Sunoco Pipeline Penalty Grant  
*Recommended Potential Projects for*  
Steckbeach Engineering and Surveying, Inc.  
*Design and Permitting Services*  

**South Londonderry/South Annville**  
Killinger Creek

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<tr>
<th>Project ID</th>
<th>Location</th>
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<th>Total Cost</th>
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| 2          | UPS of Rte 322 and IS 18 of  
Rte 117 South Annville/South Londonderry | 620 | Livestock grazing impacts; lack of buffer; unstable C4 channel with high eroding banks | Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install 1 livestock crossing | GIS Topo  
Grading Plan Prep, Permitting, Standard livestock crossing  
G-3, GP-6 | $10,000 | Bank grading and stabilization 827 yd$^2$  
Cost of 1240 LF of 3 strand, high tensile wire, wooden posts, 4 corners, 2 gates, solar Panel and accessories; plus 1 livestock crossing | $6,616 | $27,266 |

W-1 | UPS of Brandt Road South Annville/South Londonderry | 1200 | Agricultural Runoff, wastewater discharge, low baseflow | Acquire property or easement  
Create 2.75 acre wetland to treat agricultural runoff and wastewater discharges from S. Londonderry WWTP and augment baseflow to Killinger | GIS Topo  
Design Plans Prep for Wetland Permitting NW-27 | $25,000 | Excavation and grading of wetland system 19,835 yd$^2$  
Wetland seeding 2.75 acres and 412 Trees and shrubs for wetland | $158,680 | $205,665 |

3 | MacDonald Farm South Annville/South Londonderry | 2640 | Livestock grazing impacts; lack of buffer; unstable C4 channel with moderately high eroding banks | Grade and stabilize banks; Install fencing a minimum of 15 feet and install two (2) livestock crossings.  
Create 2.75 acre wetland to treat agricultural runoff and wastewater discharges from Palm City WWTP | GIS Topo  
Grading Plan, Prep Permitting, Standard livestock crossing  
G-3, GP-6  
Design Plans Prep for wetland Permitting NW-27 | $10,000 | Bank grading and stabilization 3,522 yd$^2$  
Cost of 5280 LF of 3 strand, high tensile wire with wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossing | $28,176 | $68,476 |

4 | Buck Farm South Annville/North Londonderry | 2310 | Livestock grazing impacts; lack of buffer; unstable C4 channel with moderately high eroding banks | Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install two (2) livestock crossings | GIS Topo  
Grading Plan, Prep Permitting, Standard livestock crossing  
G-3, GP-6 | $10,000 | Bank grading and stabilization 3,078 yd$^2$  
Cost of 4,620 LF of 3 strand, high tensile wire with wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossing | $32,624 | $62,449 |

5 | Musser Farm South Annville/North Londonderry | 990 | Livestock grazing impacts; lack of buffer; unstable C4 channel with moderately high eroding banks | Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install 1 livestock crossing | GIS Topo  
Grading Plan, Prep Permitting, Standard livestock crossing  
G-3, GP-6 | $8,500 | Bank grading and stabilization 1,320 yd$^2$  
Cost of 1,980 LF of 3 strand, high tensile wire with wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 1 livestock crossing | $10,560 | $32,485 |
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<tbody>
<tr>
<td>6</td>
<td>Kreider Farm UPS of Killinger Rd. South Annville/North Londonderry</td>
<td>1650</td>
<td>Livestock grazing impacts; lack of buffer; unstable C4 channel with moderately high eroding banks</td>
<td>Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install two (2) livestock crossings</td>
<td>GIS Topo Grade and Stabilization, Permitting</td>
<td>Bank grading and stabilization, 2,022 yd², Cost of 3,000 LF of 3 strand, high tensile wire, wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossings</td>
<td>$10,000</td>
<td>$17,616</td>
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<td>7</td>
<td>Kreider Farm DS of Killinger Rd. South Annville/North Londonderry</td>
<td>330</td>
<td>Livestock grazing impacts; lack of buffer; unstable E4 channel with low eroding banks</td>
<td>Install fencing a minimum of 15 feet to either side of stream and install livestock crossing</td>
<td>GIS Topo Plan Prep Permitting Standard livestock crossing</td>
<td>Cost of 660 LF of 3 strand, high tensile wire, wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 1 livestock crossing</td>
<td>$6,000</td>
<td>$2,475</td>
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## South Annville

### Gingrich Run

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<tr>
<th>Project ID</th>
<th>Location</th>
<th>Length (feet)</th>
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<tbody>
<tr>
<td>1</td>
<td>Gingrich Run Smith Property&lt;br&gt;Funck Farm&lt;br&gt;UPS of Rte 322&lt;br&gt;South Annville</td>
<td>660</td>
<td>Channel ditched; incised with high eroding banks, unstable G4; no buffer</td>
<td>Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install 1 livestock crossing</td>
<td>GIS Topo&lt;br&gt;Grading Plan, Prep Permitting&lt;br&gt;Standard livestock crossing&lt;br&gt;G-3, GP-6</td>
<td>Bank grading and stabilization 882 yd²&lt;br&gt;Cost of 1320 LF of 3 strand, high tensile wire with wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossing</td>
<td>$7,050 &lt;br&gt;$4,950 &lt;br&gt;$600 &lt;br&gt;$400 &lt;br&gt;$350 &lt;br&gt;$150 &lt;br&gt;$4,500 &lt;br&gt;$18,006</td>
<td>$26,506</td>
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<td>2</td>
<td>Gingrich Run UPS of Rte 322 Brough Property DS of&lt;br&gt;Rte 322 and UPS of&lt;br&gt;Meadow Lane&lt;br&gt;South Annville</td>
<td>1485</td>
<td>Junk cars, trucks and buses stacked along top of banks and along floodplain; unstable C4 channel with high eroding banks, debris jams, mid channel bars&lt;br&gt;Stream fenced but erosion problems; lack of buffer; unstable B4/B4c channels with moderately high eroding banks</td>
<td>Restore as stable C4 stream channel</td>
<td>Field Run Topo&lt;br&gt;Survey and Base Maps, H&amp;H, Concept and Final Design Plans Prep, Permitting&lt;br&gt;NW-27</td>
<td>Restoration as stable C4 stream channel with toe wood and/or imbricated rock walls, log-boulder j-hooks. Streambank seeding 0.5 acres and 100 trees and shrubs along streambanks</td>
<td>$138,750 &lt;br&gt;$1,750 &lt;br&gt;$3,000 &lt;br&gt;$376,000</td>
<td>$514,750</td>
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<tr>
<td>3</td>
<td>Gingrich Run Smith Property&lt;br&gt;DS of Meadow Lane&lt;br&gt;South Annville</td>
<td>2310</td>
<td>Unstable C6 channel with moderately high eroding banks, debris jams, lateral and mid channel bars, heavy sedimentation</td>
<td>Restore as stable C6 stream; Create 2.75 acre wetland in adjacent floodplain</td>
<td>Field Run Topo&lt;br&gt;Survey and Base Maps, H&amp;H, Concept and Final Design Plans Prep, Permitting&lt;br&gt;NW-27</td>
<td>Restoration as stable C4 stream channel with toe wood and soil lifts. Streambank seeding 0.8 acres and 150 trees and shrubs along streambanks</td>
<td>$145,350 &lt;br&gt;$77,500 &lt;br&gt;$36,625 &lt;br&gt;$2,800 &lt;br&gt;$4,900 &lt;br&gt;$671,325</td>
<td>$816,775</td>
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<td>4</td>
<td>Gingrich Run Otherholtzer Farm&lt;br&gt;South Annville</td>
<td>1650</td>
<td>Livestock grazing impacts; lack of buffer; unstable E6 and E4 channels with moderately high eroding banks</td>
<td>Grade and stabilize banks; Install fencing a minimum of 15 feet either side of stream and install two (2) livestock crossings</td>
<td>GIS Topo&lt;br&gt;Grading Plan, Prep Permitting&lt;br&gt;Standard livestock crossing&lt;br&gt;G-3, GP-6</td>
<td>Bank grading and stabilization 2,202 yd²&lt;br&gt;Cost of 3300 LF of 3 strand, high tensile wire, wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossing</td>
<td>$10,000 &lt;br&gt;$17,616 &lt;br&gt;$12,375 &lt;br&gt;$600 &lt;br&gt;$400 &lt;br&gt;$350 &lt;br&gt;$150 &lt;br&gt;$9,000 &lt;br&gt;$40,491</td>
<td>$50,491</td>
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<td>5</td>
<td>Gingrich Run MacDonald Farm DS of Long Meadow Rd and&lt;br&gt;UPS of Killinger Creek&lt;br&gt;South Annville</td>
<td>2400</td>
<td>Stream fenced but fencing ineffective; livestock grazing impacts; lack of buffer; unstable B4/B4c channels with moderately high eroding banks</td>
<td>Grade and stabilize banks; remove existing fencing and install higher quality fencing same location as old fencing and install two (2) livestock crossings</td>
<td>GIS Topo&lt;br&gt;Grading Plan, Prep Permitting&lt;br&gt;Standard livestock crossing&lt;br&gt;G-3, GP-6</td>
<td>Bank grading and stabilization 3,198 yd²&lt;br&gt;Cost of 4800 LF of 3 strand, high tensile wire, wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossing</td>
<td>$10,000 &lt;br&gt;$25,584 &lt;br&gt;$18,080 &lt;br&gt;$600 &lt;br&gt;$400 &lt;br&gt;$350 &lt;br&gt;$150 &lt;br&gt;$9,000 &lt;br&gt;$54,084</td>
<td>$64,084</td>
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### Cost Details

