



Don't Speculate, Calculate!

NEW LONG-TERM STEWARDSHIP CALCULATOR

Angela Sturdevant
Indiana Chapter



Why does this matter?

- LTM funding is critical to successful conservation outcomes.
- *2008 Mitigation Rule*: “A long-term management plan should include a description of long-term management needs, *annual cost estimates* for these needs, and identify the funding mechanism that will be used to meet those needs” (33 C.F.R. §332.7(d)(2)).

Need a better widget!

Advisory committee formed:

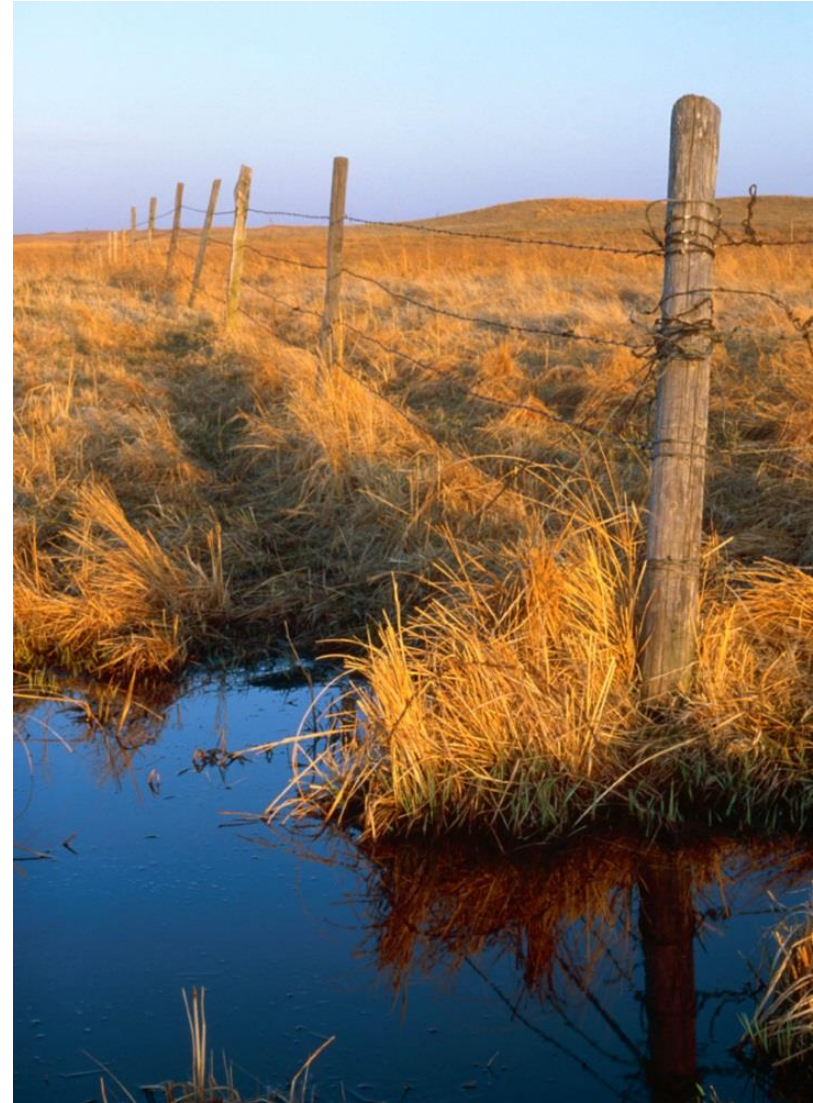


U.S. Army Corps
of Engineers®



One size does NOT fit all

- **Location, location, location!**
 - Remoteness, ease of access
 - Urban/rural setting
 - Adjacent land use
 - Edge effects
 - Public use
 - Position in watershed
- **High maintenance habitat?**
 - Habitat type, fire-dependent communities
 - Ecological integrity



Flexible tool

- Free and available to public
- Calculator & accompanying handbook
- Voluntary conservation or mitigation projects
- Fee land or easements

