

Rainfall Erosivity Waiver “R Factor” Determination (Parts A and B)

Part A - Simplified Method (see Part B for the alternative method)

A.1 Rainfall Erosivity

Rainfall erosivity is a term that is used to describe the potential for soil to wash off disturbed, devegetated areas and into surface waters of the state during storms. The potential for erosion is based on many factors including soil type, slope, and the energy or force of precipitation expected during the period of surface disturbance. While it is impossible to predict the weather several months in advance of construction, for many areas of the country, there are definite optimal periods, such as a dry season when rain tends to fall less frequently and with less force.

Typically, rainfall erosivity is measured indirectly using the Revised Universal Soil Loss Equation (RUSLE) developed by the US Department of Agriculture (*Agricultural Handbook 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)*, Chapter 2, pp. 21-64, USDA, January 1997) to help farmers control topsoil losses. The equation estimates erosivity values, also called “R factors,” which relate primarily to the average annual energy and intensity of rain events for specific rainfall distribution zones throughout the country. The USDA has collected annual R factor data for each rainfall distribution zone that reflects average precipitation patterns in each area. That data can then be used to determine if and when a “dry season” is likely to occur at any location. Lower R factors correspond to a lower probability of significant storm-induced erosion.

A.2 Rainfall Erosivity Waiver

Storm water regulations and Part 5 of the Small Construction General Permit (SCGP) allow the state to waive coverage under this permit for small construction sites (at least one, but less than five acres of land disturbance) if the value of the R factor is less than 5 during the entire period of construction activity. The period of construction activity is considered to begin when land clearing is initiated and end when the site is finally stabilized in accordance with the definition in Part 2.9 of the SCGP.

This waiver only affects the requirements of the Small Construction General Storm Water Permit. It does not relieve the operator of the following requirements:

- The operator must comply with the requirements of other federal, state, or local agencies, such as meeting local storm water quality requirements.

- The operator must obtain separate authorization to discharge storm water from other industrial activities and materials, including but not limited to, asphalt and concrete batch plants and sand and gravel mining operations.
- The operator must obtain authorization under a non-storm water WYPDES permit to discharge any process water, including but not limited to, construction site dewatering of groundwater, washing activities, and discharges related to utility installation such as hydrostatic test water, super chlorinated water, and so on.

A.3 Eligibility for Waiver

A.3.1 Who may apply?

Operators of small construction activities where the project R factor is less than 5 for the duration of the project (through final stabilization) may request a waiver from coverage under the small construction general permit (SCGP). Small construction means any clearing, grading, or excavation project which will disturb at least one, but less than five (not necessarily contiguous) surface acres. Small construction activity also includes the disturbance of less than one acre of total land area when that disturbance is part of a larger common plan of development or sale if the larger common plan will ultimately disturb at least one acre, but less than five acres.

A.3.2 What may be covered?

A separate Rainfall Erosivity Waiver application and worksheet must be provided for each construction project qualifying for the waiver. Additionally, this waiver is only available on a project-wide basis. It is not available for individual filings, phases, or other portions of a larger common plan of development or sale.

A.4 Application for a waiver using the simplified R factor determination.

A small construction site operator must complete the worksheet and application in this document and submit the application to the Department thirty (30) days prior to commencing land disturbing activities. By signing and submitting this application, the operator is certifying that the R factor for the duration of the project is less than 5 as determined using the simplified method.

A.5 Alternative R factor determination

Alternatively, any small construction operator may calculate its own R factor using site-specific information found in the Environmental Protection Agency's Guidance, Storm Water Phase II Final Rule; Construction Rainfall Erosivity Waiver (EPA 833-F-00-014, January 2001, Fact Sheet 3.1). This may be a useful option for longer duration projects located in portions of counties that have a lower isoerodent value than the conservative assumption used to develop Table 1 (page 13). Use the worksheet and application in Part B for the alternative R factor calculation.

A.6 Activities extending beyond the waiver period

It is very important to provide an accurate estimate of the end date. If in doubt, assume a longer time. Underestimating the end date can result in a project R factor that is too low and may result in an inappropriate application for a waiver. The operator is responsible for determining the project R factor as accurately as possible.

If a construction activity extends beyond the certified waiver period for any reason, the operator must either:

- Recalculate the rainfall erosivity R factor using the original start date and a new projected ending date and, if the R factor is still under 5, complete and sign a new waiver application before the end of the original waiver period. The new application must be submitted to the Department five days before the end of the current certification. Or,
- Complete and implement the requirements for obtaining authorization under this permit as specified in Part 3 before the end of the certified waiver period.

