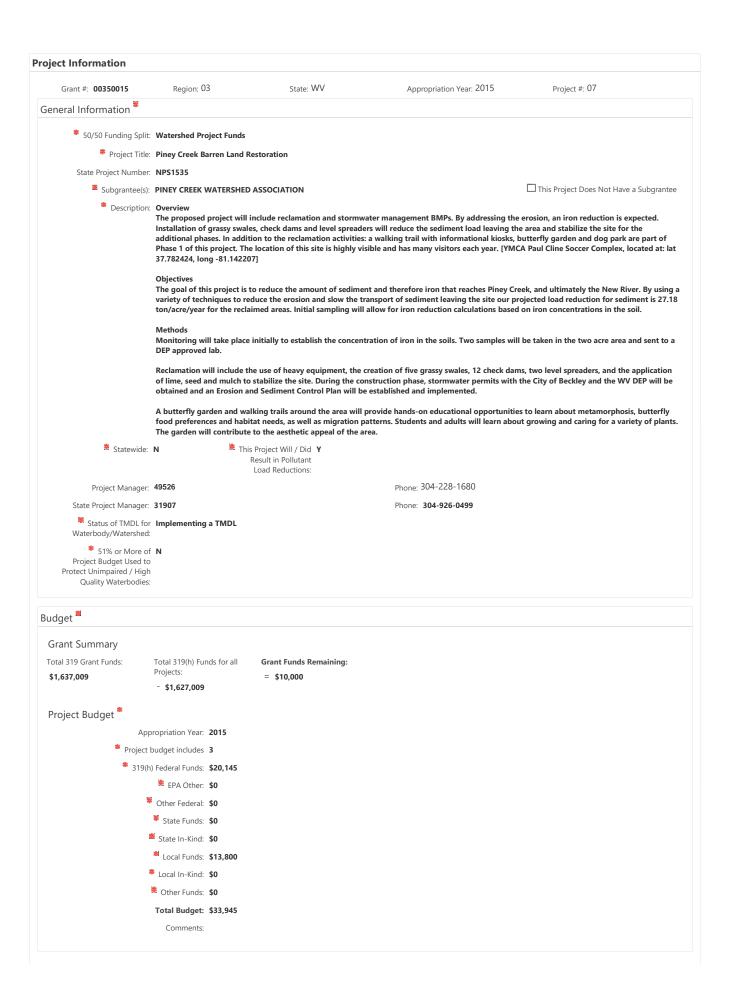
Project Print Page 1 of 4



Project Print Page 2 of 4

Work Categories **

| Category of Work | Primary |
|--|---------|
| BMP Design/Implementation | Υ |
| Local (Specific Target) Education/Information Programs | N |
| Program Development Activities | N |
| Other Water Quality Assessment /Monitoring () | N |
| Grade Stabilization | N |
| Erosion Control Projects | N |

Quality Assurance Project Plan

Does the Project require a Quality Assurance Project Plan **© Yes** O No

Sources of NPS Pollution

| Category Type | Secondary | Percent (%) |
|-------------------------|--|-------------|
| Urban Runoff/Stormwater | Post-Development Erosion and Sedimentation | 100 |
| | | 100 |

Key Partners

| Organization Type | Partner Name | Partner Contribution | Description of Role/Notes |
|---------------------------|--------------------------------|----------------------|---------------------------|
| County/Municipal Agencies | BECKLEY SANITARY BOARD | \$0 | |
| Private land holders | YMCA | \$0 | |
| SWCs | SOUTHERN CONSERVATION DISTRICT | \$0 | |
| | | \$0 | |

Related Projects

No Related Projects found.

Attachments

| Attachment Name | File Size | Document Type |
|--------------------|-----------|---------------|
| YMCA proposal.docx | 1,670.7KB | Work Plan |

Planning

Watershed Plans **

| Status | Plan Name | Attachment |
|--------|--------------|------------|
| - | *Piney Creek | - |

Project Status

| Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|-------------|-----------------|-------------|---------|----------|-------------|
| Current | Accepted by EPA | 08/01/2019 | - | LESSENTH | 08/22/2019 |
| History | Completed | 08/01/2019 | - | TCRADDOC | 08/14/2019 |
| History | On Schedule | - | - | TCRADDOC | 08/08/2017 |
| History | Behind Schedule | 11/01/2016 | - | TCRADDOC | 12/19/2016 |
| History | Behind Schedule | 11/01/2016 | - | TCRADDOC | 12/19/2016 |
| History | On Schedule | 06/08/2016 | - | TCRADDOC | 06/08/2016 |
| History | On Schedule | 09/30/2015 | - | TCRADDOC | 12/18/2015 |
| History | Pending | 10/24/2014 | - | TCRADDOC | 10/24/2014 |

Comments:

Schedule **

Project Start **11/30/2015**Date:

Project End Date: 08/01/2019

Waterbody Information

No Waterbodies found.

Project Print Page 3 of 4

Pollutants to be Addressed

No Pollutants to be Addressed found.

Planned Activities

No Planned Activities found.

Tasks

No Tasks found.