Fund Principal = annual costs/cap rate

“Cap” rate = nominal return-inflation-fees

LONG-TERM STEWARDSHIP CALCULATOR: ACCOMPANYING HANDBOOK



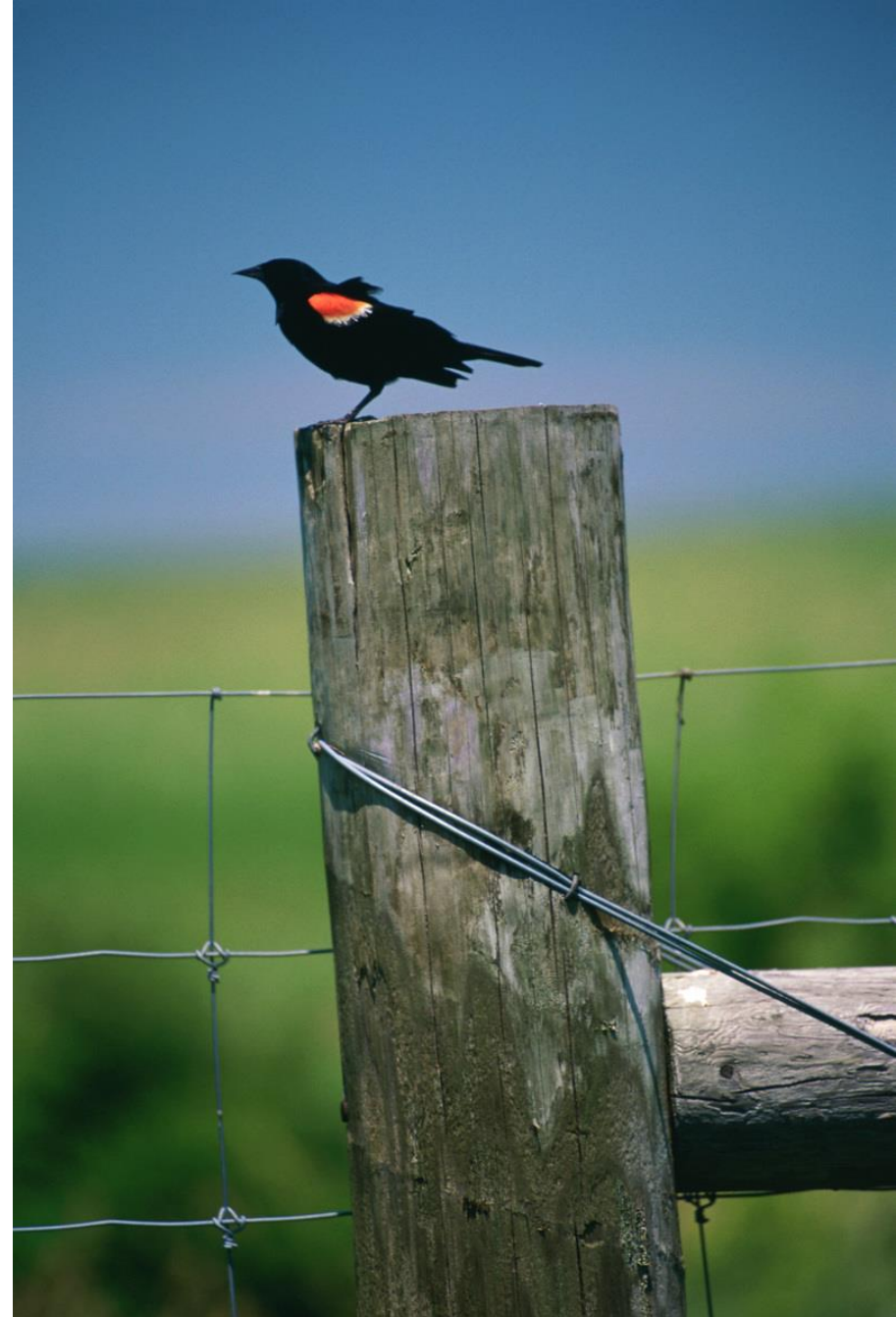
The Nature
Conservancy 

May 2016

- Background Materials
- Cost Estimates Guidance
- Managing Money for the Long-term
- Additional Resources
- Guide to Using the Calculator
- Examples of the Calculator in Use
- Example Stewardship Standards & Guidelines

Example Project

- Preserved 7,000 feet of stream, 80 acres riparian buffer.
- Reforested 9 acre hayfield.
- *Long-term management:*
 - Annual monitoring
 - Trash removal
 - Fence/gate/culvert/sign repair & replacement
 - Invasive species control



1	2	A	B	C	D	E	F
1	LONG-TERM STEWARDSHIP COSTS CALCULATOR				<i>NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.</i>		
2							
3	Project Name:	Acres:	State (or state equivalent):	Country:	Prepared by:	Date:	
4	Stream and Riparian Buffer ILF Restoration	80	N/A	US	ILF Manager	03/28/16	
5							
6	Unit Cost Estimates:						
7		Quantity	Units	Cost			
8	Regular staff hourly rate (inc benefits)		hour	\$ 30.00			
9	Short-term staff hourly rate (inc benefits)		hour	\$ -			
14	<i>Click + to the left to expand additional hourly rates (see Instructions below).</i>						
15	Travel Costs:						
16	Mileage OR cost (round-trip)	394	miles	\$ -			
17	Mileage rate	0.54	\$/mile				
18	Vehicle Travel Cost:			\$ 212.76			
19	Overnight lodging cost (per night)	\$ -	\$/night				
20	Per diem (meals)	\$ 25.00	\$/day				
21							
22	Additional Rates:						
23	Capitalization rate	4.55%					
24	% of annual costs covered by fund (50% or 100%)	100%					
25	Contingency (10-20%)	10%					
26	Administrative (recommended min 10%)	10%					
27							
		1-Assumptions	2-Stewardship	3-Land Management & Maint	4-Summary		

3	Project Name:	Acres:	State (or state equivalent):	Country:
4	Stream and Riparian Buffer ILF Restoration	80	N/A	US
5				
6	Unit Cost Estimates:			
7		Quantity	Units	Cost
8	Regular staff hourly rate (inc benefits)		hour	\$ 30.00
9	Short-term staff hourly rate (inc benefits)		hour	\$ -
14	Click + to the left to expand additional hourly rates (see Instructions below).			
15	Travel Costs:			

