

Module 2: What Practices does the BWSR Estimator address?

What are the basic elements of the BWSR Estimators?



What practices are appropriate for these Estimators?

Practice Name	USDA NRCS Practice Code	Applicable BWSR Estimator
Conservation Cover	327	Sheet and Rill
Conservation Crop Rotation	328	Sheet and Rill
Counter Buffer Strips	332	Sheet and Rill
Contour Farming	330	Sheet and Rill
Cover Crop	340	Sheet and Rill
Erosion Control	148M	Sheet and Rill, Filter Strip, Gully, Stream and Ditch
Filter Strip	393	Filter Strip
Grade Stabilization Structure	410	Gully
Grassed Waterway and Swales	412	Gully
Lined Waterway or Outlet	468	Gully
Riparian Forest Buffer	391	Stream and Ditch
Riparian Herbaceous Cover	390	Filter Strip, Stream and Ditch
Sediment Basin	350	Gully
Stream Channel Stabilization	584	Stream and Ditch
Streambank and Shoreland Protection	580	Stream and Ditch
Strip-cropping	585	Sheet and Rill
Terrace	600	Gully
Water and Sediment Control Basin	638	Sheet and Rill, Gully

Note: The Sheet and Rill and the Filter Strip Estimators also require RUSLE2 inputs.

What practices are not appropriate for these Estimators?



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- Urban Stormwater:
 - Urban Structural Practices: Rain gardens or stormwater bio infiltration basins, and
 - Use the MIDS or other appropriate estimator,
 - Phosphorus Treatment Stormwater BMPs: ex. iron sand filters.



What practices are not appropriate for these Estimators?

- Structural and engineered practices that primarily treat nitrogen,
 - Drainage water management practices,
 - Bioreactors,
 - Alternative tile intakes, and
 - Saturated buffers, etc.

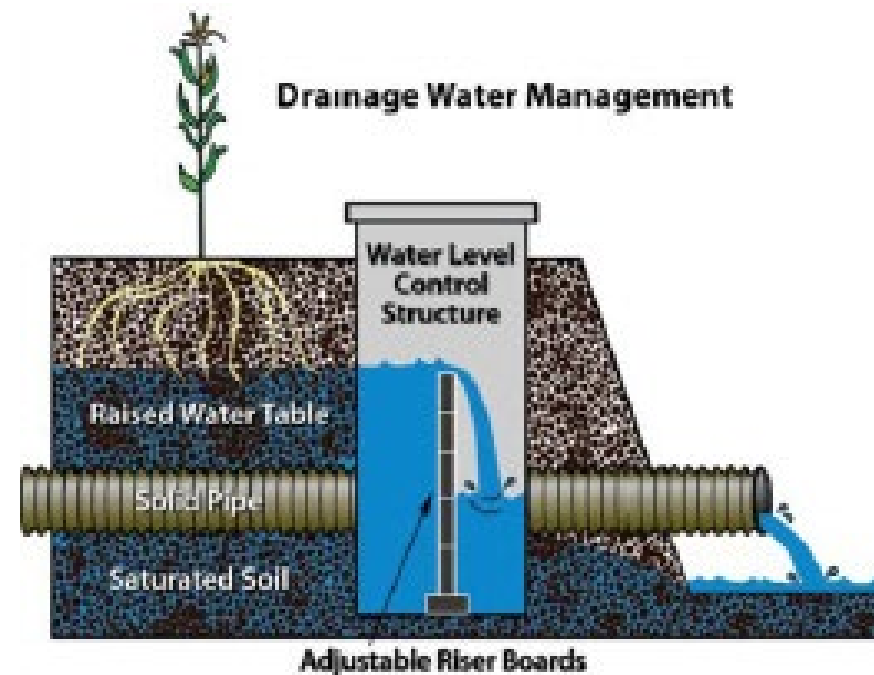


Photo Source: USDA-NRCS

What practices require more than one Estimator?

- There will be instances where a combination of the BWSR estimators and other tools will be needed,
- Examples include:
 - Any practice requiring the Sheet and Rill and Filter Strip calculators,
 - Streambank projects that are stabilizing banks and establishing buffers,
 - Sediment basins: WASCOBs.

WASCOBs require multiple steps

1) RUSLE2 and BWSR Sheet and Rill Estimator for any drainage area reductions

2) Gully Estimator for impacts from stabilization practices

3) Add outputs from 1 and 2 to get final pollution reduction

Where can I get more information?

- BWSR Estimator Manual (2010)
- Additional Videos on how to use BWSR Estimators
 - Detail provided on how to use each of the 4 estimators,
 - Demonstration of inputting data and how to use each estimator correctly.
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