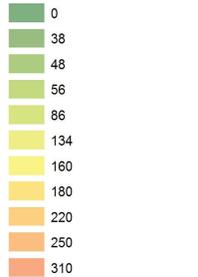


SE Idaho Wind Erodibility from Soil Survey (SSURGO)

Wind Erodibility Index {DCD, >}, [tons/acre/yr]

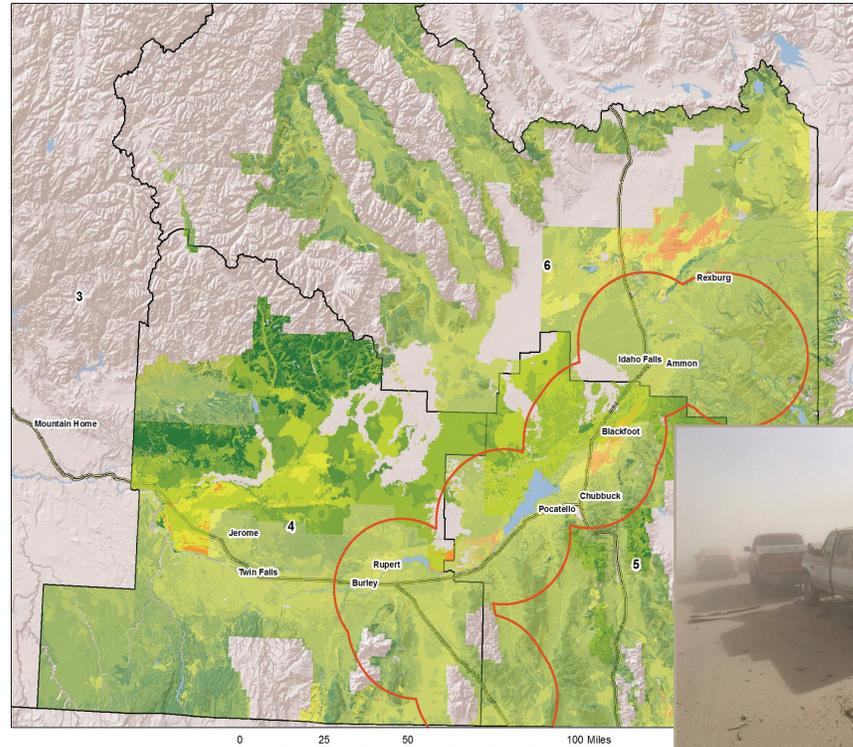


Not rated or not available



Wind Erodibility Index indicates the susceptibility to blowing. There is a close correlation between soil blowing and the size and durability of surface clodiness, fragments, organic matter, and the calcareous reaction. The soil properties that are most important with respect to soil blowing are listed below:

1. Soil texture class
2. Organic matter content
3. Carbonates in the fine-earth fraction as determined by effervescence class
4. Rock and pararock fragment content
5. Mineralogy



NRCS CREATES PROGRAM TO REDUCE AG-RELATED WIND-BORN DUST ALONG TARGETED HIGHWAYS

By Steve Stuebner

In some parts of Idaho in the spring, right after farmers have tilled their fields for planting or in the fall after harvest, high winds blow topsoil from farm fields, causing serious visibility issues on adjacent highways.

Sometimes, if the winds and the erosion are particularly bad, the wind-born dust/topsoil can cause auto accidents. The Idaho Transportation Department (ITD) reviewed accident records from 2012 to 2016 and found that there were 10 accidents along Idaho roadways in that five-year period where property damage occurred. Fortunately, there were not any fatalities.

In addition, over the last five years, ITD had to close I-15 north of Idaho Falls 16 times because of dust and low visibility, officials said.

Long-time Idaho residents know that this can be an issue every year. It's been a pet peeve of Norman Wright's for some time. Wright is a retired farmer from American Falls and chairman of the Idaho Soil and Water Conservation Commission.

"This issue has been a concern for a long time," Wright says. "Years ago, we had a massive wreck on Interstate 84 east of Burley, and we saw Cassia County and the Natural Resources Conservation Service take a real hard look at that. Some producers have modified their operations,

and they've made things a lot better. "Farmers don't want to lose their top soil."

However, more needs to be done, he said. Wright got together with NRCS, Conservation Commission and ITD officials recently to discuss some solutions. NRCS has developed a new program to address wind erosion on Idaho farms called "Wind Erosion Prevention Corridors." The program identifies multiple best practices that farmers can install on their farms to reduce wind erosion and keep topsoil in their fields.

