

State Cost-Share Programs & Technical Assistance

Also known as "PFC"; old statue was called CPP or Conservation Practices Program.

- Objectives of the Program
- ▶ Reduce Sheet and Rill Erosion Exceeding "T" (tolerable soil loss level)
- Ephemeral / Gully Erosion
- Minimize the transport of nutrients
- Address Water Quality issues- Sediment, Nutrients and Non-Point Source Pollutants



PFC Program

### Highlights

- All 97 SWCDs are eligible to receive Partners for Conservation Program monies.
- Cost-share or incentive payments are for erosion control practices which address sheet + rill, ephemeral, and or gully erosion.
- Agreements are between the applicants and the local SWCD.



PFC Program

One out of every four cropland fields are experiencing either ephemeral or gully erosion.

These agricultural lands are the target of the Partners For Conservation Program.





#### SWCD PFC Practice Component List FY2023

PFC

			FFC
ractice	Component		FY23
327	Conservation Cover (Pollinator) Scenario #22 Monarch Species Mix	Unit	
327	Conservation Cover (Pollinator) Scenario #55 Monarch Species Mix	AC	\$980.47
329		AC	\$239.41
340	No-till / Strip-till	AC	\$40.00
340	Cover Crops - Scenario #1 Basic	AC	\$53.33
342	Cover Crops - Scenario #20 Winter kill species	AC	\$53.33
342	Critical Area Planting- Scenario #1	AC	\$309.06
THE RESERVE THE PARTY NAMED IN	Critical Area Planting -Scenario #4-Moderate Grading	AC	\$835.46
342	Critical Area Planting -Scenario #51-Gully repair with seeding	AC	\$2,987.9
345	Mulch-till- Residue + Tillage Management, Reduce Till	AC	N/A
351	Well Decommissioning Scenario #1 (hand dug)	FT	\$64.37
351	Well Decommissioning (drilled)	FT	\$7.26
356	Dike	CU/YD	\$4.75
362	Diversions-Scenario #1- <2 CY/FT	FT	\$3.77
362	Diversions-Scenario #2- 2-2.9 CY/FT	FT	\$8.11
362	Diversions-Scenario #3- >=3 CY/FT	FT	\$11.01
393	Filter Strip-Scenario #5 Native Species (warm season grasses)	AC	\$273.2
393	Filter Strip-Scenario #6 Introduced Species (cool season grasses)	AC	\$226.
410	Grade Stabilization Structure- Scenario #6 Pipe Drop, Smooth steel or CMP	SQ/FT	\$18.7
410	Grade Stabilization Structure- Scenario #7 Full Flow Straight Pipe	Dia/In/FT	\$6.
410	Grade Stabilization Structure- Scenario #8 Open Flow Drop Spillway (metal or reinforced concrete)	SQ/FT	\$23!
410	Grade Stabilization Structure- Scenario #9 Rock Rap Chute	CU/YD	\$10
410	Grade Stabilization Structure- Scenario #13 Open Flow Drop Spillway-High overfall or sheet pile	SQ/FT	\$2!
410	Grade Stabilization Structure- Scenario #15 Concrete Drop Structure	CU/YD	\$1.
410	Grade Stabilization Structure- Scenario #16 Concrete Block Chute	SQ/FT	\$
410	Grade Stabilization Structure- Scenario #17 Side Inlet	Feet	\$
412	Grassed Waterway -Scenario #1 <35 foot top width	AC	\$3
412	Grassed Waterway -Scenario #2 35-55 foot top width	AC	\$
412	Grassed Waterway -Scenario #3 >55 foot top width	AC	5
412	Grassed Waterway w/checks Scenario #4 <35 foot top width	AC	7
412	Grassed Waterway w/checks-Scenario #5 35-55 foot top width	AC	_
412	Grassed Waterway w/checks -Scenario #6 >55 foot top width	AC	-
412	Grassed Waterway -Scenario #7 <35 foot top width, Crop season	AC	
412	construction  Grassed Waterway w/checks Scenario #8 <35 foot top width, crop season construction	AC	

# Partners For Conservation Program PFC Program

- Eligible Projects + NRCS Practice Scenarios
- ► IDOA-BLWR prepares a list (found in the PFC Guidelines) of conservation practices that will emphasize soil erosion control and water quality protection. The costs are derived from the NRCS scenarios and adjusted annually.
- NRCS Natural Resources Conservation Service Technical Guide is used to establish specifications for all projects, otherwise known as Practice Standards. PFC projects must meet NRCS specs.



### PFC Program







- **▶** Eligible Practices − Traditional
- No-Till / Strip-Till
- Cover Crops
- Critical Area Planting
- Grassed Waterways
- Diversions
- ► Water + Sediment Control Basins
- Terraces
- Grade Stabilization Structures
- Sealing Abandoned Water Wells
- Rain Gardens



**PFC Program** 

- RCPP / Climate Smart Practices
- > 340 Cover Crops
- ▶ 327 Pollinators
- ▶ 329 No-Till / Strip-Till
- ▶ 342 Critical Area







Climate Smart / RCPP Practices

Cover Crops

**Pollinators** 

No-Till / Strip-Till

Critical Area Seeding

- When a claim for payment is made, the following documents should be submitted—each as a separate attachment:
- ► (FIPS) (Application #)
- XXX XXXXX Last name PFC 1-1b
- XXX XXXXX Last name STAR Forms
- XXX XXXXX Last name Job Sheet
- XXX XXXXX Last name CCC-902
- XXX XXXXX Last name Subsidiary Report
- XXX XXXXX Last name Farm Data Report
- XXX XXXXX Last name CPA-52

