

APPENDIX L:

Estimated User Rate Analysis

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 1

ESTIMATED USER RATES	
Funding Agency-PennVest (Option 1-30 yr. payback period w/ 1.0% int. and \$5.2 Million in Grants)	
Case: Alternative 1	
Construction of a Central Sewage Collection System and Conveyance Line to Plains Township Sewer System	
Cost Description	
Capital Cost Estimate Summary - Alternative No. 1 (Including Land)	
1 Sewage Collection and Conveyance System	\$ 10,405,519
2 State Route 115 Corridor Sewage Collection System	\$ 1,066,111
3 Sewage Conveyance System	\$ 988,416
4 Equalization Tank/Pump Station	\$ 838,800
5 Connection Fee to Plains	\$ 210,000
Total	\$ 13,508,846
Financing	
PENNVEST Funding Package	
TOTAL PROJECT COST	\$ 13,508,846
EST. NUMBER EDUs	480
\$500 Connection Fee for each EDU (Bear Creek Twp.)	
CONNECTION FEE - \$500/EDU	\$ 240,000
GRANT MONEY	\$ 6,100,000
BALANCE TO FINANCE	\$ 7,168,846
Financing Parameters Using Pennvest Standard Loan Offer	
Assume:	
n = 30 YRS (payback period)	
i = 1.00% (interest rate)	
Final User Cost	
1 Debt Repayment Fee	\$ 579
2 Operation and Maintenance Fee (includes fees to Plains and WVSA)	\$ 410
Subtotal User Fee	\$ 988
Annual User Fee with 10% non-pay rate	\$ 1,098

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 1

ESTIMATED USER RATES			
Funding Agency - PENNVEST (Option 2 - 30 yr. payback period w/ 1.0% interest and No Grants)			
Remaining Proj. Costs financed through: Rural Utilities Service (RUS) (40 yr. payback per. w/ 3.75% int. and No Grants)			
Case: Alternative 1			
Construction of a Central Sewage Collection System and Conveyance Line to Plains Township Sewer System			
Cost Description			
Capital Cost Estimate Summary - Alternative No. 1 (Including Land)			
1 Sewage Collection and Conveyance System		\$	10,405,519
2 State Route 115 Corridor Sewage Collection System		\$	1,066,111
3 Sewage Conveyance System		\$	988,416
4 Equalization Tank/Pump Station		\$	838,800
5 Connection Fee to Plains		\$	210,000
	Total	\$	13,508,846
Financing			
PENNVEST Funding Package			
Max. Amount funded by PennVest (per current PennVest guidelines)			
	\$		11,000,000
EST. NUMBER EDUs			
			480
\$500 Connection Fee for each EDU (Bear Creek Twp.)			
	\$	240,000	
CONNECTION FEE - \$500/EDU			
	\$		-
GRANT MONEY			
Financing Parameters Using Pennvest Loan Offer			
Assume:			
n = 30 YRS (payback period)			
i = 1.0% (interest rate)			
Partial User Cost (PENNVEST)			
1 Debt Repayment Fee	\$		888
BALANCE TO FINANCE (RUS)			
	\$		2,268,846
Financing Parameters Using RUS Standard Loan Offer			
Assume:			
n = 40 YRS (payback period)			
i = 3.75% (interest rate)			
Partial User Cost (RUS)			
1 Debt Repayment Fee	\$		230
Total User Cost			
1 Partial User Cost (PennVest)	\$		888
2 Partial User Cost (RUS)	\$		230
Operation and Maintenance Fee (includes fees to Plains and WWSA)			
	\$		410
Subtotal User Fee			
	\$		1,528
Annual User Fee with 10% non-pay rate			
	\$		1,697

