

# The Monthly Dirt

A Monthly Newsletter on the California Construction General Permit  
By WGR Southwest, Inc.

# RUSLE2

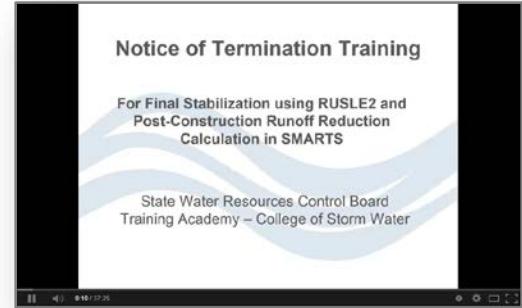
This has been on my bucket list since the current Construction General Permit first came out, and I kept telling myself that I was going to jump in and learn it. But each time I started to mess with the software it was like jumping into frigid ice water and I got out as fast as possible. But, with the encouragement and help of a new instructional video by Eric Berntsen and the State Water Board, I decided to try it again and I found the water of RUSLE2 to be much more tepid and not as baffling.

**What is RUSLE2?** It is a computer modeling tool that was originally released by the USDA's Natural Resources Conservation Service in 2003. It was originally developed to estimate soil loss from rill and interrill (sheet) erosion caused by rainfall on cropland and to predict the long-term average rate of rill and sheet erosion for several alternative combinations of crop systems and management practices. It takes into consideration specified soil types, rainfall patterns, and topography. When these predicted losses are compared with soil loss tolerances, RUSLE2 provides specific guidelines for effective erosion control. In 2005, Caltrans completed its modification of RUSLE2 and made it more applicable for construction sites.

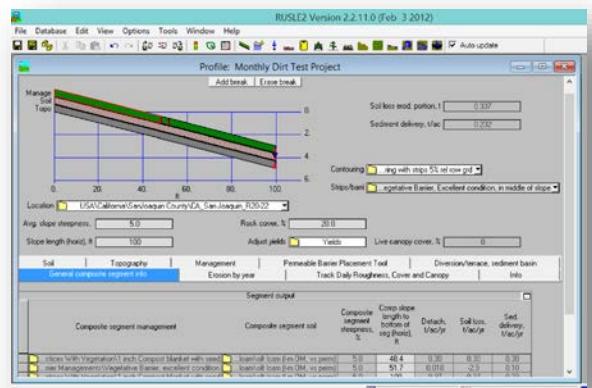
**Why use RUSLE2?** The advantage of using this computer modeling tool is that it provides the SWPPP developer with a more versatile tool to not only calculate predicted rates of sheet and rill erosion, but also to provide the sediment yield (MUSLE) for a specific project. The modeling tool can be used to view erosion rates before, during, and after construction. As allowed by the CGP, the State Water Board will accept RUSLE2 calculations and reports to be used to verify that final site stabilization has been achieved. This may be a very useful tool for large projects or challenging projects in which it is difficult to show stabilization by photographs.

**Where do you get RUSLE2?** The software is free and can be downloaded from the Caltrans website at <http://www.dot.ca.gov/hq/oppd/stormwtr/rusle2.htm>. In addition to the Water Board's 37-minute introductory video, Caltrans has several training resources available online, including quick reference fact sheets, a PowerPoint presentation, and a recorded webinar.

**Who can use RUSLE2?** After finally taking the plunge, I found out it was not as scary as I had first thought. I am by no means a RUSLE2 expert (yet), but I was able to perform fairly simple derivations of a simple site showing during- and post-construction erosion values. There are many advanced features in the software for which it will take some more time to master, but don't let those features frighten you out of the water. Jump in! You can do it!



To view video, go to:  
[www.waterboards.ca.gov/water\\_issues/programs/stormwater/training.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/training.shtml)



## Beware of R in RUSLE2

Although many of the variables in the RUSLE2 software model are analogous, if not identical, to those used in the RUSLE equation; R is not determined in the same way and is not interchangeable. To determine R for the RUSLE2 model, take the following steps:

1. Go to the following NRCS website and click on your State. (Note that California has been divided into two sections – Northern and Southern California.)

[http://efotg.sc.gov.usda.gov/efotg\\_locator.aspx?map=US](http://efotg.scegov.usda.gov/efotg_locator.aspx?map=US)

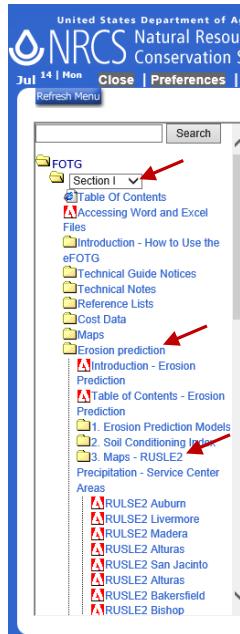
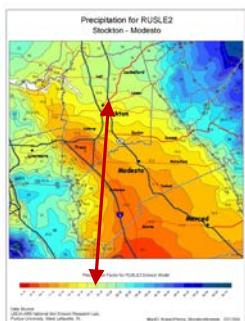


2. Select the county for your project.

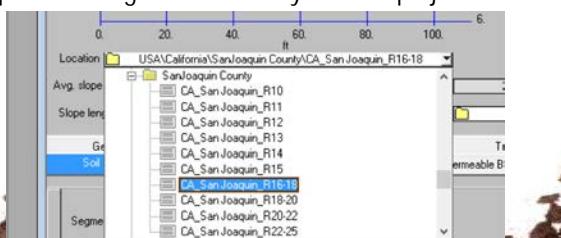
Click on your county



3. Next, under Section 1, Erosion Prediction, and "3. Maps – RUSLE2", select the location map nearest your project. You may have to look at a couple of maps if the project is near the boundary of two different maps.
4. Locate your project's location on the map and, using the color codes, determine the R value range (i.e. 16-17).