The application period for this new initiative will open in late April, NRCS officials said. The NRCS State Conservationist has

DUST, *cont. from Page 1*

set aside general EQIP funds to assist eligible farmers to address this resource concern.

“This is a unique opportunity with ITD as a partner,” Wright says. “They’re working on the issues on their side of the fence, but the real problem is on the other side of the fence, on Idaho farm ground. We all need to do our part to make things better.”

Shawn Nield, state soil scientist for NRCS, notes that the issue is important for farmers to address topsoil losses, but it’s also a public safety issue.

“The wind-erosion issue continues to be a problem in Idaho, and it’s something we

State Highway 39 north of American Falls. While ITD has also identified some areas of concern in northern Idaho, the initiative is first being rolled out in south-eastern Idaho, where some of the most hazardous and costly wind erosion exists.

In all of these areas, ITD has had to spend money to address public safety issues, officials said. In some cases, the agency has planted vegetation to reduce erosion in the highway right of way. ITD has planted “living fences” in high-dust areas – trees or tall vegetation planted in a long row that provides a filter from blowing dirt, said Reed Hollingshead, a spokesman for ITD.

“There is a greenbelt along I-15 north



GOODING HIGH WINS IDAHO ENVIROTHON

by Karma Bragg

Gooding High School Team B placed first in this year’s Idaho Envirothon. The team was sponsored by the Wood River Soil and Water Conservation District.

The final score reflected the results of a total of five teaching/testing stations: aquatics, wildlife, soils, forestry and the current issue “Western Range Management, Balancing Diverse views”.

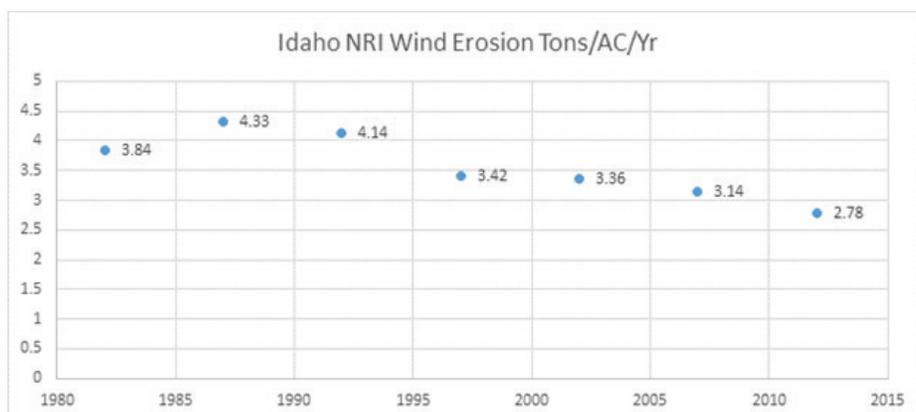
The team won first place in Aquatics station (100), Current Issue station (95) and tied for first in Wildlife station (100). Their total score including test scores and their oral round final presentation score was 543.2.

Gooding High School has competed for many years, bringing two to three teams each year to the Idaho Envirothon. Advisors Becky Frieberg and Tom Woodland have coached many winning teams.

The team will now advance to the NCF Envirothon hosted in Pocatello, Idaho this year from July 22 to July 28. Team members will spend the early part of their summer preparing to compete in the International event hosted at the Idaho State University.

The same committee that put on the Idaho Envirothon will spend their summer planning the event which is expected to attract 55-60 teams from across the US, Canada, and China.

For more information, visit <https://www.Envirothon.org>.



need to address, particularly along our busy highways where dust and visibility issues can lead to accidents,” Nield said.

The good news is that NRCS statistics show that the amount of wind erosion in Idaho has decreased in recent times. Looking at a graph from 1980 to 2015, the amount of wind erosion peaked in the 1985-1990 time frame, when there was an average of 4.3 tons per acre per year, and it has been slowly decreasing to a more current level of 2.78 tons per acre per year.

For the latest initiative, ITD officials drafted a highway map of Idaho that showed where the most significant wind erosion areas are located next to specific highways.

In Southeast Idaho, ITD identified the reach of I-84 between Burley and Snowville, I-84 between Pocatello and Blackfoot, I-15 north of Idaho Falls, U.S. 26 between Ririe and Swan Valley, and

of Osgood which is probably 20 years old or so. I believe we have also done some plantings along I-84 near Cottrell in south-central Idaho. I think we’ve also done some recent plantings along U.S. 20 between Mountain Home and Fairfield,” Hollingshead said.

