



PESTICIDE RUNOFF/EROSION MITIGATION POINTS CALCULATION WORKSHEET

When the pesticide product label or endangered species protection bulletin, found on the Bulletins Live! Two website¹, instructs a user to achieve runoff or erosion points, this worksheet can be used to assist the user in determining whether the necessary level of mitigation has been met before applying a pesticide product. This worksheet can be used to track the number of points a user has achieved in lieu of the Microsoft Excel calculator² or the Pesticide App for Label Mitigations (PALM)³ EPA has also developed for this purpose. The calculator and descriptions of mitigation measures are found on EPA's Mitigation Menu Website. This worksheet can be found online at <https://www.epa.gov/pesticides/mitigation-menu>

General Field/Management Unit Information (Optional Information – Does not Impact Calculation)	
Name:	
Today's Date:	
Field/Management Unit Identification(s) ⁴	
Crop(s)	
Pesticide Product Name(s)	
Target Application Date(s)	

You may not have to implement any additional runoff/erosion measures for applications if the answer is "yes" to any one bullet in any one of the following questions:	Yes	No
Does the application area (farm/field) use any of the following systems that capture runoff and discharge? - Perimeter berm system (permanent berms, elevated border/perimeter) present at the time of application and throughout the cropping season - Irrigation tailwater return system - Subsurface or tile drainage with controlled outlet	No further runoff/erosion mitigation needed	Continue calculating mitigation points below
Does the application use any of the following application methods or parameters? - Soil injection - Tree injection - Chemigation applied to the subsurface and under non-permeable plastic mulch - Spot treatment (<1000 square feet) - Less than 1/10 acre treated		
Are you participating in an EPA-Qualified Conservation Program?		
Are the areas within 1,000ft down-gradient from the treated farm/field comprised entirely of managed areas? Managed areas may include: - Agricultural fields, including untreated portions of the treated field - Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground - Buildings and their perimeters, silos, or man-made structures - Vegetative filter strips, field borders, hedgerows, Conservation Reserve Program lands, and other areas for spray drift or runoff mitigation - Managed wetlands - On-farm contained irrigation water sources that are not connected to adjacent water bodies		

Required Number of Mitigation Points (from label – if applicable)	Required Number of Mitigation Points (from bulletin – if applicable)	Other restrictions of note

¹ Bulletins Live! Two Website: <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>

² Excel Mitigation Points Calculator available for download at <https://www.epa.gov/pesticides/mitigation-menu>

³ PALM: <https://www.epa.gov/pesticides/pesticide-app-label-mitigations>

⁴ A field or management unit is defined as the single contiguous piece of land that is managed as a single unit in production or in preparation for production of a single crop. A uniform field may be sub-divided based upon different crops (e.g., vegetables and leafy greens) or sub-divided based upon different features (e.g., flat portion and contoured portion).

