Buffer$: Chesapeake Bay RFB CREP Calculator

Chesapeake RFB Networking Forum
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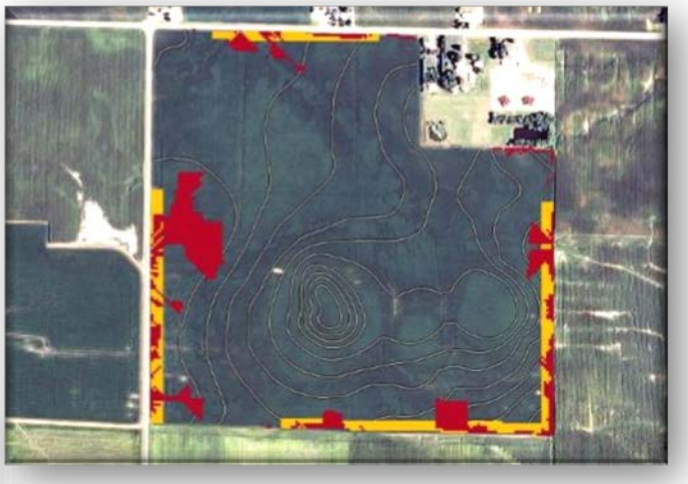
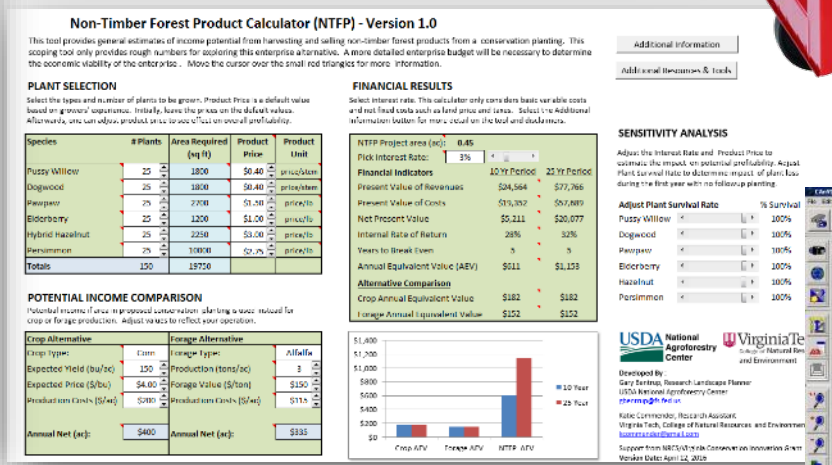
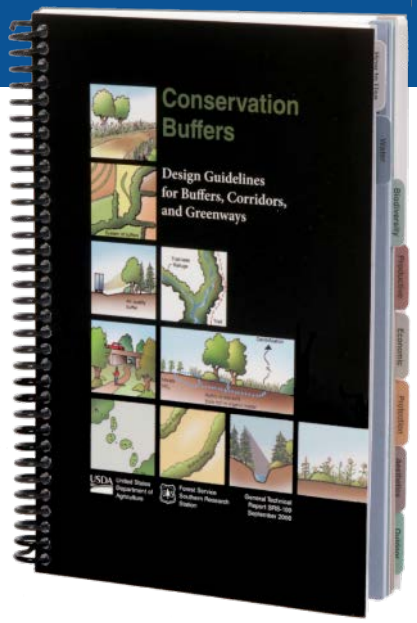
Tools & Resources





