

FUTURE RESTORATION ENDEAVORS

There is no doubt the Little Conestoga Creek Watershed is significantly impaired, offering (to say the least) substantial restoration and improvement opportunity for those willing to tackle the endeavor.

Fortunately, the Little Conestoga Watershed Alliance has accepted the challenge. But such a daunting task can seem overwhelming at times. Completed restoration projects can seem small and insignificant when compared to the vast amounts of remaining work. With this in mind, it is vitally important the Little Conestoga Watershed Alliance keeps things in proper perspective and approach ever existing problems at a reasonable pace to avoid frustration and fatigue.

One of the first realizations the Alliance needs to face is the fact that they cannot “fix” the watershed by themselves. Outside help is required; thus partners with similar interests are required. The Alliance doesn’t have to do all the work, if they are capable of getting others interested in their restoration endeavor.

Secondly, the Alliance didn’t make the “mess” to begin with. The intentions of the Alliance are simply to “fix” what others have “broke” (and doing so on a volunteer basis). Therefore any restoration accomplishment, whether how big or small, is in fact an accomplishment and a step in the right direction. Take pride in both the small and large victories!

Thirdly, a watershed such as the Little Conestoga Creek Watershed will never be completely restored. It’s too involved and ever changing within its 65.5-square miles. There will always be another problem to fix. This is not to say great strides cannot be made and significant restoration as a whole occur– indeed it can! Rather the point is that there will always be problems to various degrees requiring corrective action. Therefore, the ultimate goal of restoring the watershed is to have the “good” outweigh, outperform and cancel out the “bad”.

Fourthly, not everyone will appreciate and fall in love with the idea of restoring the Little Conestoga Creek – namely those who are singled out as being behind the problems. Winning over stubborn landowners and educating watershed stakeholders and public officials will be an ongoing challenge.

Lastly and most importantly, follow the restoration plan. There is a logical progression to stream and watershed restoration. Generally speaking, it is wise to concentrate work in one or two sub-watersheds rather than skipping around the entire watershed. Sub-watersheds the size of which they are broken down in the report writing are manageable. When working in each sub-watershed, it is wise to begin restoration work in the headwaters and proceed downstream in a contiguous fashion thereby “fixing” the stream as you go. What you want to avoid is some sort of restoration project mid-watershed that is rendered insignificant or useless because of still existing problems upstream.

PRIORITIZING DISCOVERED PROBLEMS

RESTORATION STRATEGY PRIORITIZED ON A SUB-WATERSHED BASIS

CRITICALLY IMPAIRED SUB-WATERSHEDS

Bachman Run	Manheim Township <ul style="list-style-type: none">• A tributary within the Little Conestoga Creek Main Stem Sub-watershed• Residential stormwater related impacts
Millers Run	East Hempfield Township <ul style="list-style-type: none">• Severe property damage• Residential stormwater related impacts
Swarr Run	East Hempfield Township <ul style="list-style-type: none">• Agricultural related impacts• Residential stormwater related impacts
West Branch	Manor Township <ul style="list-style-type: none">• Agricultural related impacts

RESTORATION STRATEGY BY SUB-WATERSHED – BEGINNING IN HEADWATERS AND PROCEEDING DOWNSTREAM

Brubaker Run	East Hempfield Township
<i>High Priority</i>	Stormwater management and water quality retrofits within Old Sycamore Industrial Park, Sycamore Business Complex and Centerville Industrial Park
<i>High Priority</i>	Streambank erosion, lack of forest buffer @ J. Wilson and Donna J. Hershey farm, 2715 Columbia Avenue
<i>High Priority</i>	Streambank erosion, farmed/cropped right up to the stream channel, sedimentation from cropland @ Herley Industries, Inc. property, Running Pump Road
<i>High Priority</i>	Streambank erosion, forest buffer could be improved @ John I. Hartman, Jr. farm, 2452 Marietta Avenue
<i>High Priority</i>	Streambank erosion, lack of forest buffer though stream is located in fallowing pasture @ WMP Ltd. property, 206 Rohrerstown Road

High Priority Littering, channelized stream, thermal pollution, parking lot contaminants, stormwater quality BMP retrofit possibilities @ Stauffers of Kissel Hill store, Millersville Road

Medium Priority Streambank erosion, lack of forest buffer @ Church of the Apostles, 1842 Marietta Avenue

Low Priority Littering associated with homeowners with Regency Square and Glenbrook developments

Low Priority Removal of exotic, invasive plant species with the East Hempfield Township Park

Low Priority In-stream habitat improvements downstream of Glenbrook Court

Indian Run Manor Township

Medium Priority Sporadic pasturelands where livestock has free access to stream, streambank erosion, lack of forest buffer from the headwaters downstream to Indian Run Road

High Priority Free cattle access to stream, streambank erosion @ Richard C. Falk, Jr. farm, 1004 Breneman Road

Low Priority Sporadic streambank erosion downstream of Indian Run Road

Medium Priority Free cattle access to stream @ Allan R. Herr farm, 707 Walnut Hill Road, located right at the mouth of Indian Run

Millers Run East Hempfield Township

Medium Priority Sporadic streambank erosion from headwaters downstream to Westminster Drive @ School Lane Estates development

High Priority Severe streambank erosion due to lack of stormwater management, stormwater quality BMP retrofit possibilities, lack of forest buffer, floodway encroachments by landowners, stream channel incised – needs to be re-introduced to floodway and floodplain from Westminster Drive @ School Lane Estates development downstream to Sylvan Road

There is an on-going Growing Greener Project within this area as of this writing

High Priority Severe streambank erosion, sedimentation from Sylvan Road downstream to Old Harrisburg Pike @ Joseph F. and Dianne M. Mast property, 1059 Sylvan Road and @ Sylvan View Farms PT property currently undergoing subdivision (“Village Grande At Millers Run”), 2348 Harrisburg Pike

High Priority Encourage East Hempfield Township to be most pro-active within this sub-watershed with specific interest in retrofitting/installing stormwater controls and water quality BMPs – Also encourage off-site mitigation of stormwater management facilities to headwater areas

Swarr Run East Hempfield Township

High Priority Severe streambank erosion and lack of forest buffer @ East Hempfield Sports Complex owned by East Hempfield Township

High Priority Lack of forest buffer, sporadic streambank erosion @ Larry J. Booth farm, 1046 Snapper Road

High Priority Lack of forest buffer, streambank erosion @ Gregory A. Meinzer property, 580 Church Street