Runoff/erosion mitigation options				
Mitigation Measure Title ¹	Measures Included in Mitigation Category ^{1,2}		Points	Score
Systems that Capture Runoff and Discharge				
Water Retention Systems	Sediment basins, catch basins, sediment traps, water retention ponds		2	
Subsurface drainages and tile drainage installed without controlled drainage structure	Subsurface tile drains, tile drains without controlled drainage structure		1	
Pesticide Runoff Vulnerability and Field Characteristics				
County-based mitigation relief	Your county may receive mitigation relief points if in a geographic area with reduced pesticide runoff vulnerability. Check the runoff vulnerability credit of your location at https://www.epa.gov/system/files/documents/2024-10/county-mitigation-relief-points-runoff-vulnerability.pdf	Pesticide runoff vulnerability - very low	6	
		Pesticide runoff vulnerability - low	3	
		Pesticide runoff vulnerability - medium	2	
		Pesticide runoff vulnerability - high	0	
Conservation Program and Runoff/Erosion Specialists/Mitigation Tracking				
Mitigation Tracking	Documented at the field or farm level, using paper or electronic format (using this worksheet counts for this measure)		1	
Runoff/Erosion Specialists OR Conservation Program	Working with and following recommendations from a technical specialist		1	
	Participating in a conservation program		2	
Field Characteristics ³				
Field with Slope ≤ 3%	Field slope ≤3% (naturally low slope or flat fields; flat laser leveled fields)		2	
Predominantly Sandy Soils ⁴	Moderately sandy soils: Fields with 10-20% clay and 50-90% sand (HSG B type soils)		2	
	Predominately sandy soils: Fields with ≤10% clay and ≥90% sand (HSG A type soils)		3	
In-Field Mitigation Measures ³				
Conservation Tillage [Select one]	No-till		3	
	Reduced tillage, mulch tillage, strip till, ridge tillage		2	
Reservoir Tillage	Reservoir tillage, furrow diking, basin tillage		3	
Contour Farming	Contour farming, contour tillage, contour orchard and perennial crops		2	
Vegetative Strips – In-Field	Inter-row vegetated strips, strip cropping, alley cropping, prairie strips, contour buffer strips, contour strip cropping, prairie strip, alley cropping, vegetative barrier (occurring in a contoured field)		2	
Terrace Farming	Terrace farming, terracing, field terracing		2	
Cover Crop/Continuous Ground Cover [Select one]	Cover crop or continuous ground cover; with tillage		1	
	Cover crop or continuous ground cover; no tillage; short-term cover crop		2	
	Cover crop or continuous ground cover; no tillage; long-term cover crop		3	
Irrigation Water Management [Select one]	Use of soil moisture sensors/evapotranspiration meters with center pivots & sprinklers; above ground drip tape, drip emitters; micro-sprinklers		2	
	Use of below tarp irrigation, below ground drip tape		3	
	; dry farming, non-irrigated lands; no irrigation		3	
Mulching [Select one]	Mulching with permeable artificial materials (i.e., landscape fabrics, synthetic mulches)		1	
	Mulching with natural materials		3	
Anionic Polyacrylamide (PAM)	Use of Anionic Polyacrylamide (PAM)		2	
Erosion Barriers	Wattles; silt fences		2	
Adjacent to Field Mitigations ⁵				

Runoff/erosion mitigation options			
Mitigation Measure Title ¹	Measures Included in Mitigation Category ^{1,2}	Points	Score
Grassed Waterway	Grassed waterway	2	
Vegetative filter strips (VFS) or field border adjacent to field [Select one]	20 to <30 feet wide	1	
	30 to <60 feet wide	2	
	≥60 feet wide	3	
Vegetated Ditch	Vegetated drainage ditch	1	
Riparian area; riparian forest buffer; riparian herbaceous cover [Select one]	20 to <30 feet	1	
	30 to <60 feet	2	
	≥60 ft	3	
Constructed and Natural Wetlands	Constructed and natural wetlands, wetland and riparian landscape/habitat improvement	3	
Terrestrial Habitat Landscape Improvement [Select one]	20 to <30 feet	1	
	30 to <60 feet	2	
	≥60 ft	3	
Filtering Devices [Select one]	Filters, sleeves, socks, or filtration units containing activated carbon	3	
	Filters, sleeves, socks, or filtration units containing compost amendments	1	
Other Mitigation Measures ⁶			
Using mitigation measures from multiple categories	Practices must be used from at least 2 of the following categories: in-field, field-adjacent, or systems that capture runoff and discharge ⁶	1	
Application Parameters			
Annual Application Rate Reduction [Select one]	Any application 10% to <30% less than the maximum labeled annual application rate	1	
	Any application 30% to <60% less than the maximum labeled annual application rate	2	
	Any application ≥60% less than the maximum labeled annual application rate	3	
Reduction in Proportion of Field Treated [Select one]	10 to <30% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	2	
	30 to <60% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	3	
	≥60% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	4	
Soil Incorporation	Watering-in or mechanical incorporation before a runoff producing event	1	
TOTAL MITIGATION POINTS SCORE:			

¹ EPA's mitigation menu and measure descriptions specific to pesticides are available in the following websites:

<https://www.epa.gov/pesticides/mitigation-menu> and <https://www.epa.gov/pesticides/menu-measure-descriptions>. If the state has a more restrictive requirement, that must be followed instead. Not all measures are applicable to all fields and crops.

² Only one of the measures that qualify from a 'mitigation menu item' can be used. For example, a user could get mitigation points for cover cropping or double cropping but not both.

³ Multiple field characteristics may apply to an individual field.

⁴ Soil texture is as defined by USDA's soil classification system. See USDA's Web Soil Survey tool to determine soil texture:

<https://websoilsurvey.nrcs.usda.gov/app/>.

⁵ Adjacent to the field mitigations should be located downgradient from a treated field to effectively reduce pesticide exposure in runoff and erosion.

⁶ For example, if a cover cropping and adjacent to the field VFS are both utilized, the efficacy of the mitigation measures in combination may be increased.

Notes: