

The Monthly Dirt

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

Calculating R when the EPA's Website is Down

Attempting to determine the risk level of your new project, you find the K value using the [USDA's Web Soil Survey](#), you identify the LS value using the [State's KML files](#) on Google Earth™, and you are thinking there is one last easy piece of data to obtain ... the R value.

So, you go to the [USEPA's Rainfall Erosivity Factor Calculator](#) website, and to your dismay you see a message stating that it is down for repairs. Oh no! What do you do now? The website references a [fact sheet](#) which you download, but you find that even the fact sheet is confusing and could use another fact sheet to explain it. OK, stop hyperventilating! In this edition of The Monthly Dirt, let's take a look at how to calculate R when the website calculator is not working.

Let's suppose you have a project starting on June 16, 2012 in Fresno and the project will last until December 31, 2012. What is the R value for that project? To find R, do the following steps:

Step 1 – Find the Erosivity Index (EI) number on Figure 1:

- ✓ Identify which zone your project is in using Figure 1 on page 4 of the EPA's fact sheet. We realize that it would be much easier to do this if the map had cities, counties, and other landmarks identified on it. Unfortunately it does not, so you may need to cross reference with other maps such as Google Earth or Google Maps. But still, it may be tough to determine which zone to use when a project is near the zone boundaries.
- ✓ Fresno is within Zone 23, therefore, the EI for Fresno is 23.

Figure 1. Erosivity Index Zone Map



REMINDER – The deadline for the comment period for the proposed changes to the Construction General Permit is 12 Noon on Monday, May 14. The proposed changes to the permit can be viewed by going to:

http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/construction/2009_0009_dwq_nel_amnd.pdf

Comment letters may be submitted by email to commentletters@waterboards.ca.gov (if less than 15 megabytes in total size) or by fax at (916) 341-5620. For email submittals, please indicate in the subject line: "Comment Letter – Construction General Permit NEL Amendment."

Welcome to the Rainfall Erosivity Factor Calculator!



The NPDES Stormwater Phase II Rule allows NPDES permitting authorities to accept "low erosivity waivers" for small construction sites. The waiver process exempts small construction sites (disturbing under five acres) from NPDES permitting requirements when the construction activity takes place during a relatively short time in arid or semi-arid areas.

EPA accepts low erosivity waivers for the four states and other areas where [EPA is the permitting authority](#). Several states that are authorized to implement the NPDES permitting program also accept low erosivity waivers. Check with your state NPDES permitting authority for more information.

Note: EPA's online rainfall erosivity factor calculator is currently under construction. In the meantime, please use the [Construction Rainfall Erosivity Waiver Fact Sheet \(PDF\)](#) (12 pp, 1.39MB) to assist in determining the R Factor for a particular small construction site. [Appendix C \(PDF\)](#) (4 pp, 99K) of the 2012 CGP also provides information on small construction waivers.

Step 2 – Calculate the percentage of the Annual R value that applies to your project:

- ✓ Use Table 1 in the Fact Sheet (page 9).
- ✓ Find the corresponding percentages for the starting date and the ending date (Jun. 16 – Dec. 31).
- ✓ Subtract the starting percentage from the ending percentage.

Table 1. Erosivity Index Table

EI as a percentage of Average Annual R Value Computed for Geographic Areas Shown in Figure 1

Jun	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Nov	Dec	Dec
16-30	1-15	16-31	1-15	16-31	1-15	16-31	1-15	16-31	1-15	16-31	1-15	16-31
48.8	49.4	49.9	50.7	51.8	54.1	57.7	62.8	65.9	70.1	77.3	86.8	93.5

- ✓ For Fresno (EI #23), % of EI = $93.5 - 48.8 = 44.7\%$ of the R value.
- ✓ If the project lasted for more than one year, say from Jun. 16, 2012 – Dec. 31, 2013, the % EI would be 93.5% for the complete 2013 year, and 44.7% for the partial year or 138.2% of the R value.
- ✓ Every additional year is the value shown in the “Dec. 16-31” column (for EI #23 it is 93.5%).