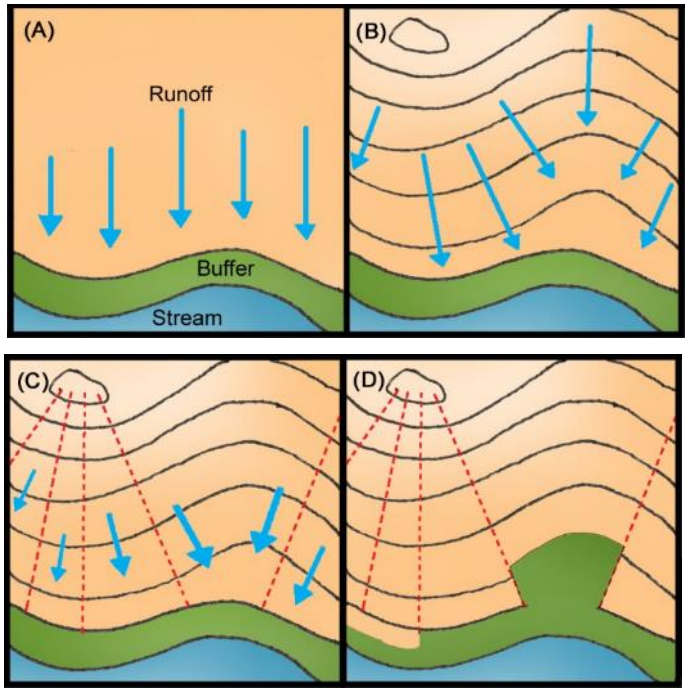
Conservation Buffer Guide



Over 1,400 research publications

Illustrated design guidelines

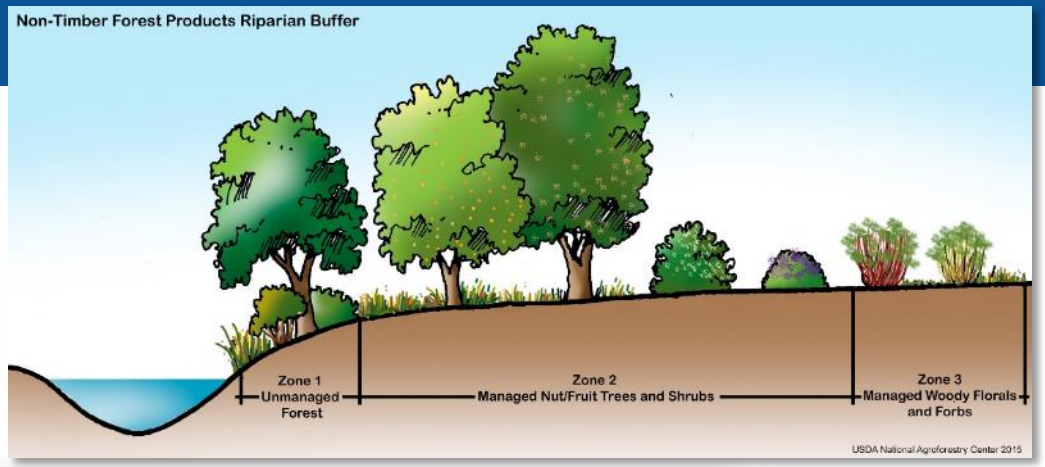
- Improve air & water quality
- Protect soil
- Enhance habitat
- Enhance economic productivity
- Provide recreational opportunities
- Beautify the landscape



AgBufferBuilder

United States Department of Agriculture
National Agroforestry Center

NTFP Calculator



Non-Timber Forest Product Calculator (NTFP) - Version 1.0

This tool provides general estimates of income potential from harvesting and selling non-timber forest products from a conservation planting. This scoping tool only provides rough numbers for exploring this enterprise alternative. A more detailed enterprise budget will be necessary to determine the economic viability of the enterprise . Move the cursor over the small red triangles for more information.

Additional Information

Additional Resources & Tools

PLANT SELECTION

Select the types and number of plants to be grown. Product Price is a default value based on growers' experience. Initially, leave the prices on the default values. Afterwards, one can adjust product price to see effect on overall profitability.