## STATE LIST OF ELIGIBLE CONSERVATION PRACTICES AND MAXIMUM COST-SHARE RATES (AND THE NUMBER OF YEARS PRACTICES MUST BE MAINTAINED)

PRACT	ICE PRACTICE	COST	MAINTENANCE
CODE	<u> </u>	SHARE RATES	YEARS
327	Conservation Cover (Pollinators) (See Notes)	75 % (10 Acres max)	5
329	No-till or Strip-till Planting System (acres)	\$30/acre (up to 3 years)	1
	(See Notes)	maximum \$3,200/year	
340	Cover Crop (acres) (See Notes)	75% up to \$40/acre (up to 3 year maximum \$3,200/year	rs) 1-3
342	Critical Area Planting (Temporary Cover, acres) (See Notes)	75%	N/A
342	Critical Area Planting (acres)	75 %	10
345	Mulch-till (See notes)	N/A	
351 351	Well Decommissioning (Hand Dug) Well Decommissioning (Drilled) (See Notes)	75% not to exceed \$400 75% not to exceed \$750	N/A N/A
362	Diversion (feet)	75 %	10
393	Filter Strips (acres)(moved to appendix E)	75%	10
410	Grade Stabilization Structure (#)	75 %	15
412	Grassed Waterway (acres)	75 %	10
512	Pasture and Hayland Planting (acres) (See Notes)	75% not to exceed \$275.15/ac co	ost-share 10
570	Rain Garden (See notes)	75% not to exceed \$1.13; \$1.74, for small scale	/sq ft 3
600	Terrace, Narrow or Broad Base (feet)	75 %	10
606	Subsurface Drain (feet) (See Notes)	75 %	20
620	Underground Outlet (feet) (See Notes)	75 %	20
638	Water and Sediment Control Basin (# & feet) (See Notes)	75 %	1(

#### Partners For Conservation Fund Program

#### **PFC Program**

- Cost-Sharing Rates + Years
- Financial incentive for the program shall not exceed 75% of the actual or the average cost, whichever is less.
- Average Cost- The PFC Program uses the NRCS Practice Scenarios for average cost.
- Actual Cost- The amount billed to the participant to install project.
- There are caps or maximum set for a few practices such as Cover Crops (\$3200 / 80 acres)
- Maintenance Years of Practice determine Contract (ESC-1a) length.



#### USDA - Natural Resources Conservation Service

Practice: 412 - Grassed Waterway

Scenario #4 - <35 foot top width with checks

#### Scenario Description:

Typical practice is 1 acre, 30' topwidth, 8:1 side slopes, 1.5' depth, half excavation. A grass waterway that is a shaped or graded channel and is established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet. Stone checks are installed every 100 feet along the length of the waterway perpendicular to waterflow and are 2/3 the waterway top width to reduce maintenance and provide temporary protection until vegetation is established. This practice addresses Concentrated Flow Erosion (Classic Gully & Ephemeral Erosion) and Excessive Sediment in surface waters. Waterway area measured from top of bank to top of bank. Seeding area is 20% greater than waterway area to account for disturbed areas. Costs include excavation and associated work to construct the overall shape and grade of the waterway.

Illinois

#### Before Situation:

The field has a small gulley which is cutting deeper into the field as time goes on, so it needs to be stopped or controlled. Excessive sedimentation and soil erosion as a result from ephemeral or classic gully erosion. Gully has formed in field as a result of excessive runoff and poor cropping techniques. Grassed waterway is also commonly installed to covey runoff from concentrated flows, terrarces, diversions, or water control structures or similar practices to a suitable, stable outlet.

Installed grassed waterway is 1 acre, 30' topwidth, 8:1 side slopes, 1.5' depth. Checks are installed every 100 feet along the length of the waterway. The practice is installed using a dozer. Stone checks are installed with small backhoe and labor. Waterway area is fertilized and seeded for establishment of waterway vegetation. If erosion control blankets or mulching for seedbed establishment/protection are needed, use conservation practice Mulching (484). Drainage tile, if needed, will be installed accoring to Subsurface Drain (606). Outlets, if needed will be installed using Structure for Water Control (587). If inlet Structures are needed with the drainage tile, then those will be installed using Underground Outlet (620).

Feature Measure: Acre of Waterway

Scenario Unit:: Acre

Scenario Typical Size: 1.0

\$4,390.43 Scenario Total Cost: Scenario Cost/Unit: \$4,390.43

Agriculture

Cost Details: Component Name	ID	Description	Unit	Cost	QTY	Total
	10	Description	Onit	Cost	QIT	Total
Equipment Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.99	1	\$10.99
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.66	1	\$6.66
Lime application	953	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$10.39	1	\$10.39
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$26.37	1	\$26.37
Cultipacking	1100	Includes equipment, power unit and labor costs.	Acre	\$7.97	1	\$7.97
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.70	369.5	\$628.15
Excavation, common earth, large equipment, 150 ft	1223	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 150 feet. Includes equipment and labor.	Cubic Yard	\$4.02	369.5	\$1,485.39
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$401.13	0.5	\$200.57
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$400.93	0.5	\$200.47
abor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$44.46	1	\$44.46
Vlaterials						
Rock Riprap, Placed with geotextile	44	Rock Riprap, placed with geotextile, includes materials, equipment and labor to transport and place	Cubic Yard	\$71.91	14	\$1,006.74
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.37	90	\$33.30
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.41	90	\$36.90
Illinois	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.31	90	\$27.90

### Partners For Conservation Fund Program

### PFC Program

- **Average Costs**
- Only used for projects with established cost-share percentage, not for flat rate practices.
- It is an equitable and cost-efficient means of ensuring public dollars are expended consistently.
- IDOA-BLWR uses the USDA-NRCS Practice Scenarios for average costs. For grassed waterways, currently there are 12 scenarios from which to choose as well as 8 grade stabilization structure scenarios. PLEASE READ THE GUIDELINES; THE BLWR WELCOMES SUGGESTIONS.

# Partners For Conservation Fund Program PFC Program



- The PFC-1 form is the application and is also used to calculate the payment to the landowner or applicant.
- Form PFC-1A is the contract between SWCD and Cooperator. Project amendments can be made using the PFC-1A.
- ► Information gathered from the field visit, as well as the PFC-1 +1b, should be used for ranking and the prioritization of applications on the PFC-3.



# Partners For Conservation Fund Program PFC Program



- **▶** Items for Priority Considerations
- Total Cost
- Cost-share Dollars
- ► Total Cropland brought below T
- Dollar Cost per acre benefited
- Total tons of soil saved
- Dollar cost per ton
- Nutrient saving benefits or reduction of
- Funding should be used on projects providing the most benefit in terms of soil saved or greatest protection offered per dollar expended.



**PFC Program** 

## **District Review + Payment**

Upon project completion, practice check out.

Gathering of bills, complete PFC-1, submit additional forms if project is Climate Smart / RCPP

**Board Approval** 

Payment to Producers after IDOA -BLWR authorization of restricted fund to be spent by the SWCD.





# Partners For Conservation Fund Program PFC Program

### **Special Projects**

- If project uses a practice not on the approved list, unique to a limited area, or noncropland acres experiencing erosion, the Special Project component is available.
- SWCD submits application to IDOA-BLWR before practice installation.
- ► IDOA-BLWR will review on a case-by-case basis.

### PFC Program



- S.T.A.R. Saving Tomorrow's Agricultural Resources
- Starting in FY20, all PFC projects are required to complete a STAR form.
- Ask the producer to complete and sign the STAR form once the application is approved. This will ensure a recent STAR form is being utilized.
- Saving Tomorrow's Agriculture Resources (S.T.A.R.) is a FREE nationwide tool to assist farm operators and landowners in evaluating their nutrient and soil loss management practices on individual fields



Streambank Stabilization & Restoration Program

Low-cost Streambank Stabilization Techniques

Stone Toe Protection

Stream Barbs

Bendway Weirs

Rock Riffles

Vegetative

> 75% cost-share with a per foot max

► SWCDs apply to the IDOA-BLWR.







## Fall Covers for Spring Saving Program

- Discount Program offers a crop insurance discount.
- Designed to promote additional acres for cover crops that are <u>not covered</u> by other state or federal program.
- ▶ \$5 per acres discount, no limits
- Requires a FSA 578
- December 15 sign up; can complete application ahead of time and save until the date to submit. The program is first come, first serve with funding for 140,000 acres.
- This program is not under PFC; has its own line of funding.

Now that you are familiar with the programs available to producers, let's take a closer look at the PFC 1 & 1B....

## PFC 1

Application #

FIPS Code + 5 digit number

Unique to every PFC application; numbered consecutively

On the PFC 1, an apostrophe must be inserted prior to the 5 digit application number if it begins with a 0.