High Priority Lack of forest buffer, evidence of past stream relocation, existing wetland impacts, currently farmed but owned by Hempfield School District just upstream of Church Street, property at 478 Church Street

Medium Priority Retrofit stormwater basins with water quality BMPs at Hempfield High School and Middle School

High Priority Free cattle access to stream, streambank erosion, lack of forest buffer, sedimentation from cropland @ Titus B. Stoner farm, 3207 Bowman Road

Medium Priority Free cattle access to stream, streambank erosion, lack of forest buffer, sedimentation from cropland @ Benjamin S. Landis farm, 1361 Nissley Road

Medium Priority Stormwater retrofits @ Olde Forge Crossing residential subdivision

Medium Priority Lack of forest buffer, streambank erosion @ Lloyd B. Denlinger property, 3060 Harrisburg Pike

Medium Priority Free sheep access to stream, sporadic streambank erosion, lack of forest buffer @ farm owned by Centaurus LLC, 2148 State Road

High Priority Free cattle access to stream, severe streambank erosion, lack of in-stream cover, lack of forest buffer, sedimentation from cropland, occasional manure spills due to overflowing manure storage @ Mann Family Partnership II farm, 2701 State Road

As of this writing, there is an ongoing 319 Grant Project for this farm – owners currently working with Lancaster County Conservation District

High Priority Free cattle access to stream, severe streambank erosion, lack of in-stream cover, lack of forest buffer, sedimentation from cropland, manure introduction from feedlot @ Clair D. Landis farm, 1366 Colebrook Road

Medium Priority Sporadic streambank erosion @ Robert Z. Getz property

Medium Priority Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover @ Golden Meadows, Inc. property

Medium Priority Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover @ The TC Lancaster West Co. property, 1-419 Colonial Crest Drive

Medium Priority Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover, stormwater basin water quality BMP retrofits @ Mennonite Home Inc. property, 2001 Harrisburg Pike

Medium Priority Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover, littering @ MGA Acquisition LP property, 2000 Swarr Run Road

West Branch Manor Township

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, farmed right up to stream channel @ Fieldcrest Associates property, 292 Hershey Mill Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, farmed right up to stream channel @ H. James Shearer farm, 388 Hershey Mill Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Nelson H. Hershey farm, 420 Rohrer Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ J. Clayton Charles, Jr. farm, 229 Habecker Church Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Elmer S. Sensenig, Jr. farm, 228 Habecker Church Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ David E. Charles farm, 3101 Charlestown Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ P. Kenneth Rohrer farm, 3052 Charlestown Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Marlin S. Harnish farm, 3421 Blue Rock Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Wilmer D. Rohrer, Inc. farm, 3390 Blue Rock Road

Medium Priority Lack of forest buffer, lack of in-stream habitat, localized sedimentation problem due to dam at the George B. Mann farm @ Chanastocka Nature Sanctuary owned by the Lancaster County Conservancy

As of this writing, this area was proposed for restoration funding to the Growing Greener Program in February 2003

High Priority Remove dam blockage @ George B. Mann farm lane (see above)

Unnamed Tributary intersecting West Branch @ Chanastocka Nature Sanctuary

(Properties listed from headwaters of tributary downstream to the confluence with the West Branch)

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Simeon S. Glick farm, 503 Habecker Church Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Norman Shertzer farm, 530 Habecker Church Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Clyde E. Kreider farm, Charlestown Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Jay V. Funk farm, 3593 Blue Rock Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Wilmer D. Rohrer Inc. farm, Blue Rock Road

Medium Priority Streambank erosion @ Wendell L. Funk property

Listing now returning to the main West Branch downstream of Chanastocka Nature Sanctuary

High Priority Small pasture and grasslands immediately upstream and downstream from Bender Mill Road, severe streambank erosion, lack of forest buffer

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ James R. Barley farm, Bender Mill Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Joan A. Witmer farm, Letort Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland @ David H. Frey farm, 704 Stehman Church Road

Medium Priority Agricultural related impacts from David H. Frey farm downstream to confluence with Main Stem – Includes following farms:

Letort Valley Farms, 400 Owl Bridge Road
Michael H. Walmer, North Cherry Street
Gregory J. Breslin, 523 Stehman Church Road
Ronald E. Hunt, 465 Stehman Church Road

Main Stem of Little Conestoga Creek

East Hempfield Township
Lancaster Township
Manheim Township
Manor Township

Major Influencing Municipalities

Penn Township
Warwick Township
Lancaster City
East Petersburg Borough
Lititz Borough
Millersville Borough

Minor Influencing Municipalities

- High Priority* Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Dale M. Nolt farm, 307 Bucknoll Road
- High Priority* Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Noah W. Kreider & Sons Farm, 1461 Lancaster Road
- High Priority* Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Kevin L. Nolt farm, 1603 Lancaster Road
- Medium Priority* Lack of forest buffer @ Oakwood Properties, 1276 Lititz Road
- High Priority* Streambank erosion, lack of forest buffer, free cattle access to stream @ Allen D. Esbenshade farm, 882 Lititz Road – owner did do some rip-rapping of streambank along Lititz Road
- High Priority* Streambank erosion, lack of forest buffer, free cattle access to stream @ Gilbert B. Lyons farm, 1026 Lititz Road
- Medium Priority* Binkley & Ober, Inc. quarry and McMinn’s Asphalt @ Lancaster Road (Rte. 72) – McMinn’s parking lot and staging area yielding contaminants to quarry discharge – mainly fine limestone dusts, litter and thermal pollution – high rates of stormwater runoff from McMinn’s parking lot – no stormwater detention – Binkley & Ober, Inc. owns next property downstream from McMinn’s Asphalt where a water quality basin and/or wetland treatment system could be installed
- High Priority* Streambank erosion, free cattle access to stream, lack of forest buffer @ C. Gordon Ober farm, Quarry Road

High Priority Streambank erosion, free cattle access to stream, lack of forest buffer @ Benuel L. Petersheim farm, 709 Petersburg Road

Medium Priority Fallowing pasture, sporadic streambank erosion, possibility to improve forest buffer and in-stream habitat @ Wetherburn North ETAL, Fruitville Pike (Mr. Barry Hogan) – just upstream of confluence with tributary Bachman Run

Medium Priority Fallowing pasture, sporadic streambank erosion, possibility to improve forest buffer and in-stream habitat @ Peter B. Rohrer farm, 2544 Fruitville Pike and Ruth H. Rohrer farm, 2686 State Road – these farmsteads are right at the confluence with tributary Bachman Run

Bachman Run – Tributary within the Main Stem Sub-watershed

(Properties listed from headwaters of Bachman Run downstream to its confluence with the Main Stem)

High Priority Rohrer’s Quarry – Currently in midst of upgrading sediment basin which should greatly improve pumping influence to Bachman Run – Depending upon storm events and groundwater levels, the quarry pumps large quantities of water from the quarry pit into the stream thus dramatically controlling flow volumes within the upper reaches of Bachman Run – sometimes the stream has water in it and some times it doesn’t during the summer months

High Priority Streambank erosion, littering, introduction of manure due to poor barnyard management, lack of forest buffer, free cattle access to stream, sinkholes in substrate of stream @ David K. King farm, 929 Erbs quarry Road

High Priority Streambank erosion, sedimentation from cropland, sinkholes in substrate of stream @ James R. Buckwalter farm, 511 Snyder Road – very serious problem with sinkholes at this farm and David K. King farm

Medium Priority Retrofit stormwater quality BMPs within the following residential developments:

Milton Estates	Buckfield	Stonehenge
Wetherburn North	Mill Pond	Kingspointe
Flyway Business Park		

These developments do have stormwater management detention basins so flooding is not a problem

High priority Streambank erosion, lack of forest buffer, free cattle access to stream @ Philip W. Eyster farm, Buckwalter Road

High Priority Streambank erosion, sedimentation from cropland @ Buckwalter Farm LLC, 860 Buckwalter Road

Medium Priority Streambank erosion, lack of forest buffer, lawn clippings dumped into stream, floodway encroachments @ Wetherburn and Jeb Family LTD Partnership immediately upstream of Fruitville Pike

A Growing Greener Project is currently funded and under design in this area

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the Bachman Run Tributary

Medium Priority Horse farm – pasture could use streambank fencing and forest buffer, sporadic streambank erosion @ Harry J. Fogarty farm, 2620 Miller Road

High Priority Remove dam at PPL, Inc. upstream of Mannheim Pike (Route 72), also improve forest buffer and in-stream cover in area of dam

Medium Priority Retrofit stormwater quality BMPs @ Yellow Freight downstream of Manheim Pike (Route 72)

Medium Priority Lack of forest buffer, lack of in-stream cover @ Florys Mill

Unnamed tributary that enters Main Stem of the little Conestoga just below Florys Mill

High Priority Streambank erosion, sedimentation from nursery and greenhouse operation, lack of forest buffer @ Lloyd M. Lapp nursery, 1472 Stevens Street

Medium Priority Streambank erosion, sedimentation from cropland @ Hershey T. Rohrer, Jr. farm, 1572 State Road

High Priority Streambank erosion, lack of forest buffer, free cattle access to stream @ Vernon H. Charles farm, 2249 Leabrook Road

High Priority Streambank erosion, lack of forest buffer, sedimentation from cropland, processing of corn product waste generating a liquid waste that is

routinely irrigated on cropland where it evidently washes into stream via storm events – BOD problems suspected – a yeasty, fermenting smell is very discernable in the substrate sediments at Route 283 – Need to involve PADEP @ Clyde H. Kreider farm, 2278 Leabrook Road

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the unnamed tributary at Florys Mill

- High Priority* Lack of forest buffer, water quality BMP retrofits with Granite Run Corporate Center
- High Priority* Thermal pollution, stormwater management and water quality retrofits at Park City
- High Priority* Severe streambank erosion, lack of forest buffer, very poor in-stream cover/habitat for aquatic life @ Mennonite Home, Inc.
- High Priority* Severe streambank erosion, lack of forest buffer, lack of in-stream cover @ Mark N. Ashley farm, 1048 W. Roseville Road

Main Stem of the Little Conestoga Creek downstream of Route 30

- Medium Priority* Water quality issues with pond and waterfowl, nutrient loading @ Longs Park
- Medium Priority* Sporadic streambank erosion, various locations where forest buffer could be improved, in-stream cover/habitat for aquatic life (especially Smallmouth bass could be greatly improved) @ the following properties:
- Deisley Family LTD Partnership, 1418 Harrisburg Pike
Lancaster County Solid Waste, Farmingdale Road
Lancaster Malleable Castings, Harrisburg Pike
Franklin & Marshall College
- High Priority* Streambank erosion, lack of forest buffer, very poor in-stream habitat for aquatic life @ Windsor Court LP, 1821 Hidden Lane
- High Priority* Streambank erosion, lack of forest buffer, very poor in-stream habitat for aquatic life @ National Properties, Inc., 1707 Marietta Avenue
- Medium Priority* Retrofit stormwater quality BMPs within the following residential developments:

Barrcrest
School Lane Hills

Glenbrook
Woodlawn

Medium Priority Maintain recently planted riparian forest buffer and monitor in-stream structures @ Maple Grove Park

Medium Priority Retrofit stormwater quality BMPs within the following residential developments:

Stone Mill Manor Mobile Home Park
Canterbury Place

Pheasant Ridge
West Ridge

High Priority Work with the Conestoga Country Club and educate them in regards to the watershed restoration effort – They have been observed dumping their lawn clipping and yard wastes directly into the Little Conestoga Creek! Streambank stability and in-stream habitat are also concerns within the country club property

Medium Priority Streambank erosion/stability issues with falling trees, lack of forest buffer, poor in-stream habitat for aquatic life (habitat could greatly be improved for Smallmouth bass) @ Manor Township Park

High Priority Remove large log jam @ Benjamin H. Shertzer farm, 271 Blue Rock Road

Submitted for Growing Greener funding in February, 2003

High Priority Remove Frantz Mill Dam @ Ironstone Ridge Road

Low Priority Farms and properties downstream of Frantz Mill Dam

OTHER CONCERNS, SOLUTIONS AND STRATEGIES

COST ANALYSIS (ESTIMATED) AND FUNDING SOURCES

Streambank Fencing

Indian Run Manor Township

1. Sporadic pasturelands where livestock has free access to stream, streambank erosion, lack of forest buffer from the headwaters downstream to Indian Run Road

Fencing	10,000-feet	\$ 20,000.00
Forest buffer	8.0-acres (35-foot width, both sides)	\$ 8,000.00
Streambank stabilization, in-stream habitat		\$ 30,000.00
Engineering, consulting		\$ 10,000.00
	TOTAL	\$ 68,000.00

2. Free cattle access to stream, streambank erosion @ Richard C. Falk, Jr. farm, 1004 Breneman Road

Fencing	2,600-feet	\$ 5,200.00
Forest buffer	0.5-acres (35-foot width, both sides)	\$ 500.00
Streambank stabilization, in-stream habitat		\$ 4,000.00
Engineering, consulting		\$ 2,000.00
	TOTAL	\$ 11,700.00

3. Free cattle access to stream @ Allan R. Herr farm, 707 Walnut Hill Road, located right at the mouth of Indian Run

Fencing	2,600-feet	\$ 5,200.00
Forest buffer	1.8-acres (35-foot width, both sides)	\$ 1,800.00
Streambank stabilization, in-stream habitat		\$ 8,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 18,000.00

Swarr Run**East Hempfield Township**

4. Free cattle access to stream, streambank erosion, lack of forest buffer, sedimentation from cropland @ Titus B. Stoner farm, 3207 Bowman Road

Fencing	3,600-feet	\$ 7,200.00
Forest buffer	2.5-acres (35-foot width, both sides)	\$ 2,500.00
Streambank stabilization, in-stream habitat		\$ 13,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 27,700.00

5. Free cattle access to stream, streambank erosion, lack of forest buffer, sedimentation from cropland @ Benjamin S. Landis farm, 1361 Nissley Road

Fencing	3,150-feet	\$ 6,300.00
Forest buffer	2.2-acres (35-foot width, both sides)	\$ 2,200.00
Streambank stabilization, in-stream habitat		\$ 6,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 17,500.00

6. Free sheep access to stream, sporadic streambank erosion, lack of forest buffer @ farm owned by Centaurus LLC, 2148 State Road

Fencing	525-feet	\$ 1,050.00
Forest buffer	0.4-acres (35-foot width, both sides)	\$ 400.00
Streambank stabilization, in-stream habitat		\$ 6,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 10,950.00

7. Free cattle access to stream, severe streambank erosion, lack of in-stream cover, lack of forest buffer, sedimentation from cropland, manure introduction from feedlot @ Clair D. Landis farm, 1366 Colebrook Road

Fencing	3,000-feet	\$ 6,000.00
Forest buffer	2.0-acres (35-foot width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 30,000.00
Engineering, consulting		\$ 10,000.00
	TOTAL	\$ 48,000.00

West Branch Manor Township

8. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Nelson H. Hershey farm, 420 Rohrer Road

Fencing	3,750-feet	\$ 7,500.00
Forest buffer	2.6-acres (35-feet width, both sides)	\$ 2,600.00
Streambank stabilization, in-stream habitat		\$ 10,000.00
Engineering, consulting		\$ 6,000.00
	TOTAL	\$ 26,100.00

9. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ J. Clayton Charles, Jr. farm, 229 Habecker Church Road

Fencing	2,400-feet	\$ 4,800.00
Forest buffer	1.7-acres (35-feet width, both sides)	\$ 1,700.00
Streambank stabilization, in-stream habitat		\$ 8,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 19,500.00

10. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Elmer S. Sensenig, Jr. farm, 228 Habecker Church Road

Fencing	2,700-feet	\$ 5,400.00
Forest buffer	4.0-acres (35-feet width, both sides)	\$ 4,000.00
Streambank stabilization, in-stream habitat		\$ 12,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 25,900.00

11. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ David E. Charles farm, 3101 Charlestown Road

Fencing	1,200-feet	\$ 2,400.00
Forest buffer	0.8-acres (35-feet width, both sides)	\$ 800.00
Streambank stabilization, in-stream habitat		\$ 3,000.00
Engineering, consulting		\$ 1,500.00
	TOTAL	\$ 7,700.00

12. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ P. Kenneth Rohrer farm, 3052 Charlestown Road

Fencing	2,700-feet	\$ 5,400.00
Forest buffer	1.9-acres (35-foot width, both sides)	\$ 1,900.00
Streambank stabilization, in-stream habitat		\$ 9,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 19,800.00

13. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Marlin S. Harnish farm, 3421 Blue Rock Road

Fencing	3,450-feet	\$ 6,900.00
Forest buffer	2.4-acres (35-foot width, both sides)	\$ 2,400.00
Streambank stabilization, in-stream habitat		\$ 13,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 26,800.00

14. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Wilmer D. Rohrer, Inc. farm, 3390 Blue Rock Road

Fencing	4,500-feet	\$ 9,000.00
Forest buffer	3.0-acres (35-foot width, both sides)	\$ 3,000.00
Streambank stabilization, in-stream habitat		\$ 16,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 32,500.00

Unnamed Tributary intersecting West Branch @ Chanastocka Nature Sanctuary
(Properties listed from headwaters of tributary downstream to the confluence with the West Branch)

15. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Simeon S. Glick farm, 503 Habecker Church Road

Fencing	3,450-feet	\$ 6,900.00
Forest buffer	2.4-acres (35-foot width, both sides)	\$ 2,400.00
Streambank stabilization, in-stream habitat		\$ 5,000.00
Engineering, consulting		\$ 1,500.00
	TOTAL	\$ 15,800.00

16. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Norman Shertzer farm, 530 Habecker Church Road

Fencing	3,900-feet	\$ 7,800.00
Forest buffer	2.7-acres (35-foot width, both sides)	\$ 2,700.00
Streambank stabilization, in-stream habitat		\$ 11,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 26,000.00

17. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Clyde E. Kreider farm, Charlestown Road

Fencing	2,250-feet	\$ 4,500.00
Forest buffer	1.5-acres (35-foot width, both sides)	\$ 1,500.00
Streambank stabilization, in-stream habitat		\$ 6,000.00
Engineering, consulting		\$ 2,500.00
	TOTAL	\$ 14,500.00

18. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Jay V. Funk farm, 3593 Blue Rock Road

Fencing	2,700-feet	\$ 5,400.00
Forest buffer	1.8-acres (35-foot width, both sides)	\$ 1,800.00
Streambank stabilization, in-stream habitat		\$ 7,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 17,200.00

19. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Wilmer D. Rohrer Inc. farm, Blue Rock Road

Fencing	2,850-feet	\$ 5,700.00
Forest buffer	2.0-acres (35-foot width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 7,500.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 18,200.00

Listing now returning to the main West Branch downstream of Chanastocka Nature Sanctuary

20. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ James R. Barley farm, Bender Mill Road

Fencing	3,000-feet	\$ 6,000.00
Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 15,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 28,000.00

21. Streambank erosion, lack of forest buffer, sedimentation from cropland, cattle have free access to stream @ Joan A. Witmer farm, Letort Road