+

Expand for additional staff types

3	Project Name:	Acres:	State (or state equivalent):	Country:
4	Stream and Riparian Buffer ILF Restoration	80	N/A	US
5				
6	Unit Cost Estimates:			
7		Quantity	Units	Cost
8	Regular staff hourly rate (inc benefits)		hour	\$ 30.00
9	Short-term staff hourly rate (inc benefits)		hour	\$ -
10	Enter staff type and hourly rate (inc benefits)		hour	\$ -
11	Enter staff type and hourly rate (inc benefits)		hour	\$ -
12	Enter staff type and hourly rate (inc benefits)		hour	\$ -
13	Enter staff type and hourly rate (inc benefits)		hour	\$ -
14	<i>Click + to the left to expand additional hourly rates (see Instructions below).</i>			
15	Travel Costs:			

Unit Cost Estimates:

Quantity	Units	Cost
Regular staff hourly rate (inc benefits)	hour	\$ 30.00
Short-term staff hourly rate (inc benefits)	hour	\$ -
<i>Click + to the left to expand additional hourly rates (see Instructions below).</i>		
Travel Costs:		
Mileage OR cost (round-trip)	394 miles	\$ -
Mileage rate	0.54 \$/mile	
Vehicle Travel Cost:		\$ 212.76
Overnight lodging cost (per night)	\$ - \$/night	
Per diem (meals)	\$ 25.00 \$/day	

Additional Rates:

Capitalization rate	4.55%
% of annual costs covered by fund (50% or 100%)	100%
Contingency (10-20%)	10%
Administrative (recommended min 10%)	10%



+

1	A	B	C	D	E	J	K	L	M	N	O	P	Q	R
2	Site Protection Monitoring and Easement Stewardship Costs			NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.										
	Stewardship Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party	
	Monitoring the site protection mechanism											\$ 787.76		ILF program
	Preparation for site visit	Staff time	2			hours		\$ 60.00	1	\$ 60.00				
	Travel expenses occurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76	1	\$ 237.76				
		Overnight stays for annual site visit(s)		0	# nights									
		Allowance for meals (# of days) for annual site visit(s)		1	# days									
	Travel expenses (non-annual trips)	Number of trips				# trips	\$ -	\$ -	3	\$ -				
		Overnight stays for site visit(s)			# nights									
		Allowance for meals (# of days) for site visit(s)			# days									
	Site visit	Visual assessment, notes, photos. Include travel time and time on-site.	12			hours		\$ 360.00	1	\$ 360.00		8 hrs travel time, 4 hrs field time		
	Prepare and submit report, maintain records	Report preparation & submittal, agency coordination, maintenance of records	4			hours		\$ 120.00	1	\$ 120.00				
		Expenses (e.g. printing, copying, mailing)				ea		\$ -	1	\$ -				
	Supplies	iPad (with camera and GPS) and waterproof case			0.05	ea	\$ 600.00	\$ 30.00	3	\$ 10.00		Used 5% of time on this site		
	Maintaining landowner/neighbor relationships											\$ 240.00		
	Staff time	Communicating with landowner/neighbors, reviewing reserved rights, etc.	8			hours		\$ 240.00	1	\$ 240.00				
	Communications/outreach	Staff time				hours		\$ -	1	\$ -				
		Expenses (e.g. newsletter/brochure printing, postage, supplies for events, etc.)				ea		\$ -	1	\$ -				
	Enforcement to correct violations											\$ -		
	Option A: Legal defense fund contribution	Lump sum (based on LTA Legal Defense Reserves calculator). Entire lump sum is carried over to Summary tab.			1	ea	\$ 5,000.00	\$ 5,000.00	N/A	N/A				
	Option B: Legal defense costs	Staff time				hours		\$ -	8	\$ -				
		Travel expenses (Number of trips)				# trips	\$ -	\$ -	8	\$ -				
		Travel expenses (Overnight stays for site visit(s))			# nights									
		Travel expenses (Meals (# of days) for site visit(s))			# days									
		Legal fees				hours		\$ -	8	\$ -				
	Legal Defense Insurance	Annual insurance premium, prorated for an individual property				ea		\$ -	1	\$ -				
	ANNUAL COST SUBTOTAL:											\$ 1,027.76		

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Site Protection Monitoring and Easement Stewardship Costs												NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.		
Stewardship Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party		
Monitoring the site protection mechanism										787.76		ILF program		
Preparation for site visit	Staff time													
Travel expenses occurring annually	Number of trips annually			1	# trips									
	Overnight stays for annual site visit(s)			0	# nights	\$ 237.76	\$ 237.76	1	\$ 237.76					
	Allowance for meals (# of days) for annual site visit(s)			1	# days									
Travel expenses (non-annual trips)	Number of trips				# trips									
	Overnight stays for site visit(s)				# nights	\$ -	\$ -	3	\$ -					
	Allowance for meals (# of days) for site visit(s)				# days									
Site visit	Visual assessment, notes, photos. Include travel time and time on-site.	12			hours		\$ 360.00	1	\$ 360.00		8 hrs travel time, 4 hrs field time			
Prepare and submit report, maintain records	Report preparation & submittal, agency coordination, maintenance of records	4			hours		\$ 120.00	1	\$ 120.00					
	Expenses (e.g. printing, copying, mailing)				ea		\$ -	1	\$ -					
Supplies	iPad (with camera and case)										Used 5% of time on this site			
Maintaining landowner/neighbor relationships										240.00				
Staff time	Communicating with landowner, reviewing reserved rights, etc.				hours		\$ -	1	\$ -					
Communications/outreach	Expenses (e.g. newsletter, postage, supplies for events)													
Enforcement to correct violations										-				
Option A: Legal defense fund contribution	Lump sum (based on LTMP Reserves calculator). Entire lump sum is carried over to Summary tab.			1	ea	\$ 3,000.00	\$ 3,000.00	N/A	N/A					
Option B: Legal defense costs	Staff time				hours		\$ -	8	\$ -					
	Travel expenses (Number of trips)				# trips									
	Travel expenses (Overnight stays for site visit(s))				# nights	\$ -	\$ -	8	\$ -					
	Travel expenses (Meals (# of days) for site visit(s))				# days									
	Legal fees				hours		\$ -	8	\$ -					
Legal Defense Insurance	Annual insurance premium, prorated for an individual property				ea		\$ -	1	\$ -					
ANNUAL COST SUBTOTAL:										\$ 1,027.76				