Project ID

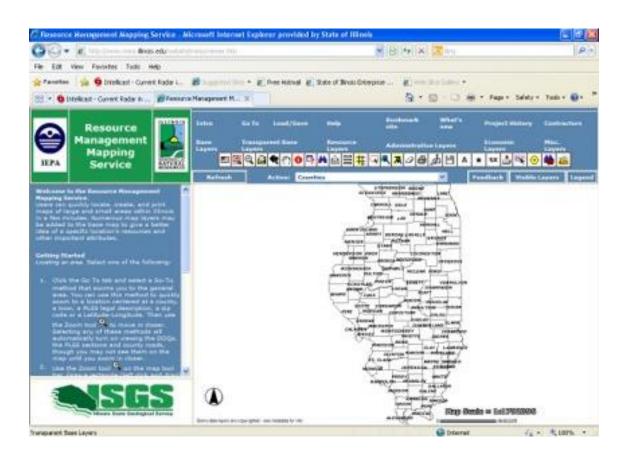
Assigned to each reportable practice

Fiscal Year

Be sure to include the fiscal year of the funds being used

			PFC-1			Fiscal Ye	ar	0	Approval Yes		No	
	12		N 1000 Person			PFC				Approved:		
	Р	artners F	or Conservation	on		SPECIAL				/End Date:		
	A	pplication	n/Payment For	rm					7.40.0	ment Date:		
			RSION 23.0			INTEREST			STAR Form			
NCD:		0	Application N	lo.	0			Applic	ation Date:			
		4001104	NIT -		Check box of person	on to be paid			LANDOWN	FR o		
		APPLICA	NT 🗈			Name:			LANDOVIN	LIK D		
ame:		-				Address:						
	tate, Zip:	-				City, State,	7ip					
hone		-				Phone:						
ione	,					i iioiio.						
roject	GPS Coord.	(dec./ deg.)	Farm, Tract, Fiel	d ID	12-d	igit HUC		1/4	Sec.	TWP	Range	P.M.
ID	Latitude /	Longitude	ex. F123, T4, FI	D5	12.0	igit 1100		Sec.		N or S	E or W	
$\neg$												
		Д	pplication/Section	on						Payment Se		
(A)	(B)		(C)		(D)	(E)	(F		(G)	(H)		(1)
roject	Practice	P	ractice Components		Estimated	Average		nated	Installed	Total	Actu	al Cost
ID	ID Code				Units	Cost/Unit	Cost I	DXE=F	Units	Avg. Cost ExG=H		
										EXO-II		
=		Maintain so	il loss below T.			0.00		0.00				
						#N/A		WA.		#N/A		
						#N/A		WA		#N/A		
						#N/A		WA		#N/A		
						#N/A		WA				
		-		_	0	#N/A #N/A		WA WA		#N/A #N/A		
_		-		-	0	#N/A		WA.		#N/A		
_		-			0			WA		#N/A		
_					0	#N/A	#1	WA		#N/A		
					0	#N/A	#1	W/A		#N/A		
otals							#1	WA		#N/A	\$	
oject	ID 01 \$	-	75%		\$ -				\$ -	75%	\$	-
	Estir	mated Cost X	Cost-Share %	=	Estimated Payme	ent	Average	e Cost or	Actual Cost X	Cost-Share%	Payment	Amount
roject	ID 02 \$	-	75%		\$ -		i		\$ -	<u>75%</u>	\$	-
	Estir	mated Cost X	Cost-Share %	=	Estimated Payme	ent	Average	e Cost or		Cost-Share %	Payment	Amount
roject	ID 03 \$	-	75%		\$ -				\$ -	<u>75%</u>	\$	-
	Estir	mated Cost X	Cost-Share %	-	Estimated Payme	ent	Average	e Cost or	Actual Cost X	Cost-Share %	Payment	Amount
	T	otal Estima	ted Payment		\$	-	Т	otal P	ayment	\$		-
nereb	certify that the	materials, labor	and equipment listed	above wer	e used in installin	g the above-re	ference	d conse	rvation projects	and no items or	costs listed	above
e acti	en included on a ual cost not to ex	another claim to ceed the avera	r payment under this a ge cost on a per projec	t basis, an	of as a claim und	ed to no more	than the	stated	percentage of th	e lesser amount		aseu up
	Check Here if N											
							D-41-1		lation Coatie		_	ate
heck	Payable to (Pleas	se Print)	Cost-Share Pay	/ment	Landowner C		Particip	pants Co	ompletion Certifi	cation	L	alc
			\$		\$0.0				0.1712			
	D CERTIFICA	ATION				TECHNIC						
	ectors of the	0		-A -U (A-	County SWCD,					I agreed upon po to technical spec		
	that the receipts ary and authorize		rred are correct and the	at all items	sisted were	pior	and and	qu	,			,
50055	ary and authorize	ou.										
SIAIC	D. Deard Ohe	irman/Decid	nee	(D	late)	Technicia	n's Sic	natur	a/Title		(Date)	

# PFC 1



## Latitude / Longitude HUC 12 Watershed

▶http://www.rmms.lllinois.edu

Click "Go to" in top header

Select "County"

Select County from drop down tab

Click "OK"

Click "Vector Layers" in top header

Select "Resource Layer"

Select "Watersheds"

Select "12 Digit HUC"

Zoom to location

Record 12 digit HUC

Record Latitude / Longitude

#### **Bill of Materials**

Terrace - Broadbase	600'
Riser 6"	4
Tile 6"	120'
Tile 8"	240'
Tile 10"	400'

#### Grassed waterway

40' x 1.2' x 900'	0.8 ac
4" tile	900'
Erosion Control Blanket	0.6 ac
Critical area seeding	0.8 ac

## PFC 1

- Populate the PFC 1 based on the project designs.
- This project includes both a terrace and a grassed waterway.
- Refer to the corresponding scenarios to determine the practice components.

## PFC 1

- ►IDs 1-3
- All components for specific practice included with the ID number.
- Estimated total cost is greater than \$10,000, so requires preapproval. Submit construction plans, PFC 1-1B, and Wetland Site Screening Form to your Regional Representative.