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 1

ESTIMATED USER RATES	
Funding Agency-Rural Utilities Service (RUS) (Option 3-40 yr. payback per. w/ 3.75% int. and No Grants)	
Case: Alternative 1	
Construction of a Central Sewage Collection System and Conveyance Line to Plains Township Sewer System	
Cost Description	
Capital Cost Estimate Summary - Alternative No. 1 (Including Land)	
1 Sewage Collection and Conveyance System	\$ 10,405,519
2 State Route 115 Corridor Sewage Collection System	\$ 1,066,111
3 Sewage Conveyance System	\$ 988,416
4 Equalization Tank/Pump Station	\$ 838,800
5 Connection Fee to Plains	\$ 210,000
Total	\$ 13,508,846
Financing	
RUS Standard Funding Package	
TOTAL PROJECT COST	\$ 13,508,846
EST. NUMBER EDUs	480
\$500 Connection Fee for each EDU (Bear Creek Twp.)	
CONNECTION FEE - \$500/EDU	\$ 240,000
GRANT MONEY	\$ -
BALANCE TO FINANCE	\$ 13,268,846
Financing Parameters Using RUS Standard Loan Offer	
Assume:	
n = 40 YRS (payback period)	
i = 3.75% (interest rate)	
Final User Cost	
1 Debt Repayment Fee	\$ 1,345
2 Operation and Maintenance Fee (includes fees to Plains and WWSA)	\$ 410
Subtotal User Fee	\$ 1,755
Annual User Fee with 10% non-pay rate	\$ 1,950

Bear Creek Twp, Luzerne County, PA
Sewage Facilities Alternative 2

ESTIMATED USER RATES		
Funding Agency - PENNVEST (Option 2 - 30 yr. payback period w/ 1.0% interest and No Grants)		
Remaining Proj. Costs financed through: Rural Utilities Service (RUS) (40 yr. payback per. w/ 3.75% int. and No Grants)		
Case: Alternative 2		
Construction of a Sanitary Sewer System and 0.15 MGD Plant near Study Area No. 1		
Direct Stream Discharge to Deep Hollow		
Total Project Cost Estimate Summary - Alternative No. 2		
1 Sewage Collection and Conveyance System	\$	10,405,519.20
2 State Route 115 Corridor Sewage Collection System	\$	1,066,111.20
3 Wastewater Treatment Plant (0.15 MGD SBR)	\$	4,073,760.00
Total	\$	15,545,390.40
Financing		
PENNVEST Funding Package		
Max. Amount funded by PennVest (per current PennVest guidelines)		
EST. NUMBER EDUs	\$	11,000,000
\$500 Connection Fee for each EDU (Bear Creek Twp.)		
CONNECTION FEE - \$500/EDU	\$	240,000
GRANT MONEY	\$	-
Financing Parameters Using Pennvest Loan Offer		
Assume:		
n = 30 YRS (payback period)		
i = 1.0% (interest rate)		
Partial User Cost (PENNVEST)		
1 Debt Repayment Fee	\$	888
BALANCE TO FINANCE (RUS)	\$	4,305,390
Financing Parameters Using RUS Standard Loan Offer		
Assume:		
n = 40 YRS (payback period)		
i = 3.75% (interest rate)		
Partial User Cost (RUS)		
1 Debt Repayment Fee	\$	436
Total User Cost		
1 Partial User Cost (PennVest)	\$	888
2 Partial User Cost (RUS)	\$	436
3 Operation and Maintenance Fee	\$	508
Subtotal User Fee	\$	1,833
Annual User Fee with 10% non-pay rate	\$	2,036

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 3

ESTIMATED USER RATES		
Funding Agency - PENNVEST (Option 2 - 30 yr. payback period w/ 1.0% interest and No Grants)		
Remaining Proj. Costs financed through: Rural Utilities Service (RUS) (40 yr. payback per. w/ 3.75% int. and No Grants)		
Case: Alternative 3		
Construction of a Sanitary Sewer System and 0.15 MGD Plant near Study Area No. 2		
Spray irrigation with seasonal stream discharge		
Total Project Cost Estimate Summary - Alternative No. 3		
1 Sewage Collection and Conveyance System		\$ 10,939,816.80
2 Wastewater Treatment Plant (0.15 MGD SBR)		\$ 4,610,880.00
3 Spray Irrigation System		\$ 3,241,713.60
	Total	\$ 18,792,410.40
Financing		
PENNVEST Funding Package		
Max. Amount funded by PennVest (per current PennVest guidelines)		
	\$	11,000,000
EST. NUMBER EDUs		
		480
\$500 Connection Fee for each EDU (Bear Creek Twp.)		
CONNECTION FEE - \$500/EDU		
	\$	240,000
GRANT MONEY		
	\$	-
Financing Parameters Using Pennvest Loan Offer		
Assume:		
n = 30 YRS (payback period)		
i = 1.0% (interest rate)		
Partial User Cost (PENNVEST)		
1 Debt Repayment Fee	\$	888
BALANCE TO FINANCE (RUS)		
	\$	7,552,410
Financing Parameters Using RUS Standard Loan Offer		
Assume:		
n = 40 YRS (payback period)		
i = 3.75% (interest rate)		
Partial User Cost (RUS)		
1 Debt Repayment Fee	\$	766
Total User Cost		
1 Partial User Cost (PennVest)	\$	888
2 Partial User Cost (RUS)	\$	766
3 Operation and Maintenance Fee	\$	582
Subtotal User Fee	\$	2,236
Annual User Fee with 10% non-pay rate	\$	2,484

