

Factors for determining Agricultural runoff impacts to nearby wetlands and watercourses

GEOSPATIAL FACTORS	
Climate	Local climate, weather patterns or weather events, significant events (rainfall intensity, duration and distribution, timing of first major snowfall, timing of snow melt)
Soil Erodibility	Soil characteristics (structure, type, drainage, organic matter, compaction, etc.)
Topography	Slope / topography (Poor slope, high slope, long slope length, concentrated flow, too steep, lack of permanent grass in hollows)
Land Use	(intensive agriculture / high percentage of ag land)
Location Within Watershed	(Stream order, Proximity to headwaters)
Distance to a Watercourse	Proximity to stream.
Runoff direct route to the stream	Concentrated flow directly to stream (regardless of distance from the stream)
Buffer Zones	Around streams (expanded buffers, trees, etc.)
Field location	(bare field at the bottom end of multiple fields (various landowners))
Large field size	
Proximity to ecologically significant areas	(high biodiversity, old growth, salmon, species at risk)
Proximity to important / productive aquaculture areas	
CROP MANAGEMENT FACTORS	
Cropping: Type, harvest techniques, row cropping, over tillage, not using crops that contribute to ground cover and organic matter	
Crop Rotation	
Lack of ground cover / cover crop	
Pesticide types, usage and timing / lack of integrated pest management	
Spring tillage	
General practices (not staying off the field when it's wet, keeping axle loads to a minimum, surface drainage plans not carried out, no permanently established headlands, timing and depth of primary tillage)	
Human error: ruts in fields or roadways that provide a direct conduit to the watercourse	
Lack of management plans or plans not correcting for weather patterns	
FIELD MANAGEMENT FACTORS	
Lack of soil conservation measures (grassed waterways, berms, terraces, conservation tillage, tillage timing)	
Waterways in fields not grassed, or if grassed, not maintained	
Lack of grassed headlands /poorly established grassed headlands	