Fencing	1,200-feet	\$ 2,400.00
Forest buffer	0.7-acres (35-feet width, both sides)	\$ 700.00
Streambank stabilization, in-stream habitat		\$ 6,000.00
Engineering, consulting		\$ 2,000.00
	TOTAL	\$ 11,100.00

Main Stem of Little Conestoga Creek

22. Streambank erosion, lack of forest buffer, free cattle access to stream @ Allen D. Esbshade farm, 882 Lititz Road – owner did do some rip-rapping of streambank along Lititz Road

Fencing	3,000-feet	\$ 6,000.00
Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 11,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 24,000.00

23. Streambank erosion, lack of forest buffer, free cattle access to stream @ Gilbert B. Lyons farm, 1026 Lititz Road

Fencing	500-feet	\$ 1,000.00
Forest buffer	0.7-acres (35-feet width, both sides)	\$ 700.00
Streambank stabilization, in-stream habitat		\$ 2,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 6,700.00

24. Streambank erosion, free cattle access to stream, lack of forest buffer @ C. Gordon Ober farm, Quarry Road

Fencing	2,100-feet	\$ 4,200.00
Forest buffer	1.4-acres (35-feet width, both sides)	\$ 1,400.00
Streambank stabilization, in-stream habitat		\$ 9,000.00
Engineering, consulting		\$ 3,500.00
TOTAL		\$ 18,100.00

25. Streambank erosion, free cattle access to stream, lack of forest buffer @ Benue L. Petersheim farm, 709 Petersburg Road

Fencing	3,000-feet	\$ 6,000.00
Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 25,000.00
Engineering, consulting		\$ 7,500.00
TOTAL		\$ 40,500.00

Bachman Run – Tributary within the Main Stem Sub-watershed

(Properties listed from headwaters of Bachman Run downstream to its confluence with the Main Stem)

26. Streambank erosion, littering, introduction of manure due to poor barnyard management, lack of forest buffer, free cattle access to stream, sinkholes in substrate of stream @ David K. King farm, 929 Erbs quarry Road

Fencing	1,650-feet	\$ 3,300.00
Forest buffer	1.1-acres (35-feet width, both sides)	\$ 1,100.00
Streambank stabilization, in-stream habitat		\$ 20,000.00
Engineering, consulting		\$ 6,000.00
TOTAL		\$ 30,400.00

27. Streambank erosion, lack of forest buffer, free cattle access to stream @ Philip W. Eyster farm, Buckwalter Road

Fencing	3,600.00-feet	\$ 7,200.00
Forest buffer	2.5-acres (35-feet width, both sides)	\$ 2,500.00
Streambank stabilization, in-stream habitat		\$ 10,000.00
Engineering, consulting		\$ 3,500.00
TOTAL		\$ 23,200.00

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the Bachman Run Tributary

28. Horse farm – pasture could use streambank fencing and forest buffer, sporadic streambank erosion @ Harry J. Fogarty farm, 2620 Miller Road

Fencing	3,000-feet	\$ 6,000.00
Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat		\$ 15,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 27,500.00

Unnamed tributary that enters Main Stem of the Little Conestoga just below Florys Mill

29. Streambank erosion, lack of forest buffer, free cattle access to stream @ Vernon H. Charles farm, 2249 Leabrook Road

Fencing	3,300-feet	\$ 6,600.00
Forest buffer	2.3-acres (35-feet width, both sides)	\$ 2,300.00
Streambank stabilization, in-stream habitat		\$ 12,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 24,400.00

Stormwater Improvements

Brubaker Run East Hempfield Township

- 1. Stormwater management and water quality retrofits within Old Sycamore Industrial Park, Sycamore Business Complex and Centerville Industrial Park

Requires further study and planning **\$ 20,000.00**

- 2. Littering, channelized stream, thermal pollution, parking lot contaminants, stormwater quality BMP retrofit possibilities @ Stauffers of Kissel Hill store, Millersville Road

Requires further study and planning **\$ 20,000.00**

Millers Run East Hempfield Township

- 3. Severe streambank erosion due to lack of stormwater management, stormwater quality BMP retrofit possibilities, lack of forest buffer, floodway encroachments by landowners, stream channel incised – needs to be re-introduced to floodway and floodplain from Valley View Drive @ School Lane Estates development downstream to Sylvan Road

Requires further study and planning \$ 35,000.00
Estimated construction/implementation \$ 240,000.00
TOTAL \$ 275,000.00

Swarr Run East Hempfield Township

- 4. Retrofit stormwater basins with water quality BMPs at Hempfield High School and Middle School

Requires further study and planning \$ 15,000.00
Estimated construction/implementation \$ 80,000.00
TOTAL \$ 95,000.00

- 5. Stormwater retrofits @ Olde Forge Crossing residential subdivision

Requires further study and planning \$ 40,000.00
Estimated construction/implementation \$ 250,000.00
TOTAL \$ 290,000.00

6. Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover, stormwater basin water quality BMP retrofits @ Mennonite Home Inc. property, 2001 Harrisburg Pike

Requires further study and planning	\$ 30,000.00
Estimated construction/implementation	\$ 200,000.00
TOTAL	\$ 230,000.00

Main Stem of Little Conestoga Creek

7. Binkley & Ober, Inc. quarry and McMinn's Asphalt @ Lancaster Road (Rte. 72) – McMinn's parking lot and staging area yielding contaminants to quarry discharge – mainly fine limestone dusts, litter and thermal pollution – high rates of stormwater runoff from McMinn's parking lot – no stormwater detention – Binkley & Ober, Inc. owns next property downstream from McMinn's Asphalt where a water quality basin and/or wetland treatment system could be installed

Requires further study and planning	\$ 25,000.00
Estimated construction/implementation	\$ 150,000.00
TOTAL	\$ 175,000.00

Bachman Run – Tributary within the Main Stem Sub-watershed

(Properties listed from headwaters of Bachman Run downstream to its confluence with the Main Stem)

8. Retrofit stormwater quality BMPs within the following residential developments:

Milton Estates	Buckfield	Stonehenge
Wetherburn North	Mill Pond	Kingspointe
Flyway Business Park		

Requires further study and planning

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the Bachman Run Tributary

9. Retrofit stormwater quality BMPs @ Yellow Freight downstream of Manheim Pike (Route 72)

Requires further study and planning	\$ 40,000.00
Estimated construction/implementation	\$ 250,000.00
TOTAL	\$ 290,000.00

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the unnamed tributary at Florys Mill

10. Lack of forest buffer, water quality BMP retrofits with Granite Run Corporate Center

Requires further study and planning	\$ 10,000.00
Estimated construction/implementation	\$ 30,000.00
TOTAL	\$ 40,000.00