The applicant is responsible for periodically assessing their project to assure that it still qualifies for the Rainfall Erosivity Waiver.

A.7 Best Management Practices

All construction sites in Wyoming must operate in such a manner that storm water discharges do not cause a violation of the state water quality standards (see Chapter 1 of the Wyoming Water Quality Rules and Regulations). Construction projects that qualify for the rainfall erosivity waiver are, therefore, still subject to state water quality standards. For this reason, the Department recommends that all construction site operators implement appropriate best management practices (BMPs) to control the transport of pollutants off site.

Instructions for completing waiver application and worksheet using the simplified method

NOTE: A site map must be submitted with the waiver application. The application will not be processed without a site map.

- Item A.8.1 Provide all requested applicant information including a contact person. The contact should be familiar with the proposed construction project.
- Item A.8.2 Provide the project name and location of the project as either section, township, and range OR a street and city address. Include the project county.
- Item A.8.3 Briefly describe the nature of the construction activity. Include information on the type of facility being constructed and the expected method of site “final stabilization” (for example: pavement, gravel, landscaping, revegetating).

- Item A.8.4 Provide both the total area of the construction site and the area that will undergo disturbance. Include stockpile areas, areas with significant vehicle and equipment traffic, and storage areas.
- If the project is part of a larger plan of development or sale the disturbed area of the total plan should be noted. A “common plan of development or sale” is a site where multiple separate and distinct construction activities may be taking place at different times, but still under a single plan. This includes phased projects, projects with multiple filings or lots, and projects that are not contiguous, but are still under a single plan.
- Item A.8.5 Identify the nearest surface water of the state which could receive runoff from the construction project. Surface waters of the state are defined in Part 2.19 of the SCGP. The definition includes all defined drainages, even if they are usually dry. Lakes, wetlands, and even stock watering ponds are also included in the definition.
- Item A.8.6 If storm water from the construction project will discharge to a municipal storm sewer identify the municipality that owns the system and the surface water that will ultimately receive the discharge.
- Item A.9.1 **Start Date** is the day soil disturbing activities will begin. Soil disturbance includes grubbing, stockpiling, excavating, and grading activities.
- End Date** is the date the site is “finally stabilized.” Finally stabilized means that all disturbed areas have either been built on, paved over, or a uniform vegetative cover with a density of 70% of the native background vegetative cover has been established. Graveled surfaces may be considered finally stabilized provided a sufficient quantity of gravel is used to prevent sediment transport off site.
- Item A.9.2 Use Table 1 (page 9) to determine the R factors at the beginning and end of the project for the county in which the project is located.
- Item A.9.3 Calculate the project R factor. If the project occurs in one calendar year use item A. If the project will occur in two calendar years (for example, from November 16th through February 11th), use item B. The project R factor must be less than five to qualify for the waiver.
- Item A.10 The waiver application and worksheet must be signed in accordance with Part 10.7 of the SCGP. Submit the application and worksheet to the Department at least 30 days prior to commencing land disturbing activities.

A.8

**Application and Worksheet for the Rainfall Erosivity Waiver
for Exclusion from Wyoming Small Construction Storm Water Permit
(Less than Five Acres Land Disturbance)**

Please print or type. Application and worksheet must be complete.

A.8.1 Name and address of applicant:

Company Name:	
Mailing Address:	
City, State, ZIP Code:	
Telephone:	Fax:
Contact Name:	
(If different from above) Telephone:	Fax:

A.8.2 Location of Construction Site:

Provide either a Section, Township, and Range or street and city address

Qtr/Qtr	Sec.	Twp.	Rng.
Street and City Address:			
County:			
Latitude/Longitude (optional):			
Project Name:			

A.8.3 Briefly describe the project.

A.8.4

Area of construction site (acres): _____

Estimated area to be disturbed (acres): _____

NOTE: If the disturbed area of the project or the total disturbance of a "larger plan of development of sale" will be five acres or more, the project does not qualify for this waiver. Complete and submit a Notice of Intent for Storm Water Discharges Associated with Large Construction Activities.

A.8.5 Name of the nearest defined drainage(s) which could receive runoff from the construction project, whether it contains water or not. Include bodies of water such as lakes and wetlands where applicable.

A.8.6 Will storm water discharge from the project enter a municipal storm sewer? _____
 What municipality? _____
 To what water body does the storm sewer discharge? _____

A.9 Waiver Worksheet (Wyoming Simplified Method)

Refer to the "Instruction" section of this document for additional information.

A.9.1 Project information necessary to calculate the R factor:

Start date of the construction project.	Start Date
End date of the construction project. This is the date the project site is "finally stabilized."	End Date
County project is located in.	County

A.9.2. R factors at the start and end of the project.