- **Wetland Seeding**: 2.75 acres and 150 trees and shrubs along streambanks. Cost: $18,000<br>$25,584<br>$9,000<br>$54,084
- **Bank Grading and Stabilization**<br>882 yd²: Cost: $7,050<br>$4,950<br>$600<br>$400<br>$350<br>$150<br>$4,500<br>$18,006
- **Streambank Seeding**: 0.5 acres and 100 trees and shrubs along streambanks. Cost: $371,250<br>$1,750<br>$3,000<br>$376,000
- **Livestock Crossing**: First crossing: $158,680<br>$9,625<br>$12,360<br>$180,665
- **Second Crossing**: Second crossing: $180,665<br>$150<br>$350<br>$400<br>$150<br>$600<br>$400<br>$350<br>$150<br>$9,000<br>$40,491
## Upper Quittapahilla Creek Subwatershed

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Location</th>
<th>Length (feet)</th>
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<tbody>
<tr>
<td>1</td>
<td>Harold Wise Farm</td>
<td>1150</td>
<td>Livestock grazing impacts; unstable C4 channel with</td>
<td>Install fencing a minimum of 15 feet to either side of stream and install two (2)</td>
<td>GIS Topo Plan Prep</td>
<td>$8,500</td>
<td>$8,625</td>
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<td></td>
<td>UPS of Birch Rd</td>
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<td>banks completely trampled, heavy sedimentation and</td>
<td>livestock crossings.</td>
<td>Permitting for Standard livestock</td>
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<td></td>
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<td>aggradation throughout. No buffer.</td>
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<td>crossing GP-6</td>
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<td>GIS Topo Plan Prep</td>
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<td>2</td>
<td>Quest, Inc.</td>
<td>300</td>
<td>Minimal to no buffer.</td>
<td>Plant a minimum 15 riparian buffer along lawn area.</td>
<td>0</td>
<td>0</td>
<td>$750</td>
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<td>UPS of Metro Drive</td>
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<td>3</td>
<td>Burger King and Yingst</td>
<td>300</td>
<td>Unstable F4 channel – moderately high eroding banks</td>
<td>Stabilize channel and establish 10 foot filter strip along top of both banks.</td>
<td>Field Run Topo Survey and Base Maps, H&amp;H, Concept and Final Design Plans Prep,</td>
<td>$65,400</td>
<td>$75,000</td>
<td>$141,490</td>
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<td></td>
<td>Exterminating</td>
<td></td>
<td>and aggradation throughout. No buffer.</td>
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<td>Permitting NW-27</td>
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<td>UPS of Rte 422</td>
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### Notes
- Construction Cost includes Cost of 2300 LF of 3 strand, high tensile wire with wooden posts, 4 corners, 2 gates, solar panel and accessories; plus 2 livestock crossings.
- Total Cost includes Grade & stabilize streambanks; Streambank seeding 0.14 acres and 20 trees and shrubs along streambanks.