The wind-erosion best practices identified by NRCS include: planting cover crops, conservation covers, shrub and tree plantings next to highly erodible soil; cross-wind trap strips; planting field borders of vegetation such as trees, shrubs and pollinators; herbaceous wind barriers; residue and tillage management on no-till fields or reduced-till fields; and strip cropping.

Overall, soil with high sand and silt contents are most vulnerable to wind erosion, and these soils are fairly typical in the Eastern Snake Plain Region, Nield says. When these soils are highly disturbed and then left uncovered, erosion rates can easily exceed 40 tons/acre. Soils that have as little disturbance as possi-

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Cross wind trap strips are an effective method to control windborn erosion.

ble, have a live root in the ground and/or good residual cover, are much less susceptible to wind erosion, he said.

Wind erosion often occurs after farmers have harvested crops that require a high degree of soil disturbance. When this happens late in the fall, there can be little time left to plant some kind of cover crop to prevent the wind erosion that may occur with high winds in late fall or early winter storms, he said. More farmers are starting to look at companion cover crops and experimenting with things like inter-seeders.

Wright indicates he had talked to a producer who is going into the field before he harvests his potatoes and spreads



Luna pubescent wheatgrass was used in this cross wind crop strip.

winter wheat seeds right before the spuds are harvested. The wheat gets started right after harvest. The timing is critical. "Folks are innovating," he said.

Diverse cover crops have become more popular with farmers seeking to enrich the soil with organic matter and nutrients. Keeping a live root in the ground encourages microbial activity in the soil which is vital for returning nutrients and providing soil moisture benefits to the plant. NRCS officials have been experimenting with different mixes of cover crops to maximize the effect.

"The no-till farmers in Madison County are doing great things with cover crops and getting the earth worms to grow," Wright says. Nield added, "Consider earthworms as an apex critter in the soil. When they are present it indicates an entire foodweb is working in the soil, and that's an environment that should make for happy plants."

"Another benefit with cover crops is that you can lease your pasture for livestock grazing and make some extra money from that cover crop," Nield said. "That's a pretty cool thing, and it's starting to catch on."

The use of cross wind trap strips to prevent wind erosion is being promoted by the NRCS Plant Materials Center in Aberdeen. The center published a technical paper recently about the different kinds of perennial grasses that could be used to plant cross wind trap strips in Eastern Idaho. The paper is titled "Evaluation of Perennial Grasses used in Cross Wind Trap Strips in Eastern Idaho" (January 2014). Cross wind trap strips are a recognized conservation practice and can be employed in NRCS conservation plans.

Carl Ball of Hamer Farms in Hamer has used cross wind trap strips under sprinkler irrigation for a number of years, using tall wheatgrass and basin wildrye to control wind erosion on fields with a potato-small grain rotation.

"The strips are effective in keeping soil on the field for about two years before soil buildup in the cross wind trap strips causes the grasses to become buried and start to thin out," the paper said. "Typically, he will maintain the cross wind trap strips for as many as five years."

Ball plants the vegetative trap strips at the same time that potatoes are planted. That allows the grasses to get established and begin to function in the fall after potato harvest. He plants the strips 12 feet wide and 180 feet apart. That leaves room for the cash crop in between the strips. GPS

DUST, cont. from Page 3

Wild rye used in a cross wind crop strip.

units in the tractor can help with planting the strips in the proper location. The strips also help filter pesticides and fungicides.

Rush intermediate wheatgrass produced the best results as a cross wind trap strip among a number grass varieties evaluated, the paper said. Largo tall wheat grass also provided excellent erosion control, and two other varieties, Alkar tall wheatgrass and Luna pubescent wheatgrass provided good results.

“Cross wind trap strips are an effective conservation practice to keep blowing soil on a field, but they are not a permanent solution to control wind erosion,” the paper said. There can be some management issues that must fit into a farming operation. This practice may need to be used in conjunction with other practices like conservation crop rotation, residue management and reduced tillage. As always, NRCS will develop a conservation plan for the farm that will reduce erosion and benefit other resources, Nield said.

“The main thing is we’re really hoping that our farmers will take this problem to heart and help us reduce the wind erosion problem with whatever best practices are best suited for their farm,” Wright says. “We need to stay on this issue. Again, no farmer wants to lose their topsoil. That’s an asset that is so important for today and generations to come.”

For more information on the Wind Erosion Prevention Corridor project, please contact your local NRCS office.

Steve Stuebner is a regular contributor to Conservation the Idaho Way.

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