Species	# Plants	Area Required (sq ft)	Product Price	Product Unit
Pussy Willow	25	1800	$0.40	price/stem
Dogwood	25	1800	$0.40	price/stem
Pawpaw	25	2700	$1.50	price/lb
Elderberry	25	1200	$1.00	price/lb
Hybrid Hazelnut	25	2250	$3.00	price/lb
Persimmon	25	10000	$2.75	price/lb
Totals	150	19750		

FINANCIAL RESULTS

Select interest rate. This calculator only considers basic variable costs and not fixed costs such as land price and taxes. Select the Additional Information button for more detail on the tool and disclaimers.

NTFP Project area (ac):	0.45	
Pick Interest Rate:	3%	
Financial Indicators	10 Yr Period	25 Yr Period
Present Value of Revenues	$24,564	$77,766
Present Value of Costs	$19,352	$57,689
Net Present Value	$5,211	$20,077
Internal Rate of Return	28%	32%
Years to Break Even	5	5
Annual Equivalent Value (AEV)	$611	$1,153
Alternative Comparison		
Crop Annual Equivalent Value	$182	$182
Forage Annual Equivalent Value	$152	$152

SENSITIVITY ANALYSIS

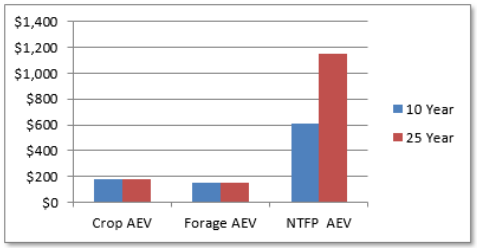
Adjust the Interest Rate and Product Price to estimate the impact on potential profitability. Adjust Plant Survival Rate to determine impact of plant loss during the first year with no followup planting.

Adjust Plant Survival Rate	% Survival
Pussy Willow	100%
Dogwood	100%
Pawpaw	100%
Elderberry	100%
Hazelnut	100%
Persimmon	100%

POTENTIAL INCOME COMPARISON

Potential income if area in proposed conservation planting is used instead for crop or forage production. Adjust values to reflect your operation.

Crop Alternative		Forage Alternative	
Crop Type:	Corn	Forage Type:	Alfalfa
Expected Yield (bu/ac)	150	Production (tons/ac)	3
Expected Price ($/bu)	$4.00	Forage Value ($/ton)	$150
Production Costs ($/ac)	$200	Production Costs ($/ac)	$115
Annual Net (ac):	$400	**Annual Net (ac):**	$335