			PFC-1		Fiscal Yea	ar 202	2 Approval Yes		No	
				- 1	PFC	x		Approved:		
	Pa	artners F	For Conservation		SPECIAL			/End Date:		
	Δ,	onlicatio	n/Payment Form				Amend	dment Date:		
	A		ERSION 23.0		INTEREST		STAR Form	1		
WCD: V	Vhite		Application No.	193	00123	App	lication Date:			
lame:		APPLICA	ANT D	Check box of pers	on to be paid Name: Address: City,State, Phone:	Zip:	LANDOWN Suzy Land			
										_
			Farm, Tract, Field ID			1/-		TWP	Range	
Project	GPS Coord. (c		ex. F123, T4, FID5	12-0	ligit HUC	Se	Sec	N or S	E or W	P.M.
1	38.18386 / -8		F123 T4 FID 1	5120	1150507	NV	v 17	45	9E	3
2	38.20436 / -8		F123 T4 FID 2		1150507	N	v 17	4S	9E	3
3	38.18235 / -8		F123 T4 FID 1.2		1150507	NN NN		48	9E	3
9	30.102007		Application/Section	012				Payment Se	ction	
(A)	(B)	T	(C)	(D)	(E)	(F)	(G)	(H)		(1)
Project	Practice Code		Practice Components	Estimated Units	Average Cost/Unit	Estimated Cost DxE=		Total Avg. Cost ExG=H	Actu	al Cost
		Maintain :	soil loss below T.	40	0.00		00			
1	600	Terrace, S	Scenario #1-Broadbase, with Te	600		2,532		-		
1	620		und Outlet 6 in Diameter Pipe	120		534				
1	620		und Outlet 8 in Diameter Pipe	240		1,756				
1	620		und Outlet 10 in Diameter Pipe	400		4,244 2,792				
2	412		Waterway -Scenario #2 35-55 fo ace Drain <=5 inch CPP	900		2,752		-		_
2	606 484		(Erosion Control Blanket)	0.6		6,145			_	_
3	340		ops - Scenario #1 Basic	40		2,133				
-		,			#N/A	#N/A		#N/A		
					#N/A	#N/A		#N/A		
Totals						#N/A		#N/A	\$	
Project I		9,066.80	The state of the s	\$ 6,800.10			\$ -	75%	\$	2500011111
	Estim	ated Cost	X Cost-Share %	Estimated Paym	ent	Average Cost	or Actual Cost 3		Payment	Amoun
Project I		11,196.20	THE RESERVE OF THE PERSON NAMED AND ADDRESS OF THE PERSON NAME	\$ 8,397.21			\$ -	75%	\$	
			x Cost-Share % =	Estimated Paym		Average Cos	or Actual Cost 3		Payment	Amoun
Project I		2,133.20	0 75% X Cost-Share % =	\$ 1,599.90 Estimated Paym		A	\$ -	75% Cort-Shara %	\$ Payment	Amoun
_	Estin	lated Cost	A cost chairs in	Estimated Paym	CIL	Arelage Cos				
			ated Payment		16,797.21		Payment	\$		-
have be the actu Check F	en included on a	nother claim seed the aver aximum Pay e Print)	or and equipment listed above we for payment under this agreemer age cost on a per project basis, a ment Cost-Share Payment \$	nt or as a claim un	der any other of the ded to no more contribution	than the state	gram. I understa	nd the payment i he lesser amoun	amount is t	d above based up
	ectors of the	White		County SWCD	I hereby cert	ify that the c	aimant did apply	all agreed upon p	rojects and	they ar
certify t		and costs inc	curred are correct and that all iten		installed pro	perty and ade	quately according	to technical spe	cifications	required

			PFC-1		Fiscal	/ear	2022	Approval Ye	5	No	0
	3)	Partners	For Conservation		PFC		x		te Approved		_
					SPECIAL			Sta	art/End Date		
			on/Payment Form					Ame	ndment Date	e:	
CWCD	White	0.	VERSION 23.0		INTEREST			STAR For	m		
SVVCD	White		Application No.	193	00123		Appli	cation Date			
Name Addre City, S	ss: State, Zip:	APPLIC	CANT D	Check box of per	Name: Address: City,State			LANDOW Suzy Land			
					-						
Project	GPS Coord.		Farm, Tract, Field ID	Γ			1/4		TWP	-	_
ID	Latitude / I	.ongitude	ex. F123, T4, FID5	124	digit HUC		Sec.	Sec.	N or S	Range E or W	P.M.
1	38.18386 /	88.24208	F123 T4 FID 1	5120	01150507		NW	17	48	9E	3
2	38.20436 /	88.27587	F123 T4 FID 2	5120	01150507		NW	17	48	-	
3	38.18235 / -	88.24398	F123 T4 FID 1,2	5120	01150507		NW	17		9E	3
			Application/Section		71100007		1650	1/	48	9E	3
(A)	(B)		(C)	(D)	(E)	I (F		(G)	Payment S	1	
Project ID	Practice Code		Practice Components	Estimated Units	Average Cost/Unit	Estim Cost D	nated	Installed Units	(H) Total Avg. Cost ExG≈H		(I) al Cost
1	***		oil loss below T.	40	0.00		0.00	40			
1	600		cenario #1-Broadbase, with T	600	4.22	2,	532.00	600	2,532.00		3,000.00
1	620		and Outlet 6 in Diameter Pipe a and Outlet 8 in Diameter Pipe	120	4.45		534.00	120	534.00		650.00
1	620	Undergrou	and Outlet 8 in Diameter Pipe and Outlet 10 in Diameter Pipe	240 400	7.32		756.80	240	1,756.80		2,000.00
2	412		laterway -Scenario #2 35-55 fo	0.8	3,490.34	4,244.00		400	4,244.00		5,000.00
2	606		ce Drain <=5 inch CPP	900	2.51			900	2,792.27		3,000.00
2	484	Mulching (	Erosion Control Blanket)	0.6	10,241.68		145.01	0.6	2,259.00 6,145.01		2,300.00 6,800.00
3	340	Cover Crop	os - Scenario #1 Basic	40	53.33		133.20	40	2,133,20		2,200,00
-		,		0	#N/A	#N/	A		#N/A		2,200.00
otals		1		0	#N/A	#N/.	A		#N/A		
Project IE	01 \$	0.000.00				#N/	A		#N/A	\$ :	24,950.00
reject it		9,066.80	0.101	\$ 6,800.10		\$ 9,0	66.80	Security Const	75%	\$	6,800.10
roject ID		11,196.28		Estimated Paymer	nt	Average C	Cost or A	ctual Cost X	Cost-Share%	Payment A	Amount
rojuut in				\$ 8,397.21		\$ 11,15			75%	\$	8,397.21
roject ID		2,133.20		Estimated Paymen \$ 1,599.90	nt				Cost-Share %	Payment A	Amount
			C+ Ob W			\$ 2,13			75%	\$	1,599.90
		The second second		Estimated Paymen	st .	Average C	Cost or A	ctual Cost X	Cost-Share %	Payment A	mount
hereby c	ertify that the ma	toriale labor	ted Payment		,797.21		al Pay		\$		797.21
sve been	included on and	ther claim for	and equipment listed above were payment under this agreement e cost on a per project basis, an	e used in installing or as a claim unde	the above-refi r any other co	erenced c	conserva	tion projects a	nd no items or o	osts listed a	above
				d that I am entitled	to no more th	nan the st	ated per	centage of the	lesser amount.	nount is bas	sed upon
· C	heck Here if Max	imum Payme	nt								
heck Pay	rable to (Please	Print)	Cost-Share Payment	Landowner Con	tribution 1	Participan	ts Comr	oletion Certifica	ation	Dat	
	ndowner		\$ 16,797.21	\$8,152.			no comp	metal Certifica	illon	Dai	te
	CERTIFICAT ors of the			17	TECHNICA	L CER	TIFIC/	TION			_
ertify tha		White costs incum	ed are correct and that all items	County SWCD, I listed were	hereby certify installed prope	that the	claimant doquatel	did apply all a y according to	agreed upon pro technical specif	jects and th fications req	ey are juired.
WCD E	Board Chairm	an/Design	iee (Da	ate)	echnician'	s Signa	ture/T	itle	(1	Date)	_

