

**Kawkawlin River Watershed
Buffer Strip Study**

Joseph Rivet, Bay County Drain Commissioner
Spicer Group, Inc.
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DNRE | Department of
NATURAL RESOURCES
and ENVIRONMENT

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ENGINEERS • SURVEYORS • PLANNERS

Scope and Outline

- Address Sedimentation Concerns
- Treat with Vegetative Filter Strips (VFS)
 - Research
 - Model Development
 - Implementation
- Quantify Impact of Sediment
 - Drain Cleanouts
 - Financial Costs

Vegetative Filter Strips



- Dense Vegetation Near Edge of Erodible Land
 - Agricultural Lands
 - Slows Runoff
 - Deposits on Shoreline
- Various Types of Strips
 - Plants
 - Width



Effectiveness of VFS



- Filter Effectiveness Depends on:
 - Soil Type
 - Slope
 - Contributing Area
 - Erodibility of Upland Areas
 - Type/Density of Vegetation
 - Local Climate

Suggested Buffer Width

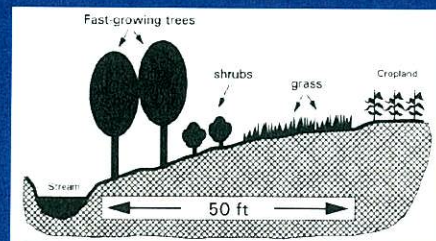


- USDA CREP
 - 50-100 feet
- NRCS Conservation Practice Standard
 - 20-30 feet
- Iowa State University
 - 50 feet for slope < 5%
- Ohio DNR
 - 50 feet minimum, 65-100 feet suggested
- USDA 1997 Agroforestry Notes
 - 50 feet

Composition of VFS



- Ohio DNR & USDA 1997
 - 50 feet
 - Trees Near Stream
 - Shrubs Middle
 - Grasses Near Field



A general, multi-purpose, riparian buffer design for cropland. – *USDA Agroforestry Notes (1997)*