Project Evaluations

| Evaluation | Evaluation Type | Reporting From | Reporting To | Creation Date | Attachments |
|---|--------------------|-------------------|-----------------|------------------|-----------------------------|
| Final report attached. | Final | 04/01/2019 | 09/30/2019 | 08/14/2019 | NPS1535_Final Report.pdf |
| The project is 90% complete. The drainage problems have been corrected and the site is revegetated. All state construction permits have been satisfied and closed. The remaining work, signs and educational trail, should be complete by September 2018. | Semi-Annual | 10/01/2017 | 03/31/2018 | 06/29/2018 | - |
| The project is nearly complete. Drainage problems have been addressed and the site is vegetated. All permits nave been satisfied and closed. Remaining work includes signage and educational trails, which should be completed in spring 2018. | Semi-Annual | 04/01/2017 | 09/30/2017 | 02/15/2018 | - |
| The project remains behind schedule but should be completed within the required time frame. The project is in the construction phase and is about 75% complete. The wet weather in the area throughout the winter delayed he contractor's work on the project. PCWA has spent or 38% for the design, permit requests, and construction oversight. The Southern Conservation District has not provided their information on the matching funds they have expended since work is ongoing. | Semi-Annual | 10/01/2016 | 03/30/2017 | 08/08/2017 | - |
| he project is behind schedule as of October 2016 but construction is set to begin before the end of this eporting period. The project is currently 25% complete; the Design Phase is complete and construction is ready o begin. The delays through the summer were caused as PCWA worked through design and permit issues with he design firm. The floods in southern WV also caused the delay of the project as the contracted construction rew from the WV Southern Conservation District (SCD) was called out to assist with flood relief efforts. Note: his project was a site visit during the 2016 EPA tour. | Semi-Annual | 04/01/2016 | 09/30/2016 | - | - |
| The association conducted soil sampling to determine the condition of the site and provided the results to WVDEP. The Executive Director conducted a site survey and provided the results to WVDEP, the association aboard of Directors, and other stakeholders (YMCA of Southern West Virginia) to inform them of the scope of he issues at the location. Members of the association then met with the stakeholders and conducted several site visits to get stakeholder input to the project. After getting the input, the Executive Director met with Alliance Consulting (Braden Hoffman-Senior Project Manager) and asked them to do the design for the project. While the design phase is ongoing, the association began removing debris from the site. Members of the association collected approximately 50 tires from the site which were later removed by WVDEP (REAP). The association also coordinated with the YMCA and other individuals who were storing items at the site to consolidate or remove their items so the project can commence. | Semi-Annual | 10/01/2015 | 03/31/2016 | - | - |
| The sub-grant award was signed Nov. 2015. There was some delays due to verification of the watershed groups procurement procedures. There is no progress to report on the project. | Semi-Annual | 04/01/2015 | 09/30/2015 | - | - |
| MVDEP recieved the full award in mid-May. The paperwork for this sub-grant award will be processed and delivered soon. | Semi-Annual | 10/01/2014 | 03/31/2015 | - | - |

Environmental Results



| Drainage number | Drainage area | Bmps | Pollutants |
|-----------------|---------------|--|--|
| 1 | WVKN-26 | Check Dam, Grassed Swale, Land Reclamation, Seeding (Re- Vegetation) | Metals (Iron), Sedimentation-Siltation |

Drainage Area Pollutants

| Drainage Area Name ↑= | Pollutant | Load Reduction Amount | Unit of Measure | Load Reduction Date | Round | Model | Comments |
|-----------------------|-------------------------|-----------------------|-----------------|----------------------------|-------|------------|----------|
| 01-WVKN-26 | Sedimentation-Siltation | .25 | TONS/YR | 01-AUG-19 | 1 | Monitoring | - |
| 01-WVKN-26 | Metals (Iron) | 11.5 | LBS/YR | 01-AUG-19 | 1 | Monitoring | - |

Best Management Practices

| BMP Type ↑= | Number Installed | Units of Measure | Implementation Date | Drainage Area Name | BMP cost | Comments |
|--------------------------|------------------|------------------|---------------------|--------------------|----------|----------|
| Check Dam | 12 | UNITS | 30-SEP-17 | 01-WVKN-26 | - | - |
| Grassed Swale | 5 | UNITS | 30-JUN-17 | 01-WVKN-26 | - | - |
| Land Reclamation | 3 | AC | 30-JUN-17 | 01-WVKN-26 | - | - |
| Seeding (Re- Vegetation) | 3 | AC | 30-SEP-17 | 01-WVKN-26 | - | - |

<

Project Print Page 4 of 4

| Ecoregions | |
|-------------------|-------|
| No ecoregions for | ınd. |
| Counties | |
| County Name | State |
| RALEIGH | WV |

| P | roject Information |
|---|--|
| | Grant #: |
| | 00350016 |
| | Region: |
| | 03 |
| | State: |
| | wv |
| | Appropriation Year: |
| | 2016 |
| | Project #: |
| | 11 |
| | General Information * |
| | * 50/50 Funding Split: |
| | Watershed Project Funds |
| | * Project Title: |
| | Second Creek Karst II |
| | State Project Number: |
| | NPS1587 |
| | ** Subgrantee(s): |
| | WEST VIRGINIA CONSERVATION AGENCY |
| | ☐ This Project Does Not Have a Subgrantee |
| | * Description: |
| | Overview |
| | Second Creek in Monroe and Greenbrier Counties of West Virginia is a large tributary of the Greenbrier River. This stream is heavily impacted by cattle and other livestock feeding on karst geology and in close proximity to karst windows and open sink holes. Agriculture in this area consists primarily of beef cattle operations. |
| | Objectives The primary goal of this project will be to reduce fecal coliform loads by 1.56E+14 Counts/year in order to bring it within allowable levels. This goal will be accomplished by precision soil sampling to develop nutrient maps, and nutrient management/grazing and winter feeding plans. These maps will allow a farmer to see where the nutrient "hot spots" are on the farm and alter their management practices to distribute these nutrients throughout their grazing land. |
| | Methods Best Management Practices (BMPs) will include prescribed grazing, nutrient management, and livestock alternative water development and pasture division fencing. Alternative water development and division fencing will be used to enact the prescribed grazing plans. Nutrient management will consist of precision soil sampling and nutrient mapping of the farms to determine if there is a need for land management changes such as feeding and grazing practices. |
| | * Statewide: |
| | N . |
| | * This Project Will / Did Result in Pollutant Load Reductions: |
| | Υ |
| | Project Manager: |
| | 31988 |
| | Phone: |
| | 304-645-6172 |
| | State Project Manager: |
| | 31907 |
| | Phone: |
| | 304-926-0499 |
| | ** Status of TMDL for Waterbody/Watershed: |
| | Implementing a TMDL |
| | * 51% or More of Project Budget Used to Protect Unimpaired / High Quality Waterbodies: |
| | M |

| ojeci Filiti | | |
|--------------------------------------|--|--|
| Budget * | | |
| Grant Summary | | |
| Total 319 Grant Funds: | | |
| \$1,733,343 | | |
| Total 319(h) Funds for all Projects: | | |
| - \$1,711,343 | | |
| Grant Funds Remaining: | | |
| = \$22,000 | | |
| Project Budget * | | |
| Appropriation Year: | | |
| 2016 | | |
| * Project budget includes | | |
| 3 | | |
| * 319(h) Federal Funds: | | |
| \$127,600 | | |
| * EPA Other: | | |
| \$0 | | |
| * Other Federal: | | |
| \$0 | | |
| * State Funds: | | |
| \$85,568 | | |
| * State In-Kind: | | |
| | | |
| * Local Funds: | | |
| | | |
| * Local In-Kind: | | |
| \$0 | | |
| * Other Funds: | | |
| | | |
| Total Budget: | | |
| \$213,168 | | |
| Comments: | | |
| | | |
| | | |
| Work Catagories | | |

Work Categories *

| Category of Work | Primary | |
|---------------------------|---------|--|
| BMP Design/Implementation | Υ | |

Sources of NPS Pollution *

| Category Type | Secondary | Percent (%) |
|---------------|-----------|-------------|
| Agriculture | | 100 |
| | | 100 |

Key Partners

No Key Partners found.

Related Projects

No Related Projects found.

Attachments

No Attachments found.

Planning

Watershed Plans **



No Watershed Plans found.

Project Status

| Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|-------------|-------------------|-------------|---------|----------|-------------|
| Current | Completed | 11/01/2019 | - | TCRADDOC | 11/07/2019 |
| History | Behind Schedule | - | - | TCRADDOC | 01/11/2019 |
| History | On Schedule | 11/15/2018 | - | TCRADDOC | 01/30/2018 |
| History | Ahead of Schedule | 06/01/2017 | - | TCRADDOC | 08/08/2017 |
| History | On Schedule | 11/01/2016 | - | TCRADDOC | 12/20/2016 |
| History | On Schedule | 11/01/2016 | - | TCRADDOC | 12/20/2016 |
| History | Pending | 03/21/2016 | - | TCRADDOC | 03/21/2016 |

Schedule *

Project Start Date:

08/09/2016

Project End Date:

11/01/2019

Comments:

Award signed 8/9/16

Waterbody Information

| | Edit | Name | Туре | ATTAINS ID | Size | Units |
|--|------|-----------|--------------------|-------------|------|-------|
| | Ø | SECOND CK | Stream/Creek/River | WVKNG-23_00 | 23.7 | MILES |

1 - 1

Pollutants to be Addressed

No Pollutants to be Addressed found.

Planned Activities

No Planned Activities found.

Tasks

No Tasks found.

Project Evaluations

| Evaluation | Evaluation Type | Reporting From | Reporting To | Creation Date | Attachments | | |
|--|--------------------|-------------------|-----------------|------------------|--------------------------------------|--|--|
| Project complete. Final report attached. | Final | 04/01/2019 | 09/30/2019 | 11/07/2019 | WVCA_SecondCreekKarstFinalReport.pdf | | |
| Preliminary planning with contractors and landowners to implement planned BMPs is underway. There has been no movement on the project since the last reporting period. | Semi-Annual | 04/01/2018 | 09/30/2018 | 10/01/2018 | - | | |
| The West Virginia Conservation Agency is continuing to work with landowners who have existing contracts. All funding has been allocated and WVCA is currently trying to find willing contractors who will install the practices. This project is still on track to be completed on time. | Semi-Annual | 10/01/2017 | 03/31/2018 | 07/02/2018 | - | | |
| The project is on-schedule. Currently three contracts have been signed and are in progress and two additional plans are in development. | Semi-Annual | 04/01/2017 | 09/30/2017 | 01/30/2018 | - | | |

| Evaluation | Evaluation Type | Reporting From | Reporting To | Creation Date | Attachments |
|--|--------------------|-------------------|-----------------|------------------|-------------|
| The project is on track to be completed prior to the performance deadline. Multiple contracts have been signed and are scheduled for construction by late summer 2017. | Semi-Annual | 10/01/2016 | 03/30/2017 | 08/08/2017 | - |
| No progress to report; however, statewide BMPs from WVCA's Ag Enhancement Programs have been implemented in the Upper Second Creek watershed. | Semi-Annual | 04/01/2016 | 09/30/2016 | - | - |

Environmental Results

Drainage Areas *

| Drainage number | Drainage area | Bmps | Pollutants |
|--------------------|-----------------------|------|--|
| 1 | Upper Second Creek | | Nitrogen, Pathogens (Coliform), Phosphorus, Sedimentation-Siltation |

Drainage Area Pollutants *

| <u> </u> | | | | | | | | | |
|-----------------------|-------------------------|-----------------------|-----------------|----------------------------|-------|------------------------|----------|--|--|
| Drainage Area Name ↑= | Pollutant | Load Reduction Amount | Unit of Measure | Load Reduction Date | Round | Model | Comments | | |
| 01-Upper Second Creek | Nitrogen | 689 | LBS/YR | 30-SEP-17 | 1 | No model was used, N/A | - | | |
| 01-Upper Second Creek | Nitrogen | 8350 | LBS/YR | 30-MAR-18 | 2 | WVCA | - | | |
| 01-Upper Second Creek | Pathogens (Coliform) | 3160000000000 | CFU | 30-SEP-17 | 2 | No model was used, N/A | - | | |
| 01-Upper Second Creek | Pathogens (Coliform) | 4370000000000 | CFU | 30-MAR-18 | 1 | WVCA | - | | |
| 01-Upper Second Creek | Sedimentation-Siltation | 70.9 | TONS/YR | 30-MAR-18 | 2 | WVCA | - | | |
| 01-Upper Second Creek | Phosphorus | 301 | LBS/YR | 30-SEP-17 | 1 | No model was used, N/A | - | | |
| 01-Upper Second Creek | Phosphorus | 1896 | LBS/YR | 30-MAR-18 | 2 | WVCA | - | | |
| 01-Upper Second Creek | Sedimentation-Siltation | 318 | TONS/YR | 30-SEP-17 | 1 | No model was used, N/A | - | | |
| 01-Upper Second Creek | Pathogens (Coliform) | 1180000000000 | CFU | 01-MAR-17 | 1 | NA | - | | |

Best Management Practices **

| BMP Type ↑= | Number Installed | Units of Measure | Implementation Date | Drainage Area Name | BMP cost | Comments |
|---------------------------|------------------|------------------|---------------------|-----------------------|----------|----------|
| Alternative Water Sources | 10 | UNITS | 30-SEP-20 | - | - | - |
| Alternative Water Sources | 9 | UNITS | 30-MAR-18 | 01-Upper Second Creek | - | - |
| Fence | 50000 | FT | 30-SEP-20 | - | - | - |
| Fence | 7648 | FT | 01-MAR-17 | 01-Upper Second Creek | - | - |
| Fence | 820 | FT | 30-SEP-17 | 01-Upper Second Creek | - | - |
| Grazing Planned Systems | 16 | UNITS | 30-SEP-20 | - | - | - |
| Heavy Use Area Protection | 4275 | SQUARE FEET | 30-MAR-18 | 01-Upper Second Creek | - | - |
| Irrigation Pipeline | 4308 | FT | 30-MAR-18 | 01-Upper Second Creek | - | - |
| Nutrient Management | 16 | UNITS | 30-SEP-20 | - | - | - |
| Pumping Plant | 2 | UNITS | 30-MAR-18 | 01-Upper Second Creek | - | - |
| Water Well | 2 | UNITS | 30-MAR-18 | 01-Upper Second Creek | - | - |

1 - 11

Ecoregions

No ecoregions found.

Counties

No counties found.

| P | roject Information |
|---|--|
| | Grant #: |
| | 00350018 |
| | Region: |
| | 03 |
| | State: |
| | WV |
| | Appropriation Year: |
| | 2018 |
| | Project #: |
| | 12 |
| | General Information * |
| | * 50/50 Funding Split: |
| | Watershed Project Funds |
| | * Project Title: |
| | Second Creek - Tall Hickory Farms |
| | State Project Number: |
| | NPS1686 |
| | * Subgrantee(s): |
| | WEST VIRGINIA CONSERVATION AGENCY |
| | ☐ This Project Does Not Have a Subgrantee |
| | * Description: |
| | Overview Second Creek in Greenbrier and Monroe Counties of West Virginia is a large tributary of the Greenbrier River (HUC-8: 05050003). This stream is heavily impacted by cattle and other livestock feeding on the karst geology, near karst windows, and open sink holes. Beef cattle operations and some dairy operations exist in this area. |
| | Objectives The goal of this project is to improve the water quality in Second Creek by evenly distribute grazing, improve manure management, and nutrient management capabilities, and limit the amount of nutrient rich runoff. WVCA estimates that soil erosion can be reduced by 6.44 tons/year on this project by proper pasture rotation and elimination of cattle being held in 3 main dirt lots. Total fecal coliform load reductions from this project are expected to be 8.89E+12 counts/year. |
| | Methods BMP's will include prescribed grazing, nutrient management, and heavy use area protection. Existing pasture division fences and alternative watering facilities will be utilized for the prescribed grazing plan. Nutrient management efforts will entail soils sampling, nutrient mapping, manure management, and proper nutrient application. Efforts to reduce nutrient and fecal coliform laden runoff entering the karst area will be addressed by installing a roofed feeding shed. The roofed feeding shed will allow the producer to better manage winter feeding and allow for a clean environment for incoming livestock by providing a roofed structure to feed under and store all manure produced to applied to crop fields or hauled out of the watershed. |
| | * Statewide: |
| | N . |
| | * This Project Will / Did Result in Pollutant Load Reductions: |
| | Y |
| | Project Manager: |
| | 52808 |
| | Phone: |
| | 304-539-2202 |
| | State Project Manager: |
| | 25286 |
| | Phone: |
| | 304-558-2204 |
| | * Status of TMDL for Waterbody/Watershed: |
| | Implementing a TMDL |
| | * 51% or More of Project Budget Used to Protect Unimpaired / High Quality Waterhodies: |

Ν

| _ | | | ð |
|----|----|-----|---|
| Bu | do | ıet | - |

Grant Summary

Total 319 Grant Funds:

\$1,850,542

Total 319(h) Funds for all Projects:

- \$1,860,542

Grant Funds Remaining:

= -\$10,000

Project Budget **

Appropriation Year:

2018

- Project budget includes
- 3
- * 319(h) Federal Funds:

\$100,000

- * EPA Other:
- \$0
- * Other Federal:
- \$0
- * State Funds:
- \$0
- * State In-Kind:

\$66,667

- * Local Funds:
- \$0
- * Local In-Kind:
- \$0
- * Other Funds:

\$0

Total Budget:

\$166,667

Comments:

Work Categories **

| Category of Work | Primary |
|------------------------------|---------|
| BMP Implementation | Υ |
| Education/Information | N |
| BMP Effectiveness Monitoring | N |
| BMP Design | N |

Quality Assurance Project Plan

Does the Project require a Quality Assurance Project Plan

● Yes ○ No

Sources of NPS Pollution *

| Category Type | Secondary | Percent (%) |
|---------------|-----------|-------------|
| Agriculture | | 100 |
| | | 100 |

Key Partners

No Key Partners found.

Related Projects

No Related Projects found.

Attachments

| Attachment Name | File Size | Document Type |
|---|-----------|---------------|
| $WVCA_Tall Hickory Second Creek FY 18319. pdf$ | 645.2KB | Work Plan |

Planning

Watershed Plans*



Project Status

| Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|-------------|----------------|-------------|---------|----------|--------------------|
| Current | On Schedule | - | - | TCRADDOC | 01/29/2019 |

Schedule **

Project Start Date:

08/17/2018

Project End Date:

06/30/2022

Comments:

Award signed 08/17/18

Waterbody Information

| | Edit | Name | Туре | ATTAINS ID | Size | Units |
|--|----------|-----------|--------------------|-------------|------|-------|
| | B | SECOND CK | Stream/Creek/River | WVKNG-23_00 | 23.7 | MILES |

1 - 1

Pollutants to be Addressed

| Pollutant ↑= | Load Reduction Goal (Numeric, Total for ENTIRE Project) | Units |
|-------------------------|--|---------|
| Pathogens (Coliform) | | UNITS |
| Sedimentation-Siltation | | TONS/YR |

1 - 2

Planned Activities

| BMP Type ↑= | Quantity Planned | Units of Measure |
|---------------------------|------------------|------------------|
| Heavy Use Area Protection | | N/A |
| Manure (Waste) Transfer | | UNITS |
| Nutrient Management | | AC |
| Prescribed Grazing | | AC |

Tasks

No Tasks found.

Project Evaluations

| Evaluation | Evaluation Type | Reporting From | Reporting To | Creation Date | Attachments |
|--|-----------------|----------------|--------------|---------------|-------------|
| This project is still in the preliminary planning stage. | Semi-Annual | 04/01/2018 | 09/30/2018 | 01/29/2019 | - |

Environmental Results

Drainage Areas *

| Drainage number | Drainage area | Bmps | Pollutants |
|-----------------|-----------------------------------|--|---|
| 1 | Lower Second Creek (050500030703) | Manure (Waste) Transfer, Nutrient Management, Prescribed Grazing | Pathogens (Coliform), Sedimentation-Siltation |

Drainage Area Pollutants *

| Dramage 7 wear onduction | | | | | | | | |
|--------------------------|--------------------------------------|-------------------------|------------------------------|-----------------|----------------------------|-------|-------|----------|
| | Drainage Area Name ↑= | Pollutant | Load Reduction Amount | Unit of Measure | Load Reduction Date | Round | Model | Comments |
| | 01-Lower Second Creek (050500030703) | Sedimentation-Siltation | - | TONS/YR | - | 1 | WVCA | - |
| | 01-Lower Second Creek (050500030703) | Pathogens (Coliform) | - | UNITS | - | 1 | WVCA | - |

Best Management Practices **

| BMP Type ↑= | Number Installed | Units of Measure | Implementation Date | Drainage Area Name | BMP cost | Comments |
|-------------------------|------------------|------------------|---------------------|--------------------------------------|----------|----------|
| Manure (Waste) Transfer | - | UNITS | - | 01-Lower Second Creek (050500030703) | - | - |
| Nutrient Management | - | AC | - | 01-Lower Second Creek (050500030703) | - | - |
| Prescribed Grazing | - | AC | - | 01-Lower Second Creek (050500030703) | - | - |

1 - 3

Ecoregions

Ecoregion

Central Appalachians Ridge and Valley

Counties

| County Name | State |
|-------------|-------|
| GREENBRIER | WV |
| MONROE | WV |

| Pro | ect Information |
|-----|---|
| Gra | nt #: |
| | 350018 |
| | ion: |
| 03 | |
| Sta | te: |
| W۱ | |
| Ар | propriation Year: |
| 20 | 18 |
| Pro | ject #: |
| 10 | |
| G | eneral Information * |
| a | 50/50 Funding Split: |
| | Watershed Project Funds |
| | Project Title: |
| | |
| | Upper Indian Creek |
| | tate Project Number: |
| | NPS1650 Subgrantee(s): |
| | |
| | WEST VIRGINIA CONSERVATION AGENCY |
| | This Project Does Not Have a Subgrantee |
| | Description: Overview |
| | Indian Creek in Monroe County of West Virginia is a large tributary of the New River. This stream is heavily impacted by cattle and other livestock feeding on karst geology and near karst windows and open sink holes. Agriculture in this area consists primarily of beef cattle and sheep operations with limited dairy production. The goal of this project is to evenly distribute grazing throughout the karst area, spreading nutrients and bacteria laden waste in a manner that will reduce concentrated runoff and infiltration; and rehabilitate failing septic systems contributing to the bacteria load. Best Management Practices (BMPs) will include prescribed grazing, nutrient management, livestock water development, pasture division fencing and failing septic system rehabilitation. Alternative water development and division fencing will be used to enact the prescribed grazing plans. Nutrient management will consist of precision soil sampling and nutrient mapping of the farms to determine if there is a need for land management changes such as feeding and grazing practices. These nutrient maps will indicate where the "hot spots" of potential runoff are on the farm per current practices and allow the farmers to alter their current practices, then alter those practices to prevent excess runoff and achieve a total load reduction of 1.0401E+13. |
| | Objectives The primary goal of this project in these select portions of the Upper Indian Creek Watershed will be to reduce fecal coliform loads by 1.0401E+13Counts/year to bring it within allowable levels. This goal will primarily be accomplished by precision soil sampling to develop nutrient maps, and nutrient management/grazing and winter feeding plans. |
| | Methods These plans will allow a farmer to see where the nutrient "hot spots" are on the farm and alter their management practices to distribute these nutrients throughout their grazing land. Additionally, they will allow for variable rate nutrient application for areas that are lacking adequate nutrients for forage production. Prescribed grazing will be utilized to aid the farmer in altering his management practices by installing pasture division fences; enacting a grazing schedule and determining appropriate stocking rates. Water development will also be used to facilitate these more appropriate grazing practices. |
| 3 | Statewide: |
| | N . |
| | this Project Will / Did |
| | oad Reductions: |
| | Y |
| F | roject Manager: |
| | 31988 |
| F | thone: |
| 3 | 04-645-6172 |
| 9 | tate Project Manager: |
| | 25286 |
| F | hone: |
| | 304-558-2204 |
| | Status of TMDL for |

Implementing a TMDL * 51% or More of Project Budget Used to Protect Unimpaired / High Quality Waterbodies: Budget ** **Grant Summary** Total 319 Grant Funds: \$1,850,542 Total 319(h) Funds for all Projects: - \$1,860,542 **Grant Funds Remaining:** = -\$10,000 Project Budget ** Appropriation Year: 2018 Project budget includes * 319(h) Federal Funds: \$100,000 * EPA Other: \$0 * Other Federal: \$0 * State Funds: \$66,668 * State In-Kind: \$0 Local Funds: \$0 Local In-Kind: \$0 * Other Funds: **Total Budget:** \$166,668 Comments:

Work Categories **

| Category of Work | Primary |
|--------------------|---------|
| BMP Implementation | Υ |
| BMP Design | N |

Sources of NPS Pollution*

| Category Type | Secondary | Percent (%) |
|---------------|--|-------------|
| Agriculture | Grazing-Related Sources Pasture Grazing | 100 |
| | | 100 |

Key Partners

No Key Partners found.

Related Projects

No Related Projects found.

Attachments

| Attachment Name | File Size | Document Type | |
|----------------------------------|-----------|---------------|--|
| WVCA_UpperIndianCreekFY18319.pdf | 698.1KB | Work Plan | |

Planning

Watershed Plans*



Project Status

| | Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|---|-------------|----------------|-------------|---------|----------|-------------|
| (| Current | On Schedule | - | - | TCRADDOC | 01/29/2019 |

Schedule **

Project Start Date:

08/17/2018

Project End Date:

09/30/2022

Comments:

Award signed 08/17/18

Waterbody Information

| | Edit | Name | Туре | ATTAINS ID | Size | Units |
|--|------|-----------------|--------------------|--------------------|------|-------|
| | | BURNSIDE BRANCH | Stream/Creek/River | WVKN-51-S-1-(S)_00 | 6.2 | MILES |

1 - 1

Pollutants to be Addressed

| Pollutant ↑= | Load Reduction Goal (Numeric, Total for ENTIRE Project) | Units |
|----------------------|--|-------|
| Pathogens (Coliform) | | UNITS |

1 - 1

Planned Activities

| BMP Type ↑= | Quantity Planned | Units of Measure |
|---------------------------|------------------|------------------|
| Alternative Water Sources | 15 | UNITS |
| Fence | 50000 | FT |
| Nutrient Management | 5000 | AC |
| Prescribed Grazing | 5000 | AC |

Tasks

No Tasks found.

Project Evaluations

| Evaluation | Evaluation Type | Reporting From | Reporting To | Creation Date | Attachments |
|---|--------------------|-------------------|-----------------|------------------|-------------|
| Ten different landowners have BMP's under contract with both the WVCA and NRCS. NRCS will be cost sharing with the water development and heavy use area protection practices and the WVCA will be assisting with the fencing practices utilizing 319 funds. Additionally the U.S. Fish and Wildlife Service has become a partner on the project providing fence post to help offset the cost of the fencing practices and extend 319 funds. | Semi-Annual | 04/01/2018 | 09/30/2018 | 01/29/2019 | - |

Environmental Results

Drainage Areas **

| Drainage number | Drainage area | Bmps | Pollutants |
|-----------------|-----------------------------------|---|----------------|
| 1 | Upper Indian Creek (050500020703) | Alternative Water Sources, Fence, Nutrient Management, Prescribed Grazing | fecal coliform |

Drainage Area Pollutants *

| Drainage Area Name ↑= | Pollutant | Load Reduction Amount | Unit of Measure | Load Reduction Date | Round | Model | Comments |
|--------------------------------------|----------------|------------------------------|-----------------|---------------------|-------|------------------------|----------|
| 01-Upper Indian Creek (050500020703) | fecal coliform | - | UNITS | - | 1 | No model was used, N/A | - |

Best Management Practices **

| BMP Type ↑= | Number Installed | Units of Measure | Implementation Date | Drainage Area Name | BMP cost | Comments |
|---------------------------|------------------|------------------|---------------------|--------------------------------------|----------|----------|
| Alternative Water Sources | - | UNITS | - | 01-Upper Indian Creek (050500020703) | - | - |
| Fence | - | FT | - | 01-Upper Indian Creek (050500020703) | - | - |
| Nutrient Management | - | AC | - | 01-Upper Indian Creek (050500020703) | - | - |
| Prescribed Grazing | - | AC | - | 01-Upper Indian Creek (050500020703) | - | - |

1 - 4

Ecoregions

Ecoregion

Central Appalachians Ridge and Valley

Counties

| County Name | State |
|-------------|-------|
| MONROE | WV |

Project Print Page 1 of 3



| Category of Work | Primary |
|------------------------------|---------|
| BMP Implementation | Υ |
| Education/Information | N |
| BMP Effectiveness Monitoring | N |

Quality Assurance Project Plan

Project Print Page 2 of 3

Does the Project require a Quality Assurance Project Plan $oldsymbol{f 0}$ Yes $\,\,$ O No

Sources of NPS Pollution

| Category Type | Secondary | Percent (%) |
|---------------|--|-------------|
| Agriculture | Grazing-Related Sources Pasture Grazing | 100 |
| | | 100 |

Key Partners

| Organization Type | Partner Name | Partner Contribution | Description of Role/Notes |
|---------------------------|---------------------------------------|----------------------|---------------------------|
| County/Municipal Agencies | MONROE COUNTY HEALTH DEPT | \$0 | |
| County/Municipal Agencies | GREENBRIER CONSERVATION DISTRICT | \$0 | |
| Other Federal Agencies | NATURAL RESOURCE CONSERVATION SERVICE | \$0 | |
| Other Federal Agencies | US FISH AND WILDLIFE SERVICE | \$0 | |
| Watershed Group | INDIAN CREEK WATERSHED ASSOCIATION | \$0 | |
| | | \$0 | |

Related Projects

No Related Projects found.

Attachments

| Attachment Name | File Size | Document Type |
|--------------------------------|-----------|---------------|
| BurnsideBranch_IndianCreek.pdf | 618.4KB | Work Plan |

Planning

Watershed Plans

| Status | Plan Name | Attachment |
|-------------------------------------|---------------|------------|
| Implementing a Watershed Based Plan | *Indian Creek | - |

Project Status

| Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|-------------|----------------|-------------|--------------|----------|-------------|
| Current | On Schedule | 06/12/2019 | Award signed | TCRADDOC | 08/13/2019 |

Schedule **

Project Start 06/01/2019 Date:

Project End Date: 02/28/2023

Comments:

Waterbody Information

| | Edit | Name | Туре | ATTAINS ID | Size | Units |
|--|------|-----------------|--------------------|--------------------|------|-------|
| | Ø | BURNSIDE BRANCH | Stream/Creek/River | WVKN-51-S-1-(S)_00 | 6.2 | MILES |

1 - 1

Pollutants to be Addressed

| Pollutant ↑= | Load Reduction Goal (Numeric, Total for ENTIRE Project) | Units |
|----------------------|--|-------|
| Pathogens (Coliform) | | UNITS |

1 - 1

Planned Activities

| BMP Type ↑= | Quantity Planned | Units of Measure |
|--|------------------|------------------|
| Nutrient Management | | AC |
| Onsite Waste Water Treatment System (New/Existing) | | UNITS |



Project Print Page 3 of 3

| BMP Type ↑= | Quantity Planned | Units of Measure |
|---|------------------|------------------|
| Onsite Waste Water Treatment System (pumpout) | | UNITS |
| Prescribed Grazing | | AC |

Tasks

No Tasks found.