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 4

ESTIMATED USER RATES		
Funding Agency - PENNVEST (Option 2 - 30 yr. payback period w/ 1.0% interest and No Grants)		
Remaining Proj. Costs financed through: Rural Utilities Service (RUS) (40 yr. payback per. w/ 3.75% int. and No Grants)		
Case: Alternative 4		
Construction of a Sanitary Sewer System and 0.15 MGD Plant near Study Area No. 2		
Spray irrigation with no direct stream discharge		
Total Project Cost Estimate Summary - Alternative No. 4		
1 Sewage Collection and Conveyance System	\$	11,119,816.80
2 Wastewater Treatment Plant (0.15 MGD Extended Aeration)	\$	3,698,640.00
3 Spray Irrigation System	\$	4,542,588.00
Total	\$	19,361,044.80
Financing		
PENNVEST Funding Package		
Max. Amount funded by PennVest (per current PennVest guidelines)		
\$	11,000,000	
EST. NUMBER EDUS		
480		
\$500 Connection Fee for each EDU (Bear Creek Twp.)		
CONNECTION FEE - \$500/EDU	\$	240,000
GRANT MONEY	\$	-
Financing Parameters Using Pennvest Loan Offer		
Assume:		
n = 30 YRS (payback period)		
i = 1.0% (interest rate)		
Partial User Cost (PENNVEST)		
1 Debt Repayment Fee	\$	888
BALANCE TO FINANCE (RUS)	\$	8,121,045
Financing Parameters Using RUS Standard Loan Offer		
Assume:		
n = 40 YRS (payback period)		
i = 3.75% (interest rate)		
Partial User Cost (RUS)		
1 Debt Repayment Fee	\$	823
Total User Cost		
1 Partial User Cost (PennVest)	\$	888
2 Partial User Cost (RUS)	\$	823
3 Operation and Maintenance Fee	\$	601
Subtotal User Fee	\$	2,313
Annual User Fee with 10% non-pay rate	\$	2,570

Bear Creek Township, Luzerne County, PA
Sewage Facilities Alternative 5

ESTIMATED USER RATES - Study Areas 1 and 2	
Funding Agency - PENNVEST (Option 2 - 30 yr. payback period w/ 1.0% interest and No Grants)	
Remaining Proj. Costs financed through: Rural Utilities Service (RUS) (40 yr. payback per. w/ 3.75% int. and No Grants)	
Case: Alternative 5	
Separate Sanitary Sewer System and Community Subsurface Disposal	
Total Project Cost Estimate Summary - Alternative No. 5	
1 Sewage Collection and Conveyance System - Study Area No. 1 and 2	\$ 10,939,816.80
2 Wastewater Treatment Plant (0.15 MGD SBR)	\$ 3,984,480.00
3 Subsurface Wastewater Disposal - Study Areas 1 and 2	\$ 8,197,920.00
Total	\$ 23,122,216.80
Financing	
PENNVEST Funding Package	
Max. Amount funded by PennVest (per current PennVest guidelines)	\$ 11,000,000
EST. NUMBER EDUs	480
\$500 Connection Fee for each EDU (Bear Creek Twp.)	
CONNECTION FEE - \$500/EDU	\$ 240,000
GRANT MONEY	\$ -
Financing Parameters Using Pennvest Loan Offer	
Assume:	
n = 30 YRS (payback period)	
i = 1.0% (interest rate)	
Partial User Cost (PENNVEST)	
1 Debt Repayment Fee	\$ 888
BALANCE TO FINANCE (RUS)	\$ 11,882,217
Financing Parameters Using RUS Standard Loan Offer	
Assume:	
n = 40 YRS (payback period)	
i = 3.75% (interest rate)	
Partial User Cost (RUS)	
1 Debt Repayment Fee	\$ 1,205
Total User Cost	
1 Partial User Cost (PennVest)	\$ 888
2 Partial User Cost (RUS)	\$ 1,205
3 Operation and Maintenance Fee	\$ 553
Subtotal User Fee	\$ 2,646
Annual User Fee with 10% non-pay rate	\$ 2,940