog, tons of swirling soil particles obscured the sun and diminished visibility along a small portion of State Highway 221, just north of Prosser, to near zero.

In the dust-induced darkness, multiple vehicles, traveling in opposite directions,
met in crushing collisions, resulting in a 30 vehicle car pile-up.

“I’m on the local volunteer fire department and I attended that accident,” Mr. Walker says. The event became a catalyst for conservation.

Although it wasn’t Walker’s field that caused the incident, he realized that it could have been. “Since that time,” he says, “I’ve put in grass buffers, strips, borders – everything I can think of to keep the soil where it belongs,” he says. “And other farmers along the highway have done the same. We all know the potential problems, and we’ve done a lot to address them.”

Through the USDA Natural Resources Conservation Service’s Environmental Quality Incentives Program (EQIP), Mr. Walker has been able to install many of those conservation practices and he’s begun transitioning his conventional tillage operation into one that uses mulch till and direct seeding. By disturbing the soil less, he says, the wind will still blow, but the soil will stay put.

It’s part of his good-neighbor philosophy. “We need to keep our dust and weeds on our own property,” Mr. Walker says. “As a result, we don’t turn the dirt any more than we absolutely have to.”

“Making the transition from conventional tillage to conservation tillage – especially in this precipitation zone – is not easy,” says NRCS Resource Conservationist Amanda Ettestad. “In this precipitation zone, changing the way you farm can be risky business. Direct seed had been shown to work well in other parts of the state and country, but as it is often said, Horse Heaven Hills is not like other parts,” she said.

NRCS’s Ettestad says many farmers have concerns about losing moisture and producing even lower yields using no-till techniques. “Some associate no-till farming with continuous cropping, which has not shown to be profitable in this part of the country. Although Mr. Walker shared some of these concerns, he decided to take the plunge and see how he could make it work,” she said.

Reducing tillage has another up-side: Fewer trips across the fields in machinery that consumes expensive diesel fuel. When you manage 9,500 acres of cropland in a precipitation zone that yields an average of only 26 bushels of wheat a year, reducing input costs like diesel fuel can mean the difference between a net profit and a net loss. To date, Mr. Walker estimates his saved about a third in fuel costs.

But without the financial and technical assistance from the NRCS, Mr. Walker says such a conversion would have been difficult – if not impossible. Now he hopes to bring even more acreage into his new conservation regime.

“I’m currently using direct seed on about 15 percent of my operation,” he says, “but I hope to increase that to 50 percent in the next couple of years.”

What began as an effort to avoid a repeat of a terrible highway accident may well become a “conservation highway to the future” for the Walker family. “My son said ‘Dad, if you can figure out a way to make this work with direct seed, I’d like to continue on.’ So,” Mr. Walker says, “I’m trying to set the stage for the fourth generation.”

Written and photographed by Ron Nichols, NRCS June, 2008