Step 3 – Find the Isoerodent Value for your project and calculate the R Value:

- ✓ Use Figure 4 in the Fact Sheet (page 7)
- ✓ Find your project's location and, if necessary, interpolate the value. Yes, once again the map's quality is poor and hard to read, but do the best you can. The interpolation is somewhat subjective.

Figure 4. Isoerodent Map of California



- ✓ For Fresno the isoerodent value is approx. 8 (interpolated).
- ✓ Therefore,
 $R = (44.7\% \times 8)$
 $= 3.58$ (eligible for the waiver).

Upcoming Training ...

- Got SWPPP? QSP/QSD & CESSWI Classes
 - ✓ Santa Cruz – July 17-19, 2012
 - ✓ Pleasanton – August 14-16, 2012
 - ✓ Stockton – Sep. 24-26, 2012
- Storm Water Awareness Week Sep. 24 – 27
We will announce more information about the week's activities including BMP demonstrations.
- Got SWPPP EXPO – moved to Spring 2013
- Would you like WGR to come to your location and provide training to your construction crew on how to comply with the permit or install BMPs? If so, call us to get a price quote.



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FINDaQSP.com

Do you need a QSP for your jobsite? Go to our new on-line QSP networking website. We will put you in touch with a reputable QSP in your area. Why pay for all that travel time? FINDaQSP in your area and use local talent!

Would you like to join our QSP network and get job referrals? Go to www.FINDaQSP.com and join the network. Recently, we have given out jobs in the Los Angeles, Fresno, Oakland, and Santa Cruz areas to network members. We have other projects in the bid phase that may be given to other network members.

Please contact us if you have any questions ...

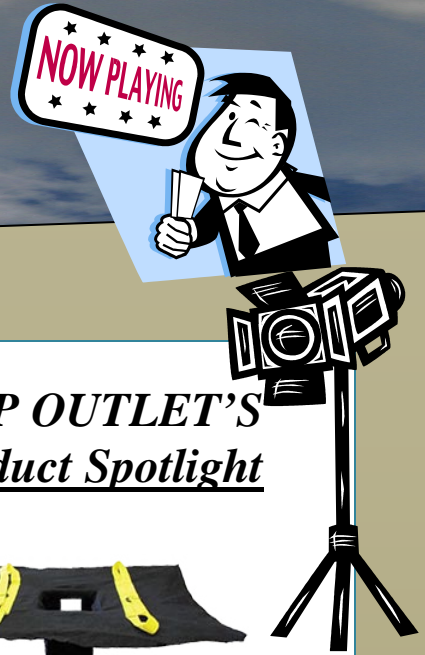
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 Call ...

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May Special

\$39.95

Universal Spill Bucket

- Absorbs up to 5 gallons;
- UN Container 1H2/Y25/S;
- Snap top lid;
- Contents identified on easy to read label;

Contents include:

Approximately 2.5 gallons of granular absorbent, 6 Universal Spill Pads, 1 Universal Soc, Safety Glasses, Nitrile Gloves (Powder-free) and 2 Disposal Bags



BMP OUTLET'S Product Spotlight



The Hornet's Nest Drain Inlet Filter is a unique, under-grate storm drain filter. The oversized base allows the filter to be used with a variety of size and shape drain inlets. Simply insert the filter into an open drain. Place the grate over the installed filter and trim the excess material for a custom fit and clean appearance. The yellow webbing secures the filter to the grate and doubles as lifting straps to quickly and easily remove the filter and grate for simple cleaning. The sediment collection cone has 4 overflow portals for high flow bypass during heavy storm events. * The total water flow rate through the insert when new is in excess of 500 gpm. The bypass rate is approximately 700 gpm.

* An available option is a replaceable, tethered oil absorbent pouch.

Caltrans Gravel Bag

\$3.00



All purpose sediment control device, which can be filled with rock up to 40 lbs. per bag.

Outer Material - 8 ounce Non-Woven Geotextile

Dimensions - 16" x 24"

Durability - 500 lb. burst strength

Flow Rate - 90 gpm/ft

Rock not included



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