# PFC 1

- ▶Landowner invoices have been added to the PFC 1
- ▶The form uses the lesser of the average or the actual costs
- ▶Next, complete the 1B

# PFC (ESC) 1B

Information needed:

Soil Series

T level

**Gully Dimensions** 

Width

Depth

Length

Number of years

**RUSLE Factors** 

R

K

LS

C

Р



#### BENEFITS REPORT

Step 1 Applicant Name:

Application Numb

Project ID#: NRCS Practice Code: Practice: # Practice Units: # Acres Maintained < T

ep 2 Watershed Information ep 3 Soil Textural Class

Step 4 Project Parameter



#### SULTS

<u> </u>	3D #01	ID #02	ID #03
Benefit			
Acres reduced below T			
Acres w/reduced sediment			
T-Level (t/ac/yr)			
Gully loss before (t/yr)			
Gully loss after (t/yr)			
Sheet & rill before (t/ac/yr)			
Sheet & rill after (t/ac/yr)			
Soil saved (t/yr)			
Practice units			
Sed. load reduction (t/yr)			
N load reduction (lb/yr)			
P load reduction (lb/yr)			

2/4/2023



## Soil Series

Use the planning soil for the calculations

Use 512B as planning soil

Acres Benefited are acres of field draining to practice

(Acres maintained to T)



## R Factor

- ► Rainfall Factor
- ► Unique to each county

## **K** Factor

Soil Erodibility

K Factors are unique to soil types; can be found in the soil survey

Generally range from .15 - .43

Suggestion: Use your county's frozen soil list for quick reference of the factors

NRCS - IL FOTG Erosion Pre

Table 2: Values for topographic factor, LS, for ROW-CROPPED agricultural and other moderately consolidated soil conditions with little to moderate cover (moderate rill to interril erosion ratio)

Percent								Slope	Length	h (feet)	)						
Slope	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
0.5	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
1.0	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20
2.0	0.17	0.17	0.17	0.17	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35	. 0.37	0.41	0.44	0.47
3.0	0.22	0.22	0.22	0.22	0.22	0.25	0.32	0.36	0.39	0.44	0.48	0.52	0.55	0.60	0.68	0.75	0.80
4.0	0.26	0.26	0.26	0.26	0.26	0.31	0.40	0.47	0.52	0.60	0.67	0.72	0.77	0.86	0.99	1.10	1.19
5.0	0.30	0.30	0.30	0.30	0.30	0.37	0.49	0.58	0.65	0.76	0.85	0.93	1.01	1.13	1.33	1.49	1.63
6.0	0.34	0.34	0.34	0.34	0.34	0.43	0.58	0.69	0.78	0.93	1.05	1.16	1.25	1.42	1.69	1.91	2.11
8.0	0.42	0.42	0.42	0.42	0.42	0.53	0.74	0.91	1.04	1.26	1.45	1.62	1.77	2.03	2.47	2.83	3.15
10.0	0.46	0.48	0.50	0.51	0.52	0.67	0.97	1.19	1.38	1.71	1.98	2.22	2.44	2.84	3.50	4.06	4.56
12.0	0.47	0.53	0.58	0.61	0.64	0.84	1.23	1.53	1.79	2.23	2.61	2.95	3.26	3.81	4.75	5.56	6.28
14.0	0.48	0.58	0.65	0.70	0.75	1.00	1.48	1.86	2.19	2.76	3.25	3,69	4.09	4.82	6.07	7.15	8.11
16.0	0.49	0.63	0.72	0.79	0.85	1.15	1.73	2.20	2.60	3.30	3.90	4.45	4.95	5.86	7.43	8.79	10.02
20.0	0.52	0.71	0.85	0.96	1.06	1.45	2.22	2.85	3.40	4.36	5.21	5.97	6.68	7.97	10.23	12.20	13.99
25.0	0.56	0.80	1.00	1.16	1.30	1.81	2.82	3.65	4.39	5.69	6.83	7.88	8.86	10.65	13.80	16.58	19.13
30.0	0.59	0.89	1.13	1.34	1.53	2.15	3.39	4.42	5.34	6.98	8.43	9.76	11.01	13.30	17.37	20.99	24.31
40.0	0.65	1.05	1.38	1.68	1.95	2.77	4.45	5.87	7.14	9.43	11.47	13.37	15.14	18.43	24.32	29.60	34.48
50.0	0.71	1.18	1.59	1.97	2.32	3.32	5.40	7.17	8.78	11.66	14.26	16.67	18.94	23.17	30.78	37.65	44.02
60.0	0.76	1.30	1.78	2.23	2.65	3.81	6.24	8.33	10.23	13.65	16.76	19.64	22.36	27.45	36.63	44.96	52.70