11. Thermal pollution, stormwater management and water quality retrofits at Park City

Requires further study and planning

Main Stem of the Little Conestoga Creek downstream of Route 30

12. Water quality issues with pond and waterfowl, nutrient loading @ Longs Park

Requires further study and planning	\$ 15,000.00
-------------------------------------	---------------------

13. Retrofit stormwater quality BMPs within the following residential developments:

Barrcrest	Glenbrook
School Lane Hills	Woodlawn

Requires further study and planning

14. Retrofit stormwater quality BMPs within the following residential developments:

Stone Mill Manor Mobile Home Park	Pheasant Ridge
Canterbury Place	West Ridge

Requires further study and planning

Streambank Stabilization & Forest Buffers

Brubaker Run East Hempfield Township

1. Streambank erosion, lack of forest buffer @ J. Wilson and Donna J. Hershey farm, 2715 Columbia Avenue

Forest buffer	3.6-acres (35-foot width, both sides)	\$ 3,600.00
Streambank stabilization, in-stream habitat	2,625-feet	\$ 13,125.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 20,225.00

2. Streambank erosion, farmed/cropped right up to the stream channel, sedimentation from cropland @ Herley Industries, Inc. property, Running Pump Road

Forest buffer	1.8-acres (35-foot width, both sides)	\$ 1,800.00
Streambank stabilization, in-stream habitat	1,350-feet	\$ 6,750.00
Engineering, consulting		\$ 2,500.00
	TOTAL	\$ 11,050.00

3. Streambank erosion, forest buffer could be improved @ John I. Hartman, Jr. farm, 2452 Marietta Avenue

Forest buffer	4.3-acres (35-foot width, both sides)	\$ 4,300.00
Streambank stabilization, in-stream habitat	3,075-feet	\$ 15,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 22,300.00

4. Streambank erosion, lack of forest buffer though stream is located in fallowing pasture @ WMP Ltd. property, 206 Rohrerstown Road

Forest buffer	2.6-acres (35-foot width, both sides)	\$ 2,600.00
Streambank stabilization, in-stream habitat	1,875-feet	\$ 7,000.00
Engineering, consulting		\$ 2,000.00
	TOTAL	\$ 11,600.00

5. Streambank erosion, lack of forest buffer @ Church of the Apostles, 1842 Marietta Avenue

Forest buffer	1.8-acres (35-foot width, both sides)	\$ 3,000.00
Streambank stabilization, in-stream habitat	1,350-feet	\$ 10,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 17,500.00

Millers Run East Hempfield Township

6. Sporadic streambank erosion from headwaters downstream to Westminster Drive @ School Lane Estates development

Streambank stabilization, in-stream habitat	1,500-feet	\$ 12,000.00
Engineering, consulting		\$ 5,500.00
	TOTAL	\$ 17,500.00

7. Severe streambank erosion, sedimentation from Sylvan Road downstream to Old Harrisburg Pike @ Joseph F. and Dianne M. Mast property, 1059 Sylvan Road and @ Sylvan View Farms PT property currently undergoing subdivision (“Village Grande At Millers Run”), 2348 Harrisburg Pike

Forest buffer	5.7-acres (35-foot width, both sides)	\$ 5,700.00
Streambank stabilization, in-stream habitat	4,125-feet	\$ 30,000.00
Engineering, consulting		\$ 13,000.00
	TOTAL	\$ 48,700.00

Swarr Run East Hempfield Township

8. Severe streambank erosion and lack of forest buffer @ East Hempfield Sports Complex owned by East Hempfield Township

Forest buffer	4.9-acres (35-foot width, both sides)	\$ 4,900.00
Streambank stabilization, in-stream habitat	3,525-feet	\$ 40,000.00
Engineering, consulting		\$ 12,000.00
	TOTAL	\$ 56,900.00

9. Lack of forest buffer, sporadic streambank erosion @ Larry J. Booth farm, 1046 Snapper Road

Forest buffer	1.6-acres (35-foot width, both sides)	\$ 1,600.00
Streambank stabilization, in-stream habitat	1,200-feet	\$ 8,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 12,600.00

10. Lack of forest buffer, streambank erosion @ Gregory A. Meinzer property, 580 Church Street

Forest buffer	1.0-acres (35-foot width, both sides)	\$ 1,000.00
Streambank stabilization, in-stream habitat	800-feet	\$ 7,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 11,500.00

11. Lack of forest buffer, evidence of past stream relocation, existing wetland impacts, currently farmed but owned by Hempfield School District just upstream of Church Street, property at 478 Church Street

Forest buffer	1.7-acres (B&B stock)	\$ 7,000.00
Streambank stabilization, in-stream habitat	1,200-feet	\$ 9,000.00
Wetland restoration		\$ 40,000.00
Engineering, consulting		\$ 18,000.00
	TOTAL	\$ 74,000.00

12. Lack of forest buffer, streambank erosion @ Lloyd B. Denlinger property, 3060 Harrisburg Pike

Forest buffer	1.5-acres (35-foot width, both sides)	\$ 1,500.00
Streambank stabilization, in-stream habitat	1,200.00-feet	\$ 8,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 13,000.00

13. Sporadic streambank erosion @ Robert Z. Getz property

Streambank stabilization, in-stream habitat	1,350-feet	\$ 10,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 13,500.00

14. Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover @ Golden Meadows, Inc. property

Forest buffer	1.0-acres (B&B stock)	\$ 3,000.00
Streambank stabilization, in-stream habitat	600-feet	\$ 17,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 25,000.00

15. Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover @ The TC Lancaster West Co. property, 1-419 Colonial Crest Drive

Forest buffer	2.0-acres (35-foot width, both sides)	\$ 3,000.00
Streambank stabilization, in-stream habitat	1,200-feet	\$ 18,000.00
Engineering, consulting		\$ 7,000.00
	TOTAL	\$ 28,000.00

16. Sporadic streambank erosion, lack of forest buffer, lack of in-stream cover, littering @ MGA Acquisition LP property, 2000 Swarr Run Road

Forest buffer	2.0-acres (35-feet width, both sides)	\$ 3,000.00
Streambank stabilization, in-stream habitat	1,500-feet	\$ 25,000.00
Engineering, consulting		\$ 10,000.00
	TOTAL	\$ 38,000.00

West Branch Manor Township

17. Streambank erosion, lack of forest buffer, sedimentation from cropland, farmed right up to stream channel @ Fieldcrest Associates property, 292 Hershey Mill Road