Project Evaluations

No Project Evaluations found.

Environmental Results

Drainage Areas **

| 1 | | | | |
|---|---|--------------------------------------|---|-------------------------|
| 1 | | Drainage area | Bmps | Pollutants |
| | 1 | Upper Indian Creek (050500020703) | Alternative Water Sources, Nutrient Management, Onsite Waste Water Treatment System (New/Existing), Onsite Waste Water Treatment System (pumpout), Prescribed Grazing | Pathogens (Coliform) |

Drainage Area Pollutants Load Reduction Date Unit of **Load Reduction** Drainage Area Name ↑= Pollutant Model Amount Measure Round Comments 01-Upper Indian Creek (050500020703) Pathogens (Coliform) Monitoring/WVCA UNITS modeling

Best Management Practices

| BMP Type ↑= | Number Installed | Units of Measure | Implementation Date | Drainage Area Name | BMP cost | Comments |
|--|---------------------|---------------------|------------------------|---|-------------|----------|
| Alternative Water Sources | - | UNITS | - | 01-Upper Indian Creek (050500020703) | - | - |
| Nutrient Management | - | AC | - | 01-Upper Indian Creek (050500020703) | - | - |
| Onsite Waste Water Treatment System (New/Existing) | - | UNITS | - | 01-Upper Indian Creek (050500020703) | - | - |
| Onsite Waste Water Treatment System (pumpout) | - | UNITS | - | 01-Upper Indian Creek (050500020703) | - | - |
| Prescribed Grazing | - | AC | - | 01-Upper Indian Creek (050500020703) | - | - |

1 - 5

Ecoregions

Ecoregion

Central Appalachians Ridge and Valley

Counties

| County Name | State |
|-------------|-------|
| MONROE | WV |

Project Print Page 1 of 3



Project Print Page 2 of 3

| Sources of NPS | Pollution * | |
|----------------|-------------|-------------|
| Category Type | Secondary | Percent (%) |
| Agriculture | | 100 |
| | | 100 |

Key Partners

| Organization Type | Partner Name | Partner Contribution | Description of Role/Notes |
|---------------------------|----------------------------------|----------------------|---------------------------|
| County/Municipal Agencies | GREENBRIER CONSERVATION DISTRICT | \$0 | |
| | | \$0 | |

Related Projects

No Related Projects found.

Attachments

| Attachment Name | File Size | Document Type |
|--------------------------|-----------|---------------|
| SecondCreekKarst-III.pdf | 255.5KB | Work Plan |

Planning

Watershed Plans **

| Status | Plan Name | Attachment |
|-------------------------------------|-------------------------|------------|
| Implementing a Watershed Based Plan | *Second Creek Watershed | - |

Project Status

| Status Type | Current Status | Status Date | Comment | Editor | Edited Date |
|-------------|----------------|-------------|--------------|----------|-------------|
| Current | On Schedule | 06/12/2019 | Award signed | TCRADDOC | 08/14/2019 |

Schedule **

Project Start **06/01/2019**Date:

Project End Date: 02/28/2023

Waterbody Information

| Edit | Name | Туре | ATTAINS ID | Size | Units |
|------|--------------|--------------------|-------------|------|-------|
| Ø | SECOND CREEK | Stream/Creek/River | WVKNG-23_04 | 19 | MILES |

Comments:

1 - 1

Pollutants to be Addressed

| Pollutant ↑= | Load Reduction Goal (Numeric, Total for ENTIRE Project) | Units |
|----------------------|--|-------|
| Pathogens (Coliform) | | UNITS |

1 - 1

Planned Activities

| BMP Type ↑= | Quantity Planned | Units of Measure |
|---------------------------|------------------|------------------|
| Alternative Water Sources | | UNITS |
| Nutrient Management | | AC |
| Prescribed Grazing | | ΔC |

Tasks

No Tasks found.

Project Evaluations

Project Print Page 3 of 3

| No Froject Evaluation | ons found. | | | | | |
|--|------------|--|--------|------------|--|--|
| nvironmental | Rosult | • | | | | |
| | | • | | | | |
| Drainage Area | S | | | | | |
| Drainage numbe | er | Drainage area | Bmps | Pollutants | | |
| 1 | Lowe | r Second Creek (050500030 | 703) - | - | | |
| Drainage Area | Dall. 1 | ************************************** | | | | |
| Best Managen | nent Pra | actices ** | | | | |
| | nent Pra | actices ** | | | | |
| Best Managen Ecoregions Ecoregion | nent Pra | actices ** | | | | |
| Ecoregions Ecoregion | | actices ** | | | | |
| Ecoregions Ecoregion Central Appalachia | | actices ** | | | | |
| Ecoregions | | actices ** | | | | |
| Ecoregions Ecoregion Central Appalachian Ridge and Valley | | actices ** | | | | |
| Ecoregions Ecoregion Central Appalachian Ridge and Valley Counties County Name | ns | actices ** | | | | |