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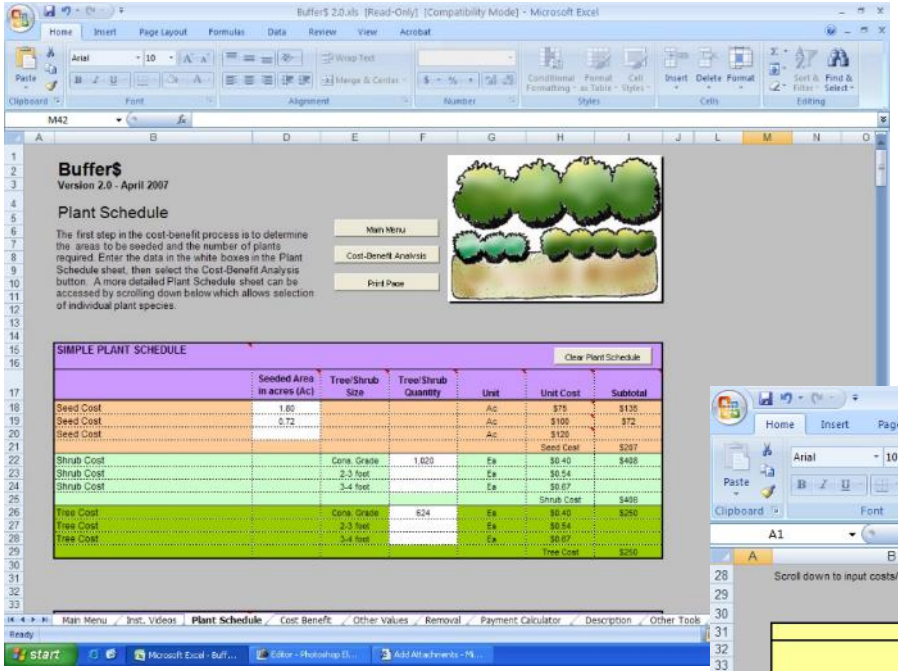
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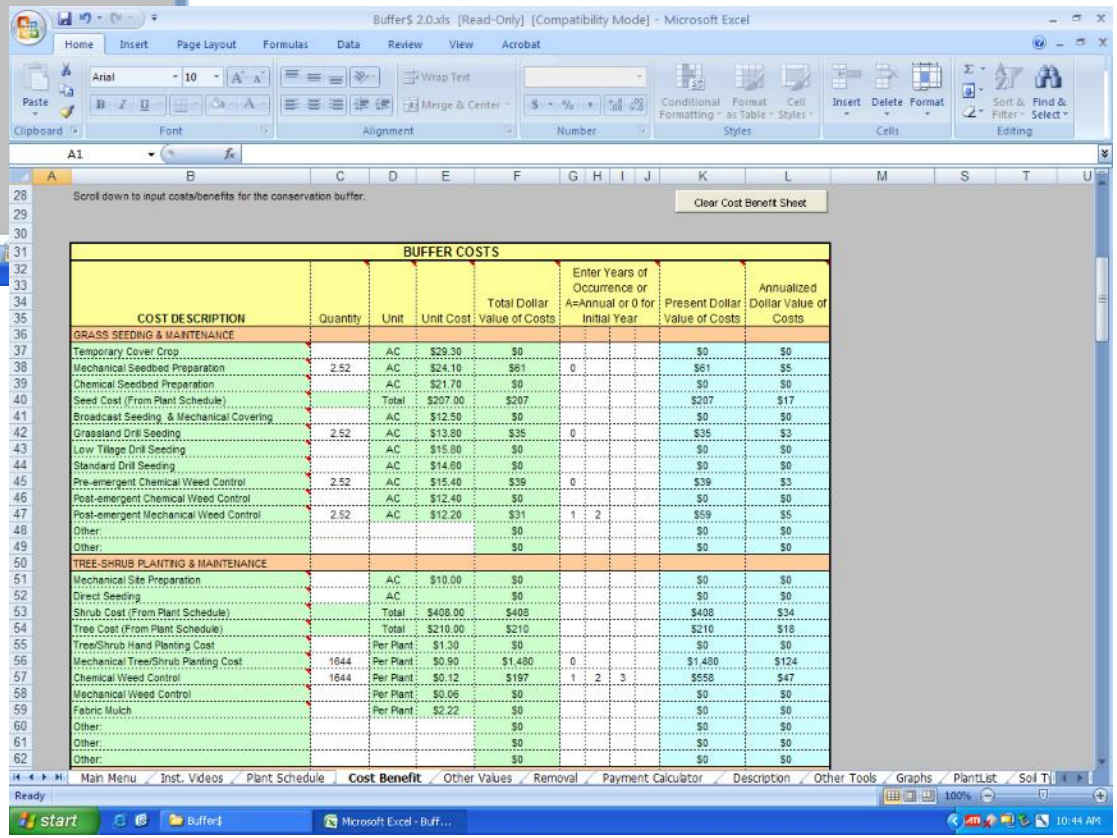
Version 2.0 - April 2007
Plant Schedule
The first step in the cost-benefit process is to determine the areas to be seeded and the number of plants required. Enter the data in the white boxes in the Plant Schedule sheet, then select the Cost-Benefit Analysis button. A more detailed Plant Schedule sheet can be accessed by scrolling down below which allows selection of individual plant species.
Main Menu
Cost-Benefit Analysis
Print Page
SIMPLE PLANT SCHEDULE
Clear Plant Schedule
Seeded Area in acres (Ac)
Tree/Shrub Size
Tree/Shrub Quantity
Unit
Unit Cost
Subtotal
Seed Cost 1.80 Ac $75 $135
Seed Cost 0.72 Ac $100 $72
Seed Cost Ac $120
Seed Cost $207
Shrub Cost Cons. Grade 1,020 Ea $0.40 $408
Shrub Cost 2-3 feet Ea $0.54
Shrub Cost 3-4 feet Ea $0.67
Shrub Cost $408
Tree Cost Cons. Grade 624 Ea $0.40 $250
Tree Cost 2-3 feet Ea $0.54
Tree Cost 3-4 feet Ea $0.67
Tree Cost $250
Main Menu
Inst. Videos
Plant Schedule
Cost Benefit
Other Values
Removal
Payment Calculator
Description
Other Tools