Forest buffer	1.5-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat	1,050-feet	\$ 35,000.00
Engineering, consulting		\$ 12,000.00
	TOTAL	\$ 49,000.00

18. Streambank erosion, lack of forest buffer, sedimentation from cropland, farmed right up to stream channel @ H. James Shearer farm, 388 Hershey Mill Road

Forest buffer	2.1-acres (35-feet width, both sides)	\$ 3,000.00
Streambank stabilization, in-stream habitat	1,575-feet	\$ 20,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 28,000.00

Unnamed Tributary intersecting West Branch @ Chanastocka Nature Sanctuary
(Properties listed from headwaters of tributary downstream to the confluence with the West Branch)

19. Streambank erosion @ Wendell L. Funk property

Streambank stabilization, in-stream habitat	525-feet	\$ 5,000.00
Engineering, consulting		\$ 3,000.00
	TOTAL	\$ 8,000.00

Listing now returning to the main West Branch downstream of Chanastocka Nature Sanctuary

20. Small pasture and grasslands immediately upstream and downstream from Bender Mill Road, severe streambank erosion, lack of forest buffer

Forest buffer	1.3-acres (35-foot width, both sides)	\$ 1,300.00
Streambank stabilization, in-stream habitat	750-feet	\$ 15,000.00
Engineering, consulting		\$ 6,000.00
	TOTAL	\$ 22,300.00

21. Streambank erosion, lack of forest buffer, sedimentation from cropland @ David H. Frey farm, 704 Stehman Church Road

Forest buffer	2.5-acres (35-foot width, both sides)	\$ 2,500.00
Streambank stabilization, in-stream habitat	2,325-feet	\$ 12,000.00
Engineering, consulting		\$ 4,500.00
	TOTAL	\$ 19,000.00

Main Stem of Little Conestoga Creek

22. Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Dale M. Nolt farm, 307 Bucknoll Road

Forest buffer	1.9-acres (35-foot width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat	1,350-feet	\$ 8,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 13,500.00

23. Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Noah W. Kreider & Sons Farm, 1461 Lancaster Road

Forest buffer	2.6-acres (35-foot width, both sides)	\$ 2,600.00
Streambank stabilization, in-stream habitat	1,875-feet	\$ 9,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 15,100.00

24. Streambank erosion, lack of forest buffer, sedimentation from cropland, stream has been channelized @ Kevin L. Nolt farm, 1603 Lancaster Road

Forest buffer	1.9-acres (35-foot width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat	1,350-feet	\$ 8,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 13,500.00

25. Lack of forest buffer @ Oakwood Properties, 1276 Lititz Road

Forest buffer	0.6-acres (35-feet width, both sides)	\$ 600.00
---------------	---------------------------------------	-----------

26. Fallowing pasture, sporadic streambank erosion, possibility to improve forest buffer and in-stream habitat @ Wetherburn North ETAL, Fruitville Pike (Mr. Barry Hogan) – just upstream of confluence with tributary Bachman Run

Forest buffer	3.6-acres (35-feet width, both sides)	\$ 5,000.00
Streambank stabilization, in-stream habitat	2,625-feet	\$ 15,000.00
Wetland enhancements		\$ 25,000.00
Engineering, consulting		\$ 12,000.00
	TOTAL	\$ 57,000.00

27. Fallowing pasture, sporadic streambank erosion, possibility to improve forest buffer and in-stream habitat @ Peter B. Rohrer farm, 2544 Fruitville Pike and Ruth H. Rohrer farm, 2686 State Road – these farmsteads are right at the confluence with tributary Bachman Run

Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,500.00
Streambank stabilization, in-stream habitat	1,500-feet	\$ 12,000.00
Engineering, consulting		\$ 8,000.00
	TOTAL	\$ 22,500.00

Bachman Run – Tributary within the Main Stem Sub-watershed

(Properties listed from headwaters of Bachman Run downstream to its confluence with the Main Stem)

28. Streambank erosion, sedimentation from cropland, sinkholes in substrate of stream @ James R. Buckwalter farm, 511 Snyder Road – very serious problem with sinkholes at this farm and David K. King farm

Forest buffer	2.0-acres (35-feet width, both sides)	\$ 2,000.00
Streambank stabilization, in-stream habitat	1,500-feet	\$ 25,000.00
Engineering, consulting		\$ 10,000.00
	TOTAL	\$ 37,000.00

29. Streambank erosion, sedimentation from cropland @ Buckwalter Farm LLC, 860 Buckwalter Road

Forest buffer	1.0-acres (35-feet width, both sides)	\$ 1,000.00
Streambank stabilization, in-stream habitat	750-feet	\$ 6,000.00
Engineering, consulting		\$ 2,500.00
	TOTAL	\$ 9,500.00

Unnamed tributary that enters Main Stem of the little Conestoga just below Florys Mill

30. Streambank erosion, sedimentation from nursery and greenhouse operation, lack of forest buffer @ Lloyd M. Lapp nursery, 1472 Stevens Street

Forest buffer	2.6-acres (35-feet width, both sides)	\$ 2,600.00
Streambank stabilization, in-stream habitat	1,875-feet	\$ 14,000.00
Engineering, consulting		\$ 5,000.00
	TOTAL	\$ 21,600.00

31. Streambank erosion, sedimentation from cropland @ Hershey T. Rohrer, Jr. farm, 1572 State Road

Forest buffer	1.5-acres (35-feet width, both sides)	\$ 1,500.00
Streambank stabilization, in-stream habitat	1,125-feet	\$ 9,000.00
Engineering, consulting		\$ 3,500.00
	TOTAL	\$ 14,000.00

32. Streambank erosion, lack of forest buffer, sedimentation from cropland, processing of corn product waste generating a liquid waste that is routinely irrigated on cropland where it evidently washes into stream via storm events – BOD problems suspected – a yeasty, fermenting smell is very discernable in the substrate sediments at Route 283 – Need to involve PADEP @ Clyde H. Kreider farm, 2278 Leabrook Road

Requires further investigation

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the unnamed tributary at Florys Mill

33. Severe streambank erosion, lack of forest buffer, very poor in-stream cover/habitat for aquatic life @ Mennonite Home, Inc.