Starting R factor. From Table 1 pick the 15-day period that your start date falls within. Follow that column down until you reach the row with the county your project is in. Enter the part-year R factor found at that point to the right.	Starting R factor
Ending R factor. From Table 1 pick the 15-day period that your end date falls within. Follow that column down until you reach the row with the county your project is in. Enter the part-year R factor found at that point to the right. If the project start and end dates fall within the same 15-day period, use the <i>next 15-day period</i> for the end date. For example, if a project will begin on June 1 st and end on June 10 th , use the "June 1-15" period for the start date and "June 16-30" for the end date.	Ending R factor

A.9.3. Project R factor.

If the project will begin and end within one calendar year complete item A. If the project will begin and end over two calendar years complete item B.

A.	<p>Project R factor calculation for projects completed in ONE calendar year.</p> <p>Subtract the starting R factor from the ending R factor and enter that result to the right.</p> $\frac{\quad}{\text{Ending R factor}} - \frac{\quad}{\text{Starting R factor}} = \frac{\quad}{\text{Project R factor}}$	
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B.	<p>Project R factor calculation for projects that occur over TWO calendar years.</p> <p>Refer to table 1 (page 13). Find the project county. In the column immediately to the right is the county's annual R factor. Enter that number below. Subtract the start R factor from the annual R factor and add the end R factor. Enter the result to the right.</p> $\frac{\quad}{\text{Annual R factor}} + \frac{\quad}{\text{Ending R factor}} - \frac{\quad}{\text{Starting R factor}} = \frac{\quad}{\text{Project R factor}}$	
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The project R factor must be less than 5 to qualify for the rainfall erosivity waiver.

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A.10 Applicant Certifications.

I, the undersigned, certify that I have read and understand the requirements and conditions of the WYPDES Small Construction Storm Water General Permit.

To the best of my knowledge, this construction activity qualifies for a rainfall erosivity waiver in accordance with the applicable requirements and conditions of this WYPDES Small Construction Storm Water General Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name of Person Signing	Title
Signature of Applicant	Date
	Telephone

Authorized signatories for this erosivity waiver are the following:	
<i>For corporations:</i>	<i>A principal executive officer of at least the level of vice president, or the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the overall operation of the facility from which the discharge originates.</i>
<i>For partnerships:</i>	<i>A general partner.</i>
<i>For a sole proprietorship:</i>	<i>The proprietor.</i>
<i>For a municipal, state, federal or other public facility:</i>	<i>Either a principal executive officer or ranking elected official.</i>

Section 35-11-901 of Wyoming Statutes provides that:

"Any person who knowingly makes any false statement, representation, or certification in any application . . . shall, upon conviction, be fined not more than ten thousand dollars (\$10,000) per day for each violation or imprisoned for not more than one (1) year, or both."

Mail this application to:
 WYPDES Permits Section
 DEQ/WQD
 Herschler Bldg. - 4 W
 122 West 25th Street
 Cheyenne, WY 82002

DEQ Use Only:

Waiver Number: _____

River Basin: _____

Stream Class: _____

HUC: _____

Table 1

Cumulative R Factors by County

County	Annual R Factor by County	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		1-15	16-31	1-15	16-29	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	12-31
		Albany	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	2.0	4.7	6.8	9.6	13.3	16.5	18.9	20.2	21.2	21.6	21.9	22.0	22.0
Big Horn	17	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	2.3	4.0	6.6	9.4	11.2	12.5	13.9	14.9	15.9	16.5	16.9	17.0	17.0	17.0	17.0
Campbell	32	0.0	0.0	0.0	0.0	0.0	0.1	0.3	1.0	2.8	6.0	11.5	15.9	19.3	22.5	24.6	26.9	28.4	30.0	30.9	31.7	32.0	32.0	32.0	32.0
Carbon	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.7	3.3	4.4	5.8	7.7	9.8	11.7	12.8	13.8	14.3	14.8	15.0	15.0	15.0	15.0
Converse	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	2.4	6.1	8.8	12.0	15.8	19.0	21.9	23.4	24.3	24.7	24.9	25.0	25.0	25.0	25.0
Crook	35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	2.4	6.1	10.4	16.1	21.2	25.4	30.1	32.5	33.9	34.44	34.9	35.0	35.0	35.0	35.0
Fremont	13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.9	1.9	3.5	4.8	6.1	7.6	8.8	9.6	10.3	11.3	12.0	12.7	13.0	13.0	13.0	13.0
Goshen	38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	3.5	8.2	11.8	16.5	23.0	28.5	32.7	34.8	36.6	37.3	37.8	38.0	38.0	38.0	38.0
Hot Springs	13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	1.1	1.8	3.1	5.0	7.2	8.6	9.6	10.6	11.4	12.2	12.6	12.9	13.0	13.0	13.0	13.0
Johnson	23	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.7	2.0	4.3	8.2	11.4	13.9	16.1	17.7	19.3	20.4	21.6	22.2	22.8	23.0	23.0	23.0	23.0
Laramie	48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.7	4.4	10.3	14.9	20.9	29.0	36.0	41.3	44.0	46.2	47.1	47.7	48.0	48.0	48.0	48.0
Lincoln	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.3	2.6	3.2	3.9	5.3	6.7	7.6	8.1	8.8	9.3	9.8	10.0	10.0	10.0	10.0
Natrona	18	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	1.6	3.4	6.4	8.9	10.9	12.6	13.9	15.1	16.0	16.9	17.4	17.8	18.0	18.0	18.0	18.0
Niobrara	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	3.0	7.7	11.3	15.4	20.2	24.4	28.1	29.9	31.1	31.6	31.8	31.9	32.0	32.0	32.0
Park	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.6	2.9	4.7	6.6	7.9	8.8	9.8	10.5	11.3	11.6	11.9	12.0	12.0	12.0	12.0
Platte	33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.2	3.0	7.1	10.2	14.4	19.9	24.8	28.4	30.2	31.7	32.4	32.8	33.0	33.0	33.0	33.0
Sheridan	23	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.7	2.0	4.3	8.2	11.4	13.9	16.1	17.7	19.3	20.4	21.6	22.2	22.8	23.0	23.0	23.0	23.0
Sublette	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.3	2.6	3.2	3.9	5.3	6.7	7.6	8.1	8.8	9.3	9.8	10.0	10.0	10.0	10.0
Sweetwater	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.1	2.2	3.0	3.9	5.1	6.5	7.8	8.6	9.2	9.5	9.9	10.0	10.0	10.0	10.0
Teton	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.9	2.2	3.0	3.9	4.9	5.1	7.7	8.9	9.8	10.3	10.8	11.0	11.0	11.0	11.0
Uinta	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.3	2.6	3.2	3.9	5.3	6.7	7.6	8.1	8.8	9.3	9.8	10.0	10.0	10.0	10.0
Washakie	17	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	2.3	4.0	6.6	9.4	11.2	12.5	13.9	14.9	15.9	16.5	16.9	17.0	17.0	17.0	17.0
Weston	35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	3.3	8.5	12.4	16.8	22.1	26.6	30.7	32.7	34.0	34.5	34.8	34.9	35.0	35.0	35.0

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Rainfall Erosivity Waiver “R Factor” Determination

Part B - Alternative Calculation

This method of calculating the project R factor uses US Environmental Protection Agency (EPA) Storm Water Phase II Final Rule Fact Sheet 3.1; Construction Rainfall Erosivity Waiver, EPA 833-F-00-014. A copy of the fact sheet may be downloaded from the EPA website at <http://www.epa.gov/npdes/pubs/fact3-1.pdf> or the DEQ also provides a link to the EPA website from the Agency’s storm water web page. The Department’s web page is found at <http://deq.state.wy.us>. You may also request a paper copy by contacting the Storm Water Coordinator at 307-777-7781.

This alternative calculation may be useful for some longer duration projects located in an area of a county that has a lower isoerodent value than the conservative value used to develop Part A.

For information on eligibility for and application of the rainfall erosivity waiver see Part 5 of the permit and Part A, Parts A.1 through A.7.

Instructions for completing waiver application and worksheet using the simplified method

NOTE: A site map must be submitted with the waiver application. The waiver application will not be processed without a site map.

- Item B.1 Provide all requested applicant information including a contact person. The contact should be familiar with the proposed construction project.
- Item B.2 Provide the project name and location of the project as either section, township, and range OR a street address. Include the project county.
- Item B.3 Briefly describe the nature of the construction activity. Include information on the type of facility being constructed and the expected method of site “final stabilization” (for example: pavement, gravel, landscaping).
- Item B.4 Provide both the total area of the construction site and the area that will undergo disturbance. Include stockpile areas, areas with significant vehicle and equipment traffic, and storage areas.

If the project is part of a larger plan of development or sale the disturbed area of the total plan should be noted. A “common plan or development of sale” is a site where multiple separate and distinct construction activities may be taking place at different times, but still under a single plan. This includes phased projects, projects with multiple filings or lots, and projects that are not contiguous, but are still under a single plan.