Buffer$ 2.0.xls [Read-Only] [Compatibility Mode] - Microsoft Excel
Scroll down to input costs/benefits for the conservation buffer.
Clear Cost Benefit Sheet
BUFFER COSTS
COST DESCRIPTION
Quantity
Unit
Unit Cost
Total Dollar Value of Costs
Enter Years of Occurrence or A=Annual or 0 for Initial Year
Present Dollar Value of Costs
Annualized Dollar Value of Costs
GRASS SEEDING & MAINTENANCE
Temporary Cover Crop AC $29.30 $0 $0 $0
Mechanical Seedbed Preparation 2.52 AC $24.10 $61 0 $61 $5
Chemical Seedbed Preparation AC $21.70 $0 $0 $0
Seed Cost (From Plant Schedule) Total $207.00 $207 $207 $17
Broadcast Seeding & Mechanical Covering AC $12.50 $0 $0 $0
Grassland Drill Seeding 2.52 AC $13.80 $35 0 $35 $3
Low Tillage Drill Seeding AC $15.80 $0 $0 $0
Standard Drill Seeding AC $14.60 $0 $0 $0
Pre-emergent Chemical Weed Control 2.52 AC $15.40 $39 0 $39 $3
Post-emergent Chemical Weed Control AC $12.40 $0 $0 $0
Post-emergent Mechanical Weed Control 2.52 AC $12.20 $31 1 2 $59 $5
Other: $0 $0 $0
Other: $0 $0 $0
TREE-SHRUB PLANTING & MAINTENANCE
Mechanical Site Preparation AC $10.00 $0 $0 $0
Direct Seeding AC $0 $0 $0
Shrub Cost (From Plant Schedule) Total $408.00 $408 $408 $34
Tree Cost (From Plant Schedule) Total $210.00 $210 $210 $18
Tree/Shrub Hand Planting Cost Per Plant $1.30 $0 $0 $0
Mechanical Tree/Shrub Planting Cost 1644 Per Plant $0.90 $1,480 0 $1,480 $124
Chemical Weed Control 1644 Per Plant $0.12 $197 1 2 3 $558 $47
Mechanical Weed Control Per Plant $0.06 $0 $0 $0
Fabric Mulch Per Plant $2.22 $0 $0 $0
Other: $0 $0 $0
Other: $0 $0 $0
Other: $0 $0 $0
Main Menu
Inst. Videos
Plant Schedule
Cost Benefit
Other Values
Removal
Payment Calculator
Description
Other Tools
Graphs
PlantList
Ready

Buffer$

Chesapeake Bay Riparian Buffer WV CREP Payment Calculator - V. 1.0

This tool provides estimates of payments that landowners could receive from the West Virginia CREP program if a riparian buffer project is installed in the Potomac River Watershed using a 14 to 15 year contract.