Forest buffer	1.8-acres (35-feet width, both sides)	\$ 4,000.00
Streambank stabilization, in-stream habitat	1,125-feet	\$ 38,000.00
Engineering, consulting		\$ 13,000.00
	TOTAL	\$ 55,00.00

34. Severe streambank erosion, lack of forest buffer, lack of in-stream cover @ Mark N. Ashley farm, 1048 W. Roseville Road

Requires further investigation – stream channel is split

Main Stem of the Little Conestoga Creek downstream of Route 30

35. Sporadic streambank erosion, various locations where forest buffer could be improved, in-stream cover/habitat for aquatic life (especially Smallmouth bass could be greatly improved) @ the following properties:

Deisley Family LTD Partnership, 1418 Harrisburg Pike
Lancaster County Solid Waste, Farmingdale Road
Lancaster Malleable Castings, Harrisburg Pike
Franklin & Marshall College

Requires further investigation and discussion with owners

36. Streambank erosion, lack of forest buffer, very poor in-stream habitat for aquatic life @ Windsor Court LP, 1821 Hidden Lane

Forest buffer	1.2-acres (35-foot width, both sides)	\$ 3,800.00
Streambank stabilization, in-stream habitat	900-feet	\$ 15,000.00
Engineering, consulting		\$ 6,500.00
	TOTAL	\$ 25,300.00

37. Streambank erosion, lack of forest buffer, very poor in-stream habitat for aquatic life @ National Properties, Inc., 1707 Marietta Avenue

Forest buffer	1.4-acres (35-foot width, both sides)	\$ 4,500.00
Streambank stabilization, in-stream habitat	1,050-feet	\$ 25,000.00
Engineering, consulting		\$ 9,000.00
	TOTAL	\$ 38,500.00

38. Work with the Conestoga Country Club and educate them in regards to the watershed restoration effort – They have been observed dumping their lawn clipping and yard wastes directly into the Little Conestoga Creek! Streambank stability and in-stream habitat are also concerns within the country club property

Requires further investigation and discussion with the owner

39. Streambank erosion/stability issues with falling trees, lack of forest buffer, poor in-stream habitat for aquatic life (habitat could greatly be improved for Smallmouth bass) @ Manor Township Park

Forest buffer	4.0-acres (35-foot width, both sides)	\$ 8,000.00
Streambank stabilization, in-stream habitat	3,000-feet	\$ 85,000.00
Engineering, consulting		\$ 18,000.00
	TOTAL	\$ 111,000.00

Other

Brubaker Run East Hempfield Township

1. Removal of exotic, invasive plant species with the East Hempfield Township Park
\$ 9,000.00

2. In-stream habitat improvements downstream of Glenbrook Court
\$ 20,000.00

West Branch Manor Township

3. Remove dam blockage @ George B. Mann farm lane (see above)

Engineering, consulting		\$ 8,000.00
Estimated removal		\$ 15,000.00
	TOTAL	\$ 23,000.00

Listing now returning to the main West Branch downstream of Chanastocka Nature Sanctuary

4. Agricultural related impacts from David H. Frey farm downstream to confluence with Main Stem – Includes following farms:

Letort Valley Farms, 400 Owl Bridge Road
Michael H. Walmer, North Cherry Street
Gregory J. Breslin, 523 Stehman Church Road
Ronald E. Hunt, 465 Stehman Church Road

Requires further investigation with assistance from the Lancaster County Conservation District

Listing now returning to the Main Stem of the Little Conestoga Creek below its confluence with the Bachman Run Tributary

5. Remove dam at PPL, Inc. upstream of Mannheim Pike (Route 72), also improve forest buffer and in-stream cover in area of dam
\$ 12,000.00

Main Stem of the Little Conestoga Creek downstream of Route 30

6. Remove Frantz Mill Dam @ Ironstone Ridge Road

Engineering, consulting	\$ 18,000.00
Estimate removal costs	\$ 45,000.00
TOTAL	\$ 63,000.00

FISHERY MANAGEMENT OPTIONS

See Chapter V – Fishery Investigation for additional information and management strategy.

BUILDING PUBLIC SUPPORT

See Chapter X – Partnerships and Public Relations for additional information.

Education of Stakeholders in Watershed Stewardship

- Educational materials (signage, brochures, mailings)
- Watershed training and demonstrations projects
- Presentations in schools, colleges, municipalities
- Presentations to landowners

Litter clean-ups

Improve Water-Based Recreational Opportunities

- Explore trail, park and access possibilities
- Work with landowners to improve public access
- Improve trout fishery as recommended
- Improve bass fishery as recommended
- Explore canoeing and kayaking routes

Pursue media coverage opportunities

Ad Crable (Lancaster New Era – evening newspaper) has served the Little Conestoga Watershed Alliance well in the past and continues to express an interest in the Alliance's restoration efforts.

Ad Crable
New Era
717-481-6029
acrable@lnpnews.com

Kevin Johns (FOX 43 News) has provide on-site television news coverage in the past and has expressed an interest in covering other interesting events.

Kevin Johns
FOX 43 News
717-393-0043
717-290-07425

INTERACTING WITH LOCAL, COUNTY AND STATE GOVERNMENT

Work closely with the Lancaster County Conservation District in addressing agricultural related concerns

Lancaster County Conservation District
Room #6, Farm and Home Center
1383 Arcadia Road
Lancaster, PA 17601

- Streambank fencing
- Barnyard and feedlot problems
- Nutrient management (manure and fertilizer)
- Cropland erosion and resulting sedimentation
- Attend District Board meetings (monthly)
- Establish a liaison between the District and Little Conestoga Watershed Alliance

Develop and improve working relationship with municipalities

- Establish a liaison between the municipality and Little Conestoga Watershed Alliance
- Meet with municipalities and explain watershed concerns and partnering possibilities/opportunities (with assistance from RETTEW Associates, Inc.) Discuss ways in which municipalities could better accommodate watershed concerns (i.e. land development, zoning, stormwater management, comprehensive planning)
- Apply water quality BMPs on municipal owned properties

MONITORING PROGRESS

Professor Philip J. Nyhus of Franklin and Marshall College has expressed an interest in having his “Environmental Problems” class continue their monitoring and assessment endeavors in 2003 and beyond.

In February of 2003, Michelle Spitko, President of the Little Conestoga Watershed Alliance and Mark Metzler of RETTEW Associates, Inc. gave a presentation to the “new” class of junior and senior students, introducing them to the watershed and informing them of past and present assessment and restoration activities.

The 2003 class intends to continue the assessment study and various investigations begun by the 2002 class and report their findings to the Little Conestoga Watershed Alliance.

The Senior Environmental Corps is also continuing their monitoring activities within the watershed and is regularly represented at the Alliance’s monthly meetings.

It is vital the Alliance maintain a working relationship with Franklin and Marshall College and the Senior Environmental Corps.