




















**Application of Best Management Practices (BPMs) to Erosion and Sediment Control on Alberta Highways (Good and Bad/Failed Installations)**












BMP	GOOD	BAD/FAILED	BAD/FAILED
<p>Energy Dissipator for Culvert Outlet (BMP 17a)</p>	 <p align="center">H595:02 Culvert outlet area with energy dissipator being protected by riprap</p>	 <p align="center">H986:01 Erosion of culvert outlet and removal of large riprap protection</p>	 <p align="center">Erosion and undermining of gabion structure resulting in collapse and scour</p>
<p>Rolled Erosion Control Blankets (BMP 13)</p>	 <p align="center">H43:12 Iosegun River Installation of gabion basket check structure and permanent RECP</p>	 <p align="center">H43:12 Chicadee Creek Erosion of soil under permanent RECP</p>	
<p>Gabion Wall (BMP 2)</p>	 <p align="center">H11:08 Rocky Mountain House Rebuilt of failed gabion wall</p>	 <p align="center">H11:08 Rocky Mountain House Poor installation of gabion wall resulting in failure</p>	
<p>Gabion-lined Channel (BMP 2)</p>	 <p align="center">H63:12 Supertest Hill Rebuilt of gabion-lined channel</p>	 <p align="center">H986:01 Failed gabion structure</p>	 <p align="center">Rock size too small resulting in large void</p>

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Slope Tracking (BMP 34)	 <p align="center">Track-walk up and down slope – strongly recommended</p>	 <p align="center">H43:10 Slope tracking along slope – not recommended</p>	
Silt Fence (BMP 1)	 <p align="center">H43:10 "Smile" shape</p>	 <p align="center">Formation of gullies below silt fence</p>	
Silt Fence (BMP 1)	 <p align="center">"J" hook</p>	 <p align="center">Silt needs to be removed</p>	 <p align="center">H43:12 Silt fence not intercepting flow – need repair</p>
Rolled Erosion Control Blankets (BMP 13)	 <p align="center">H16/H21 Interchange Installation of straw RECP in ditch</p>	 <p align="center">Improper blanket installation</p>	



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Synthetic Permeable Barriers (BMP 10)	 <p align="center">H43:10 Good installation of permeable barriers properly spaced</p>	 <p align="center">Improper installation of permeable barrier</p>	 <p align="center">H43:10 Vegetation has established - permeable barriers may be removed</p>
Synthetic Permeable Barriers (BMP 10)	 <p align="center">H43:10 Proper installation of permeable barriers with erosion control matting below</p>	 <p align="center">H43:12 Two Creeks Erosion of ditch below barriers and overtopping of water due to high silt accumulation</p>	 <p align="center">H43:12 Iosegun River Non-removal of silt resulting in switch over of water course</p>
Rock Ditch Creek (BMP 3)	 <p align="center">H43:12 Iosegun River Rock ditch check</p>	 <p align="center">H43:12 Iosegun River Collection of silt on uphill side of rock ditch check</p>	 <p align="center">H63:12 Poplar Creek Accumulation of silt on uphill side of rock ditch check</p>
Silt Fence (BMP 1)	 <p align="center">H43:10 "Smile" shape</p>	 <p align="center">H43:12 Silt fence works but need a little repair</p>	

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