Conditions for using this tool include:

1. The project is a CP 22 Riparian Buffer.

2. The project is located with the Potomac River Watershed in West Virginia. This includes the following counties:

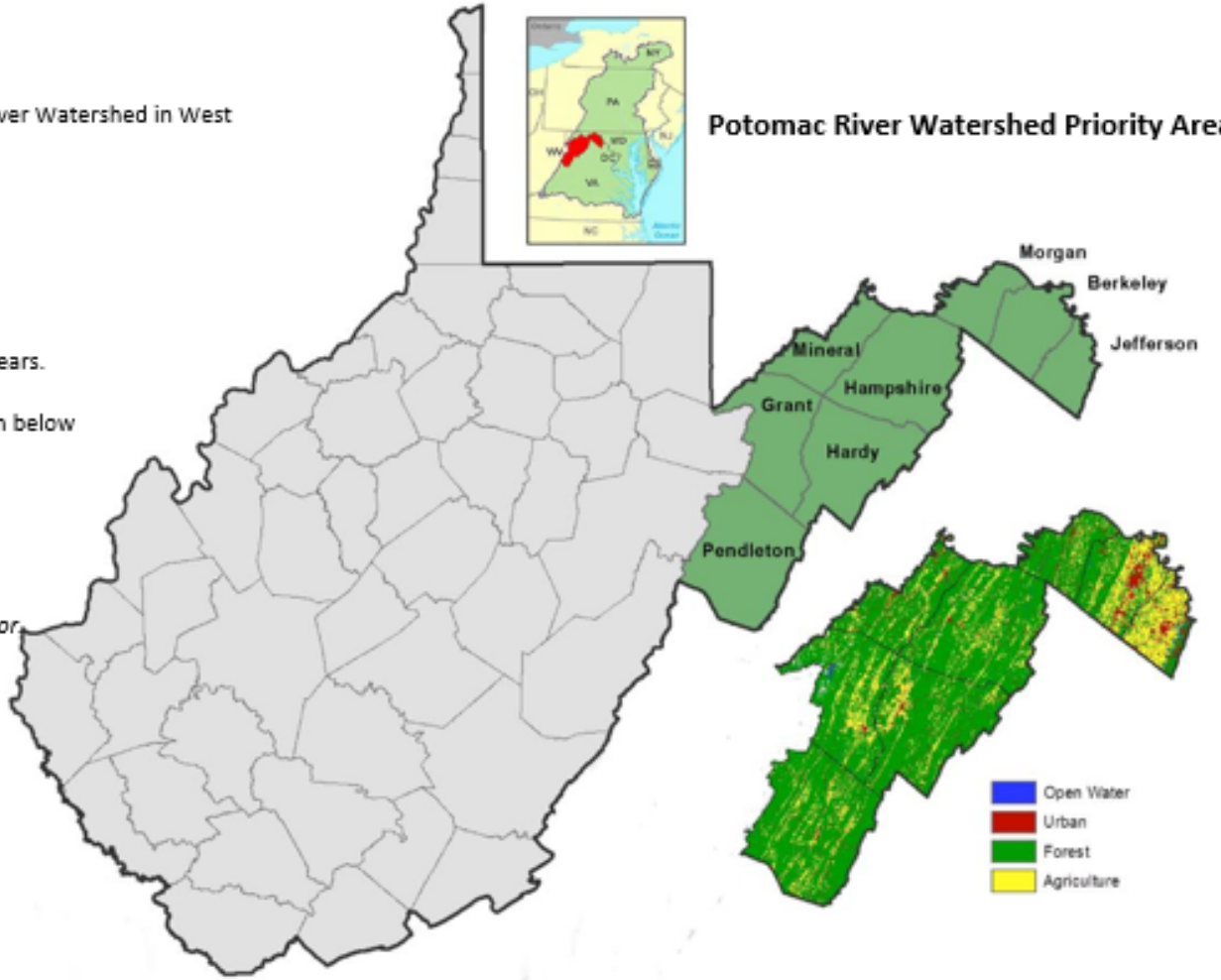
Berkeley	Hardy
Grant	Mineral
Jefferson	Morgan
Hampshire	Pendleton

3. The contract period is between 14 to 15 years.

If these conditions fit, then click on the button below to begin using the calculator.

Payment Calculator

If these conditions do not fit, then use the:
Original West Virginia CREP Payment Calculator



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