## LS Factor

Slope % and slope length necessary to determine LS factor

ection i

1

4/30/9

## **C** Factor

_	_	_												ZONE	10	3A	-	-	-	-	-	-	-	$\neg$	$\neg$				-
_	_																-	-	NO 7		-							RIDG	E
POP	SECE	NCE	CLEA	N TI	LL	FALI	MU	LCH	TIL				ING I						* CC			PD D	T.D.NF	PTNG				Till	Ξ
1		T	FALL	SPI	RING	* CC	OVER	AFT	BR I	LAN	TIN	* C	OVER	AFT	BR E	LAN	FING	-	* 00	VER	AFI	ar F	-						_
-				1000								_		-	_			_			20	30	40	50	60	70	80		Ī
orn	Grai	n Aft	er:			<10	10	20	30	40	50	<10			11	.08	50 - 07	.06	<10 .18	.14	.11	.09	.06	.05	.04	.03	.02	.10	
orn	grai	n	.24	.21		.20	.16		.12	.09	.08	.18	.15	.13	.11	.08	.07	.00	.35	.22	.18	.13						.27	
	sila		.35	.37		.34	.31	.25	_	_	_	.35	.31	.24				.06	-	.14	.11	.09	.07	.05	.04	.03	.02	.10	_
orn	sils	ge w	/cc	.21	0.000			_	_		_	.19	.15	.13	.11	.08	.07	.06	.26	.20	.13	.09	.07	.06	. 05	.04	.03	.20	
	eans		.36	.30		.34	.28	.23	_		-	.28	.24	.21		.09	.08	.07	-	.15	.12	.09	.07	.06	. 05	.04	.03	.11	
		w/cc		.23				_	_	-	-	.21	.18	.14	.11	.06	.05	.04	_	.11	.10	.07	.06	.05	.04	.03	.02		
		adow	.18	.14		.16	.14	.12	,09	.07	.05	_	.12	.10	.08	-	.04	.04	.10	.08	.07		. 05		.03	.02	.01		
esta	b. me	adow	.17	.11		.17	.15		_	-	-	.10	.09	.12	.06	.05	.06	.05	-	.12	.10	-	.05	.04	.03	.02	.02		
whea			.24	.20		.21	.17	.13	-	_	.06		.15		-		-	.06	-	.18	.15	.11	.08	.07	.06	.05	.04		
oats			.30	.24		.27	.23	.18	.14	.09	.08	_	.19	.16	.13		1.00	.00	.30	-		-							Ĺ
	rbeet		.32	.33		.32	.29	-	-	-	-	.31	.29		-		.07	06	_		.10	.08	.06	. 05	.04	.03	.02		L
whea	t/db	. cr	0 .22	.18		.19	.15	.13	.11	.09	.07	1.17	.14	.11	,10	.08	1.0,	.00		1.20	1								L
					_		_	-	-	-	-	-	-	-	-	40	50	60	<10	10	20	30	40	50	60	70	80		L
Corn	Sil	age A	fter:			<10	10	20	30	40	50		10	20	.11	_	_	_	-		-		.06	. 05	.04	.03	.02	.10	
	gra		.27	.20	_	.24	.17	_	_	.09	.08	_	.16		.11	.09	1.07	.00	.30	-	-	1		T				.30	L
	sil		.37	.36		.35	.28	.24	-	-	-	.35	-			.11	. 09	.07	+	-	_	.11	.09	.07	.06	.05	.04	.17	L
		age w	/cc	.23			-	-	-	+-	+-	.22	+	-	-	-	1.03	1.07	.26	1	1	-	1					.20	I
	eans		.36	. 29		.30	.24	.22	.20	4-	+-	.27	-	+	-		.08	.07	-	-	1	_		_	.06	.05	.04	.11	I
sovb	eans	w/cc		.22			-	-	_	+	+-	.21	-	+	+	1.03	1.00	1.0,	14	_	+	-	.06	. 05	.04	.03	.02	2	T
		eadow		.14		.18		-	_	_	+	.14	-	+	_	. 05	. 04	.03	1	+	-	-	_	_	.03	.02	.01		Ι
		eadow		.12		.17	-	_	-	_	+-	.13	-	-	_	-	_	-	-	_	-	_	_	_	.03	.02	.01	1	1
whee			.25	.21		.23	.18	.14	-	_	_	.15	-	_	-	-	_	_	-	_	-		_	0.00	5 . 05	5 .04	. 03	3	1
oats	_		.31	.25		.28	-	-	.14	1.12	. 05		_	-	1.13	4.10	1.00	1.00	.30	_	+	1	1	T					1
_	rbee	ts	.32	.32	1	.31	_	_	+	+	+-	.3			.09	1 0	7 .00	0		+	_	.08	1.0	6 .0	5 . 04	.03	3 .02	2	1
whee	t/db	1. C	0 .22	.18	1	.19	1.15	.13	1.1	1 .05	0.0	7 .1	11.14	4.13	1.0	1.0	1.00	1.0.	1	T-	T			T				1	1
				1	1	1_								-	-		ron	ia k	1116	d o	-							1	1
Note	: Cr	ops 1	ollow	ing	cro	DS W:	ith	a co	ver	cro	ps a	raam	nes 1	T	Tove	T	T	1	7	T								_	
±117	Led a	t the	12"	- 15	" he	eigh	t (L	ate	Apr	11 -	Ear	14 1	MAY)	+-	-	+	+	1						I					