- Item B.5 Identify the nearest surface water of the state which could receive runoff from the construction project. Surface waters of the state are defined in Part 2.14 of the SCGP. The definition includes all defined drainages, even if they are usually dry. Lakes, wetlands, and even stock watering ponds are also included in the definition.

Item B.6 If storm water from the construction project will discharge to a municipal storm sewer identify the municipality that owns the system and the surface water that will ultimately receive the discharge.

Item B.7 Refer to EPA Fact Sheet 3.1 to complete items B.7.1 through B.7.4

Note that the Project End Date (B.7.2) is the date the site is “finally stabilized.” Finally stabilized means that all disturbed areas have either been built on, paved over, or a uniform vegetative cover with a density of 70% of the native background vegetative cover has been established. Graveled surfaces may be considered finally stabilized provided a sufficient quantity of gravel is used to prevent sediment transport off site.

Item B.8 The waiver application and worksheet must be signed in accordance with Part 10.7 of the SCGP. Submit the application and worksheet to the Department at least thirty (30) days prior to commencing land disturbing activities.

**Application and Worksheet for the Rainfall Erosivity Waiver
for Exclusion from Wyoming Small Construction Storm Water Permit
(Less than Five Acres Land Disturbance)**

Please print or type. Application and worksheet must be complete.

B.1 Name and address of applicant:

Company Name:	
Mailing Address:	
City, State, ZIP Code:	
Telephone:	Fax:
Contact Name:	
(If different from above) Telephone:	Fax:

B.2 Location of Construction Site:

Provide either a Section, Township, and Range or street and city address

Qtr/Qtr	Sec.	Twp.	Rng.
Street and City Address:			
County:			
Latitude/Longitude (optional)			
Project Name:			

B.3 Briefly describe the project: _____

B.4 Area of construction site (acres): _____
Estimated area to be disturbed (acres): _____

If the disturbed area of the project or the total disturbance of a “larger plan of development of sale” will be five acres or more, the project does not qualify for this waiver. Complete and submit a Notice of Intent for Storm Water Discharges Associated with Large Construction Activities.

B.5 Name of nearest defined drainage(s) which could receive runoff from the construction project, whether it contains water or not. Include bodies of water such as lakes and wetlands where applicable.

B.6 Will storm water discharge from the project enter a municipal storm sewer? _____

What municipality? _____

To what water body does the storm sewer discharge? _____

B.7 Waiver Worksheet

To calculate the R factor, the applicant must refer to the figures and tables found in EPA Fact Sheet 3.1. Refer to the Fact Sheet for specific directions.

B.7.1 Erosivity Index (EI) Zone from Figure 1. Valid EI Zones in Wyoming are 48, 49, 50, 51, 52, 53, 54, 55, 56, and 57.

EI Zone from Figure 1	
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B.7.2 Determine the anticipated project start and end dates and, from Table 1, the EI values associated with those dates. ***The project end date is the date when the disturbed area is finally stabilized as defined in Part 2.9 of the permit.***

Project start date:		Starting EI value	
Project end date:		Ending EI value	

B.7.3 Determine the annual R factor (isoerodent value) from Figure 3. Interpolate values for sites that do not fall on an isoerodent contour. Valid Wyoming R factors range from 10 to 48.

Site annual R factor	
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B.7.4 Project R factor calculation.

If the project will begin and end within one calendar year complete item A. If the project will begin and end over two calendar years complete item B.

A.	<p>Project R factor calculation for projects in ONE calendar year.</p> <p>Subtract the starting EI from the ending EI to determine a part year EI and divide by 100. Multiply that result by the site annual R factor to determine the project R factor.</p> $\left(\frac{\text{Ending EI}}{\text{Ending EI}} - \frac{\text{Starting EI}}{\text{Starting EI}} \right) / 100 * \frac{\text{Annual R factor}}{\text{Annual R factor}} =$	<hr style="width: 80%; margin: 0 auto;"/> Project R factor
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B.	<p>Project R factor calculation for projects that occur over TWO calendar years.</p> <p>Subtract the starting EI from 100 and add the difference to the Ending EI. Divide the result by 100 and multiply that result by the site annual R factor to determine the project R factor.</p> $\left(100 - \frac{\text{Starting EI}}{\text{Starting EI}} + \frac{\text{Ending EI}}{\text{Ending EI}} \right) / 100 * \frac{\text{Annual R factor}}{\text{Annual R factor}} =$	<hr style="width: 80%; margin: 0 auto;"/> Project R factor
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The project R factor must be less than 5 to qualify for the rainfall erosivity waiver.

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