Expand for additional staff types

1											
2											
	A	B	C	D	E	J	K	L	M	N	O
1	Site Protection Monitoring and Easement Stewardship Costs			NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.							
	Stewardship Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost	
2											
3	Monitoring the site protection mechanism										
4	Preparation for site visit	Staff time	2			hours		\$ 60.00	1	\$ 60.00	
5	Travel expenses occurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76	1	\$ 237.76	
6		Overnight stays for annual site visit(s)			0	# nights					
7		Allowance for meals (# of days) for annual site visit(s)			1	# days					
8	Travel expenses (non-annual trips)	Number of trips				# trips	\$ -	\$ -	3	\$ -	
9		Overnight stays for site visit(s)				# nights					
10		Allowance for meals (# of days) for site visit(s)				# days					
11	Site visit	Visual assessment, notes, photos. Include travel time and time on-site.	12			hours		\$ 360.00	1	\$ 360.00	
12	Prepare and submit report, maintain records	Report preparation & submittal, agency coordination, maintenance of records	4			hours		\$ 120.00	1	\$ 120.00	
13		Expenses (e.g. printing, copying, mailing)				ea		\$ -	1	\$ -	
14	Supplies	iPad (with camera and GPS) and waterproof case			0.05	ea	\$ 600.00	\$ 30.00	3	\$ 10.00	

1

2

A	B	C	D	E	F	G	H	I	J	K
1	Site Protection Monitoring and Easement Stewardship Costs		NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.							
	Stewardship Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Enter staff type and hourly rate (inc benefits)	Enter staff type and hourly rate (inc benefits)	Enter staff type and hourly rate (inc benefits)	Enter staff type and hourly rate (inc benefits)	Quantity	Unit
2										
3	Monitoring the site protection mechanism									
4	Preparation for site visit	Staff time	2							hours
5	Travel expenses occurring annually	Number of trips annually							1	# trips
6		Overnight stays for annual site visit(s)							0	# nights
7		Allowance for meals (# of days) for annual site visit(s)							1	# days
8	Travel expenses (non-annual trips)	Number of trips								# trips
9		Overnight stays for site visit(s)								# nights
10		Allowance for meals (# of days) for site visit(s)								# days
11	Site visit	Visual assessment, notes, photos. Include travel time and time on-site.	12							hours
12	Prepare and submit report, maintain records	Report preparation & submittal, agency coordination, maintenance of records	4							hours
13		Expenses (e.g. printing, copying, mailing)								ea
14	Supplies	iPad (with camera and GPS) and waterproof case							0.05	ea

	Stewardship Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost
2								
3	Monitoring the site protection mechanism							
4	Preparation for site visit	Staff time	2			hours		\$ 60.00
5	Travel expenses occurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76
6		Overnight stays for annual site visit(s)			0	# nights		
7		Allowance for meals (# of days) for annual site visit(s)			1	# days		
8	Travel expenses (non-annual trips)	Number of trips				# trips	\$ -	\$ -
9		Overnight stays for site visit(s)				# nights		
10		Allowance for meals (# of days) for site visit(s)				# days		
11	Site visit	Visual assessment, notes, photos. Include travel time and time on-site.	12			hours		\$ 360.00
12	Prepare and submit report, maintain records	Report preparation & submittal, agency coordination, maintenance of records	4			hours		\$ 120.00
13		Expenses (e.g. printing, copying, mailing)				ea		\$ -
14	Supplies	iPad (with camera and GPS) and waterproof case			0.05	ea	\$ 600.00	\$ 30.00
15	Maintaining landowner/neighbor relationships							
16	Staff time	Communicating with landowner/neighbors, reviewing reserved rights, etc.	8			hours		\$ 240.00
17	Communications/outreach	Staff time				hours		\$ -
18		Expenses (e.g. newsletter/brochure printing, postage, supplies for events, etc.)				ea		\$ -

	Stewardship Tasks	Description	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party
2								
3	Monitoring the site protection mechanism					\$ 787.76		ILF program
4	Preparation for site visit	Staff time	\$ 60.00	1	\$ 60.00			
5	Travel expenses occurring annually	Number of trips annually						
6		Overnight stays for annual	\$ 237.76	1	\$ 237.76			
7		Allowance for meals (# of						
8	Travel expenses (non-annual trips)	Number of trips						
9		Overnight stays for site vi	\$ -	3	\$ -			
10		Allowance for meals (# of						
11	Site visit	Visual assessment, notes travel time and time on-s	\$ 360.00	1	\$ 360.00		8 hrs travel time, 4 hrs field time	
12	Prepare and submit report, maintain records	Report preparation & sub coordination, maintainan	\$ 120.00	1	\$ 120.00			
13		Expenses (e.g. printing, co	\$ -	1	\$ -			
14	Supplies	iPad (with camera and GP case	\$ 30.00	3	\$ 10.00		Used 5% of time on this site	
15	Maintaining landowner/neighbor relationships					\$ 240.00		
16	Staff time	Communicating with land reviewing reserved rights	\$ 240.00	1	\$ 240.00			
17	Communications/outreach	Staff time	\$ -	1	\$ -			
18		Expenses (e.g. newsletter postage, supplies for eve	\$ -	1	\$ -			

Enforcement to correct violations

Option A: Legal defense fund contribution	Lump sum (based on LTA Legal Defense Reserves calculator). Entire lump sum is carried over to Summary tab.			1	ea	\$ 5,000.00	\$ 5,000.00	N/A	N/A
Option B: Legal defense costs	Staff time				hours		\$ -	8	\$ -
	Travel expenses (Number of trips)				# trips				
	Travel expenses (Overnight stays for site visit(s))				# nights	\$ -	\$ -	8	\$ -
	Travel expenses (Meals (# of days) for site visit(s))				# days				
	Legal fees				hours		\$ -	8	\$ -
Legal Defense Insurance	Annual insurance premium, prorated for an individual property				ea		\$ -	1	\$ -

Land Trust Alliance - Legal Defense Reserve Calculator

- Minimum adequate reserve for portfolio of properties.
- <http://tlc.lta.org/calculator>
- Non-members contact tlc@lta.org for access.



Questions?

Assumptions

Site Protection Monitoring &
Easement StewardshipLand Management &
Maintenance

Summary

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party
Infrastructure Maintenance and Replacement										\$ 1,254.73		ILF program
Travel expenses recurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76	1	\$ 237.76			
	Overnight stays for annual site visit(s)			0	# nights							
	Allowance for meals (# of days) for annual site visit(s)			1	# days							
Travel expenses (non-annual trips)	Number of trips			0	# trips	\$ -	\$ -	3	\$ -			
	Overnight stays for site visit(s)			0	# nights							
	Allowance for meals (# of days) for site visit(s)			0	# days							
Site visit	Inspect boundaries, signs, other infrastructure. Include prep time, travel time and time on-site.	8			hours		\$ 240.00	1	\$ 240.00		travel time	
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	2	0		hours		\$ 60.00	1	\$ 60.00			
Replace fence	Contract Amount			1700	linear ft	\$ 2.78	\$ 4,726.00	20	\$ 236.30			
	Staff Oversight	5	0		hours		\$ 150.00		\$ 7.50		3hr contracting, 2hr field conf (in annual visit)	
Repair/replace signs	Material (12" No Trespassing)			2	ea	\$ 2.50	\$ 5.00	10	\$ 0.50			
	Labor	1	0		hours		\$ 30.00		\$ 3.00			
Other (select from drop-down)	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Equipment daily use rate	Vehicle (add description)				day	\$ -	\$ -	1	\$ -			
	Other (select from drop-down list)				day	\$ -	\$ -	1	\$ -			
Equipment replacement	Vehicle (add description)				ea	\$ -	\$ -	1	\$ -			
	Other (select from drop-down list)				ea	\$ -	\$ -	1	\$ -			
Ecological Management										\$ 1,084.76		
Travel expenses recurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76	1	\$ 237.76			
	Overnight stays for annual site visit(s)			0	# nights							
	Allowance for meals (# of days) for annual site visit(s)			1	# days							
Update management plan	Review and update management plan	7	0		hours		\$ 210.00	5	\$ 42.00		travel included in annual visit	
Ecological monitoring	Monitoring T&E species, inventories, reporting				hours		\$ -	1	\$ -			
	Supplies				ea	\$ -	\$ -		\$ -			
Invasive species control (plants)	Contract Amount			1	ea	\$ 430.00	\$ 430.00	1	\$ 430.00		8.6 acres at \$50/acre	
	Staff Oversight	12.5	0		hours		\$ 375.00		\$ 375.00		8.5hr travel, 2hr field conf, 2hr contracting	
Nuisance wildlife control	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Prescribed fire	Cost of burn (burn plan, implementation of burn, follow-up monitoring)				ea	\$ -	\$ -	1	\$ -			
	Staff oversight of contract				hours		\$ -		\$ -			
	Annual training and recertification costs				ea	\$ -	\$ -	1	\$ -			
Vegetation management	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Supplies	Small equipment & supplies				ea	\$ -	\$ -	1	\$ -			
Other (add description)	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Occupancy										\$ -		
Property taxes	Taxes, drainage assessments, other fees			1	ea	\$ -	\$ -	1	\$ -		tax exempt	
Insurance				1	ea	\$ -	\$ -	1	\$ -			
Other fees	eg. utilities, water rights			1	ea	\$ -	\$ -	1	\$ -			
ANNUAL COST SUBTOTAL:										\$2,339.49		