- ► Cropping / management factor
- Can use an old chart like this one from the tech guide or can calculate using the newer RUSLE program

## P Factor

- Use a P factor of 1 unless farmed on the contour or terraced
- Terraced or contoured field have a P factor of .5 - .8

iois Department of Agriculture reau of Land and Water Resources 7/19/2019

#### BENEFITS REPORT

Step 1	Applicant Name:	
stop 1	Applicant Name:	

Suzy Landowner		
White SWCD	*	
3-digit code	6-digit number	
193.00	00123	

Project ID#: NRCS Practice Code: Practice: # Practice Units: # Acres Maintained < T

ID #01	ID #02	ID #03
600	412	340
errace - Ugd.ouslet (#)	Grass waterway (ac)	▼ Cover crops fact ▼
600	0.8	40
22	18	40

Step 3 Soil Textural Class

051201190507	*	14938	
£3 han	_		
4 t/ac/yr		÷	
512 B			

Step 4 Project Parameters

ID #04: Terrone - Heat evaluate

RUSLE Factors	Constant	Before	After	Gully Dimension	_
Rainfall-Runoff (R)	210		7.11.07	Avg. width (ft)	3
Soil Erodibility (K)	0.37			Depth (ft)	2
Length-Slope (LS)		0.6	0.5	Length (ft)	350
Cover Mngmt (C)	0.08			No. of Years (>0)	350
Support Practice (P)		1	0.5	Soil N Conc (lb/lb soil)*	0.001
Other				Soil P Conc (lb/lb soil)*	0.0005
Drainage area (ac)	22			' indicates default value	0.0000

#02: Grass waterway (ac

Gully Dimensio	ns	RUSLE Fa	ctors (Field)
Avg. width (ft)	4	Rainfall-Runoff (R)	210
Depth (ft)	2	Soil Erodibility (K)	0.37
Length (ft)	400	Length-Slope (LS)	0.6
No. of Years (>0)		Cover Mngmt (C)	0.08
Soil N Conc (lb/lb soil)*	0.001	Support Practice (P)	1
Soil P Conc (lb/lb soil)*	0.0005		
' indicates default value			

D #03; Cover crops (ac)

RUSLE Factors	Constant	Before	After
Rainfall-Runoff (R)	210		7,444
Soil Erodibility (K)	0.37		
Length-Slope (LS)	0.6		
Cover Mngmt (C)		80.0	0.06
Support Practice (P)	1		0.00

RESULTS

	ID #01	ID #02	ID #03
Benefit	Terrace - Ugd.outlet (ft)	Grass waterway (ac)	Cover crops (ac)
Acres reduced below T	0.0	0.0	0.0
Acres w/reduced sediment	22.0	0.0	0.0
T-Level (t/ac/yr)	4.0	4.0	4.0
Gully loss before (t/yr)	7.4	27.2	0.0
Gully loss after (t/yr)	0.0	0.0	0.0
Sheet & rill before (t/ac/yr)	3.7	3.7	3.7
Sheet & rill after (t/ac/yr)	1.6	3.7	2.8
Soil saved (t/yr)	55.3	27.2	37.3
Practice units	600.0	0.8	40.0
Sed. load reduction (t/yr)	22.4	7.7	10.6
N load reduction (lb/yr)	69	15	27
P load reduction (lb/yr)	34	8	14

## 1B Example

- Includes the practice IDs from the PFC 1
- Insert gully dimensions for terraces and waterway
- ► Complete all RUSLE factors
- Results show total tons of soil saved
- ► Check that "Sheet and Rill after" is less than T

## PFC 1+1B

- Example includes a Cover Crop
- When submitting claim for payment:
  - ▶ PFC 1 1B
  - ► STAR forms
  - ▶ Job Sheet
  - ► CPA 52 signed by DC
  - ► Farm Data Report
  - ► CCC 902
  - Subsidiary Report

Questions?