5. Using the drop down box in RUSLE2, select the appropriate R range for the county that the project is in.



## Upcoming Training ...

Got SWPPP? Classes coming to Lodi:

- ✓ **Next Week** - QSP/QSD Training, July 22-24
- ✓ CPESC Review and Exam – Sept. 2-4, 2014

For more information about these classes, go to [www.gotswppp.com](http://www.gotswppp.com).

*Need storm water training at your office or project location?*

*Invite one of WGR's experienced QSPs to come and provide training for your crew.*

*Please contact us if you have any questions ...*

**The Monthly Dirt** Newsletter Editor:

John Teravskis, QSD/QSP, CPESC

jteravskis@wgr-sw.com

(209) 334-5363 ext. 110 or (209) 649-0877

*Technical Questions about Environmental Compliance?*

Call ...

Kevin Harcourt, QSP, CESSWI (Northern California)

kbharcourt@wgr-sw.com, (209) 373-8277

Gray Martz, QSD, PG (Southern California)

jgmartz@wgr-sw.com, (562) 799-8510 ext. 203

## QSP Tips – Factsheet #1

### Troubleshooting the Oakton T-100 Turbidimeter

*Having problems calibrating your turbidity meter? Try these troubleshooting steps that our QSPs have found to be helpful in keeping their instruments in good shape and properly calibrating.*

1. Make sure a calibration vial or sample vial is inside the T-100 and the protective cap is seated properly when turning on the unit, calibrating or sampling.
2. Replace the batteries in the unit with new ones.
3. Inspect sampling vials and/or calibration vials for smudges, scratches, or fingerprints. Clean smudges and fingerprints with a lint-free cloth and remove scratches by gently rubbing silicone oil into the glass. (Expired standards should be replaced to ensure proper calibration. Contact [www.BMPoutlet.com](http://www.BMPoutlet.com) to order new calibration standards.)
4. Carefully clean the testing housing of dirt and dust by using a cotton swab with rubbing alcohol.
5. If sampling vials or calibration vials seem to be tighter than they were originally and need to be “forced in”, gently press against the small tan plastic piece above the right light sensor inside the testing housing until the vial slides inside easily. We have found this to be a trick that allowed the instrument to once again successfully calibrate.

Gently press in  
the plastic tab.



*To order calibration supplies or a new turbidity meter, go to ...*





Filtrexx® SiltSoxx™ is the **original** mesh tube filled with FilterMedia™. Use it **instead** of silt fence.

It's the sediment control device that **actually works**. It stops silt and sediment leaving your jobsite, and helps **keep you in compliance**.

SiltSoxx™ stops pollutants in two ways: by allowing water to temporarily pond outside the sock, and by cleansing water as it passes through the sock. Sediment is either filtered or settled out.

One more thing, **Our Soxx Don't Fall Down!**



Look for the Green SiltSoxx™ on Pallets



For more information go to [www.biopreferred.gov](http://www.biopreferred.gov)

PRODUCT	LINEAR FEET	USE
SILTSoxx™, 8-INCH	160 FT/PALLET; CONTINUOUS	HOUSE WRAPS, SITE BAND AIDS
SILTSoxx™, 12-INCH	100 FT/PALLET; CONTINUOUS	PERIMETER CONTROL
SILTSoxx™, 18-INCH	50 FT/PALLET; CONTINUOUS	PERIMETER CONTROL
INLETSoxx™, 8-INCH	120 FT/PALLET; 12 - 10' PIECES	STREET & AREA INLETS
DITCHCHEXX™, 12-INCH	80 FT/PALLET; 8 - 10' PIECES	CHECK DAMS, LARGE INLETS

#### ✓ Approved By:

EPA  
USDA NRCS  
AASHTO  
USACE

- ✓ No Trenching
- ✓ Easy Installation
- ✓ Easy Removal
- ✓ Gas & Oil Proven



#### Meet Specifications

filtrexx™ Meet Specifications  
er all EPA, AASHTO, USACE and USDA-NCRS as well as  
t state agencies throughout the U.S.  
s your assurance that the product:  
ate specifications for perimeter sediment control  
ary non-compliance  
l and non-compliance costs for contractors  
f your customer over the life of the project

rxxx® In quality, specification & experience.

Ø tube	silt sock
No	No
✓	✓

#### More than Just Mesh

Wiltrexx® mesh different?  
nferior sock. Filtrexx® lets water  
eping silt and clay inside the  
sox® has the independent test  
performance.

About Filtrexx® FilterMedia™?  
specification. Two-thirds of  
is in the Soxx™. Only  
certified to meet the  
rates specified by both  
regulators.

**Filtrexx® Installer?**  
Certified™ Installer or  
duct dealer, you'll save  
our products meet  
Installer network is  
industry.

SiltSoxx™ Material Type	Multi-Filament Polypropylene DuraSoxx HD
Material Characteristic	Photodegradable
Design Diameters	8 in (200mm), 12 in (300mm), 18 in (400mm)
Mesh Opening	1/8 in (3mm)
Tensile Strength	242 psi
% Original Strength from Ultraviolet Exposure (ASTM-G-153)	100% at 1000 hr
Functional Longevity/Project Duration	2-5 yr



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[www.filtrexx.com](http://www.filtrexx.com)

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#### BMP Outlet Retail Location:

11780 N. Hwy. 99, Lodi, CA

(East side of the freeway, between Armstrong Rd. and Eight Mile Rd.)