Assumptions

Site Protection Monitoring &
Easement StewardshipLand Management &
Maintenance

Summary

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party
Infrastructure Maintenance and Replacement										\$ 1,254.73		ILF program
Travel expenses recurring annually	Overnight stays for annual site visit(s)			0	# nights	\$ 237.76	\$ 237.76	1	\$ 237.76			
	Allowance for meals (# of days) for annual site visit(s)			1	# days							
Travel expenses (non-annual trips)	Number of trips			0	# trips							
	Overnight stays for site visit(s)			0	# nights	\$ -	\$ -	3	\$ -			
	Allowance for meals (# of days) for site visit(s)			0	# days							
Site visit	Inspect boundaries, signs, other infrastructure. Include prep time, travel time and time on-site.	8			hours		\$ 240.00	1	\$ 240.00		travel time	
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	2	0		hours		\$ 60.00	1	\$ 60.00			
Replace fence	Contract Amount			1700	linear ft	\$ 2.78	\$ 4,726.00	20	\$ 236.30			
	Staff Oversight	5	0		hours		\$ 150.00		\$ 7.50		3hr contracting, 2hr field conf (in annual visit)	
Repair/replace signs	Material (12" No Trespassing)			2	ea	\$ 2.50	\$ 5.00	10	\$ 0.50			
	Labor	1	0		hours		\$ 30.00		\$ 3.00			
Other (select from drop-down)	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Equipment daily use rate	Vehicle (add description)				day	\$ -	\$ -	1	\$ -			
	Other (select from drop-down list)				day	\$ -	\$ -	1	\$ -			
Equipment replacement	Vehicle (add description)				ea	\$ -	\$ -	1	\$ -			
	Other								\$ -			
Ecological Management										\$ 1,084.76		
Travel expenses recurring annually	Overnight stays for annual site visit(s)			0	# nights	\$ 237.76	\$ 237.76	1	\$ 237.76			
	Allowance for meals (# of days) for annual site visit(s)			1	# days							
Update management plan	Review and update management plan	7	0		hours		\$ 210.00	5	\$ 42.00		travel included in annual visit	
Ecological monitoring	Monitoring T&E species, inventories, reporting				hours		\$ -	1	\$ -			
	Supplies				ea	\$ -	\$ -		\$ -			
Invasive species control (plants)	Contract Amount			1	ea	\$ 430.00	\$ 430.00	1	\$ 430.00		8.6 acres at \$50/acre	
	Staff Oversight	12.5	0		hours		\$ 375.00		\$ 375.00		8.5hr travel, 2hr field conf, 2hr contracting	
Nuisance wildlife control	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Prescribed fire	Cost of burn (burn plan, implementation of burn, follow-up monitoring)				ea	\$ -	\$ -	1	\$ -			
	Staff oversight of contract				hours		\$ -		\$ -			
	Annual training and recertification costs				ea	\$ -	\$ -	1	\$ -			
Vegetation management	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -			
	Labor or Staff Oversight				hours		\$ -		\$ -			
Supplies	Small equipment & supplies				ea	\$ -	\$ -	1	\$ -			
Other (add description)	Material								\$ -			
	Labor								\$ -			
Occupancy										\$ -		
Property taxes	Taxes			1	ea	\$ -	\$ -	1	\$ -		tax exempt	
Insurance				1	ea	\$ -	\$ -	1	\$ -			
Other fees	eg. utilities, water rights			1	ea	\$ -	\$ -	1	\$ -			
ANNUAL COST SUBTOTAL:										\$2,339.49		

Infrastructure Maintenance and Replacement

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost
Infrastructure Maintenance and Replacement									
Travel expenses recurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76	1	\$ 237.76
	Overnight stays for annual site visit(s)			0	# nights				
	Allowance for meals (# of days) for annual site visit(s)			1	# days				
Travel expenses (non-annual trips)	Number of trips			0	# trips	\$ -	\$ -	3	\$ -
	Overnight stays for site visit(s)			0	# nights				
	Allowance for meals (# of days) for site visit(s)			0	# days				
Site visit	Inspect boundaries, signs, other infrastructure. Include prep time, travel time and time on-site.	8			hours		\$ 240.00	1	\$ 240.00
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	2	0		hours		\$ 60.00	1	\$ 60.00
Replace fence	Contract Amount			1700	linear ft	\$ 2.78	\$ 4,726.00	20	\$ 236.30
	Staff Oversight	5	0		hours		\$ 150.00		\$ 7.50
Repair/replace signs	Material (12" No Trespassing)			2	ea	\$ 2.50	\$ 5.00	10	\$ 0.50
	Labor	1	0		hours		\$ 30.00		\$ 3.00
Other (select from drop-down)	▼ te Select additional tasks as needed.				ea	\$ -	\$ -	1	\$ -
	Labo				hours		\$ -		\$ -
Equipment daily use rate	Vehi				day	\$ -	\$ -	1	\$ -
	Othe				day	\$ -	\$ -	1	\$ -
Equipment replacement	Vehi				ea	\$ -	\$ -	1	\$ -
	Othe				ea	\$ -	\$ -	1	\$ -

Infrastructure Maintenance and Replacement

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost
Infrastructure Maintenance and Replacement							
Travel expenses recurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76
	Overnight stays for annual site visit(s)			0	# nights		
	Allowance for meals (# of days) for annual site visit(s)			1	# days		
Travel expenses (non-annual trips)	Number of trips			0	# trips	\$ -	\$ -
	Overnight stays for site visit(s)			0	# nights		
	Allowance for meals (# of days) for site visit(s)			0	# days		
Site visit	Inspect boundaries, signs, other infrastructure. Include prep time, travel time and time on-site.	8			hours		\$ 240.00
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	2	0		hours		\$ 60.00
Maintain fence	Contract Amount			1700	linear ft	\$ 0.04	\$ 68.00
	Staff Oversight	2	0		hours		\$ 60.00
Replace fence	Contract Amount			1700	linear ft	\$ 2.78	\$ 4,726.00
	Staff Oversight	5	0		hours		\$ 150.00
Repair/replace signs	Material (12" No Trespassing)			2	ea	\$ 2.50	\$ 5.00
	Labor	1	0		hours		\$ 30.00
Maintain gate	Contract Amount			3	ea	\$ 4.00	\$ 12.00
	Staff Oversight	0	0		hours		\$ -
Replace gate	Contract Amount (2" tube gate, 12')			3	ea	\$ 200.00	\$ 600.00
	Staff Oversight	0	0		hours		\$ -
Maintain culvert	Materials				ea	\$ -	\$ -
	Labor (clean out culvert)	1	0		hours		\$ 30.00
Replace culvert	Contract Amount			2	ea	\$ 4,000.00	\$ 8,000.00
	Staff Oversight	3	0		hours		\$ 90.00

Infrastructure Maintenance and Replacement

Management and Maintenance Tasks	Description	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party
Infrastructure Maintenance and Replacement					\$ 1,254.73		ILF program
Travel expenses recurring annually	Number of trips annually						
	Overnight stays for annual site visit(s)	\$ 237.76	1	\$ 237.76			
	Allowance for meals (# of days) for annual site visit(s)						
Travel expenses (non-annual trips)	Number of trips						
	Overnight stays for site visit(s)	\$ -	3	\$ -			
	Allowance for meals (# of days) for site visit(s)						
Site visit	Inspect boundaries, signs, other infrastructure Include prep time, travel time and time on-site	\$ 240.00	1	\$ 240.00		travel time	
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	\$ 60.00	1	\$ 60.00			
Maintain fence	Contract Amount	\$ 68.00	1	\$ 68.00		1.3% annual maintenance	
	Staff Oversight	\$ 60.00		\$ 60.00		1hr contracting, 1hr field conf (in annual visit)	
Replace fence	Contract Amount	\$ 4,726.00	20	\$ 236.30			
	Staff Oversight	\$ 150.00		\$ 7.50		3hr contracting, 2hr field conf (in annual visit)	
Repair/replace signs	Material (12" No Trespassing)	\$ 5.00	10	\$ 0.50			
	Labor	\$ 30.00		\$ 3.00			
Maintain gate	Contract Amount	\$ 12.00	1	\$ 12.00		2% annual maintenance	
	Staff Oversight	\$ -		\$ -		oversight included in fence maintenance	
Replace gate	Contract Amount (2" tube gate, 12')	\$ 600.00	20	\$ 30.00			
	Staff Oversight	\$ -		\$ -		oversight included in fence replacement	
Maintain culvert	Materials	\$ -	1	\$ -			
	Labor (clean out culvert)	\$ 30.00		\$ 30.00			
Replace culvert	Contract Amount	\$ 8,000.00	30	\$ 266.67			
	Staff Oversight	\$ 90.00		\$ 3.00		2hr contracting, 1hr field conf (in annual visit)	

Ecological Management

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost
Ecological Management							
Travel expenses recurring annually	Number of trips annually			1	# trips	\$ 237.76	\$ 237.76
	Overnight stays for annual site visit(s)			0	# nights		
	Allowance for meals (# of days) for annual site visit(s)			1	# days		
Update management plan	Review and update management plan	7	0		hours		\$ 210.00
Ecological monitoring	Monitoring T&E species, inventories, reporting				hours		\$ -
	Supplies				ea	\$ -	\$ -
Invasive species control (plants)	Contract Amount			1	ea	\$ 430.00	\$ 430.00
	Staff Oversight	12.5	0		hours		\$ 375.00
Nuisance wildlife control	Materials or Contract Amount				ea	\$ -	\$ -
	Labor or Staff Oversight				hours		\$ -
Prescribed fire	Cost of burn (burn plan, implementation of burn, follow-up monitoring)				ea	\$ -	\$ -
	Staff oversight of contract				hours		\$ -
	Annual training and recertification costs				ea	\$ -	\$ -
Vegetation management	Materials or Contract Amount				ea	\$ -	\$ -
	Labor or Staff Oversight				hours		\$ -
Supplies	Small equipment & supplies				ea	\$ -	\$ -
Other (add description)	Materials or Contract Amount				ea	\$ -	\$ -
	Labor or Staff Oversight				hours		\$ -

Ecological Management

Management and Maintenance Tasks	Description	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal	Notes (explain assumptions used in cost estimate; indicate corresponding LTMP task)	Responsible Party
Ecological Management					\$ 1,084.76		
Travel expenses recurring annually	Number of trips annually						
	Overnight stays for annual site visit	\$ 237.76	1	\$ 237.76			
	Allowance for meals (# of days) for						
Update management plan	Review and update management	\$ 210.00	5	\$ 42.00		travel included in annual visit	
Ecological monitoring	Monitoring T&E species, inventory	\$ -	1	\$ -			
	Supplies	\$ -		\$ -			
Invasive species control (plants)	Contract Amount	\$ 430.00	1	\$ 430.00		8.6 acres at \$50/acre	
	Staff Oversight	\$ 375.00		\$ 375.00		8.5hr travel, 2hr field conf, 2hr contracting	
Nuisance wildlife control	Materials or Contract Amount	\$ -	1	\$ -			
	Labor or Staff Oversight	\$ -		\$ -			
Prescribed fire	Cost of burn (burn plan, implementation, follow-up monitoring)	\$ -	1	\$ -			
	Staff oversight of contract	\$ -		\$ -			
	Annual training and recertification	\$ -	1	\$ -			
Vegetation management	Materials or Contract Amount	\$ -	1	\$ -			
	Labor or Staff Oversight	\$ -		\$ -			
Supplies	Small equipment & supplies	\$ -	1	\$ -			
Other (add description)	Materials or Contract Amount	\$ -	1	\$ -			
	Labor or Staff Oversight	\$ -		\$ -			

Occupancy

Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost
Occupancy						
Property taxes	Taxes, drainage assessments, other fees			1	ea	\$ -
Insurance				1	ea	\$ -
Other fees	eg. utilities, water rights			1	ea	\$ -



SUMMARY OF LONG-TERM COSTS AND PRINCIPAL NEEDED

Project Name:	Acres:	State (or state equivalent):	Country:	Prepared by:	Date:
Stream and Riparian Buffer ILF Restoration	80	N/A	US	ILF Manager	3/28/2016

Site Protection Monitoring and Easement Stewardship

Annual Cost Subtotal (see Tab 2 for details)		\$ 1,027.76
Contingency (10-20%)	10%	\$ 102.78
Administrative (min 10%)	10%	\$ 113.05
Annual Cost Total (includes Option B Legal Defense Costs):		\$ 1,243.59
Capitalization Rate:	4.55%	
Option A: Legal defense fund contribution		\$ 5,000.00
Total Fund Principal Needed for Site Protection Monitoring and Easement Stewardship:		\$ 32,331.64

Principal = $\frac{\text{annual costs}}{\text{cap rate}}$

Land Management and Maintenance

Annual Cost Subtotal (see Tab 3 for details)		\$ 2,339.49
Contingency (10-20%)	10%	\$ 233.95
Administrative (min 10%)	10%	\$ 257.34
Annual Cost Total:		\$ 2,830.78
Capitalization Rate:	4.55%	
Total Fund Principal Needed for Land Management and Maintenance:		\$ 62,214.92
Overall Total Fund Principal Needed:		\$ 94,546.56

Managing Money for the Long-term

LONG-TERM STEWARDSHIP CALCULATOR: ACCOMPANYING HANDBOOK



The Nature
Conservancy 


May 2016

- Types of funds
- Choosing an appropriate cap rate
- Investment strategy needed to achieve cap rate
- Different financing approaches
- Alternative funding sources
- Example NFWF Investment Policy Statement

Additional resources

- Doscher, P. et al. 2007. *Determining Stewardship Costs and Raising and Managing Dedicated Funds*. Standards and Practices Curriculum. Ed. Sylvia Bates. Land Trust Alliance, www.landtrustalliance.org/publication/determining-stewardship-costs-raising-and-managing-dedicated-funds
- Environmental Law Institute. 2012. *Wetland and Stream Mitigation: A Handbook for Land Trusts*. Washington, DC, www.eli.org/land-biodiversity/wetland-and-stream-mitigation-handbook-land-trusts
- Land Trust Alliance. 2015. *Calculating Minimum Legal Defense Reserves for Land Trusts*. Land Trust Alliance Conservation Defense Initiative, www.landtrustalliance.org/topics/conservation-defense

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Libraries


Lists


Core Data

Global Atlas

Tools


► Stewardship Calculator and Handbook





 Partnering

 **TOOLS & DATA**

Stewardship Calculator and Handbook

4/18/2016

 **DOWNLOAD FILE: STEWARDSHIP CALCULATOR** (external users)





Ever wondered how to ensure your restoration or protection project is successful 10, 20, 50 years from now? The following resources are available to help practitioners calculate long-term management costs:

Calculators: An excel file with four tabs that walks users through different cost inputs. Practitioners enter in localized dollar amounts in blue boxes. For a short tutorial on the calculator, watch for an upcoming video. To sign up to receive notifications of updates to the calculator, please [send an e-mail](#).

[Calculator for internal TNC use](#) | [Calculator for external \(non-TNC\) use](#)

Accompanying handbook: The handbook mirrors the format of the calculator and is meant to be a side-by-side resource for users filling in the calculator. Users can read the full handbook or just use sections where they have questions on specific costs. There are helpful tips on estimating costs throughout the handbook that may be useful for first time users or new project managers.

Quick reference guide: This is a short "cheat sheet" with instructions for using the calculator. Practitioners who have used the calculator and handbook before may find this a useful tool to remind them of key considerations when using the tool.

Calculator Factsheet: Looking for an easy way to explain to a colleague why the calculator is important and what resources are available? This [two-page handout](#) is just what you need!

Give it a try!

www.nature.org/stewardshipcalculator



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