WYLIE BROOK STREAM RESTORATION PROJECT

COLLABORATION OF AGENCIES:

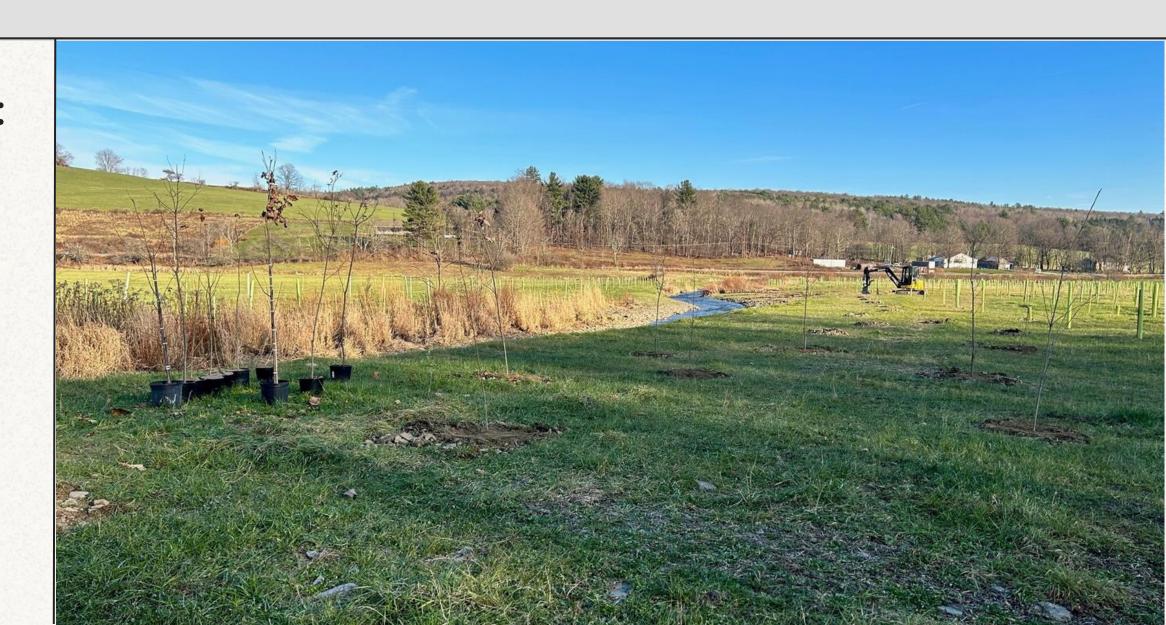
CHENANGO COUNTY SWCD

UPPER SUSQUEHANNA COALITION

USDA FARM SERVICE AGENCY

USDA NATURAL RESOURCES CONSERVATION

SERVICE



SITE DESCRIPTION & EXISTING CONDITION



LOCATION: TOWN OF COVENTRY ALONG WYLIE BROOK, C(T)

PREVIOUS DAIRY FARM ~270 ACRES

WYLIE BROOK & ITS TRIBUTARIES ARE UNIQUE BECAUSE OF THE NATIVE BROOK TROUT POPULATIONS.

JOSLYN ROAD BISECTED FARM & WAS ABONDED BY THE TOWN DECADES AGO

AMONG THE ROAD REMAINS WERE THE CONCRETE BRIDGE ABUTMENTS

A LARGE CAFO CURRENTLY RENTS THE CROP FIELDS AND SPREADS MANURE WHILE THE LANDOWNER MOWS THE "HISTORIC" PASTURES.











PERMIT REQUEST SPRING 2018

PROJECT FEASIBILITY 2018 PLAN FUND DESIGN 2019-2021

IMPLEMENT 2022

MAINTENANCE 2023 -



PERMIT REQUEST SPRING 2018

- Discuss landowner's objectives
- Met with USC and DEC
- Concluded the best course of action is to address stream from bridge to bridge
- Gauge USC's interest in pursuing the project



PASTURE FENCE - TOP STREAMBANK

REDIRECTION OF STREAM TO AVOID PASTURE/HAY FIELD

HISTORY OF STREAM ALTERATION FROM BRIDGE MAINTENANCE

BANK INSTABILITY



BANK EROSION ON THE OUTSIDE BEND EXTENDS TOWARD ROUTE 235 AND IS ABOUT 500' IN LENGTH

MASSIVE SCOUR BEHIND CONCRETE ABUTMENT

TONS OF SEDIMENT SENT DOWN THE BROOK

FLOW IN THE MAIN CHANNEL OBSTRUCTED BY SEDIMENT DEPOSITION

ABUTMENT TRAPS DEBRIS





PERMIT REQUEST SPRING 2018

LANDOWNER INITATES

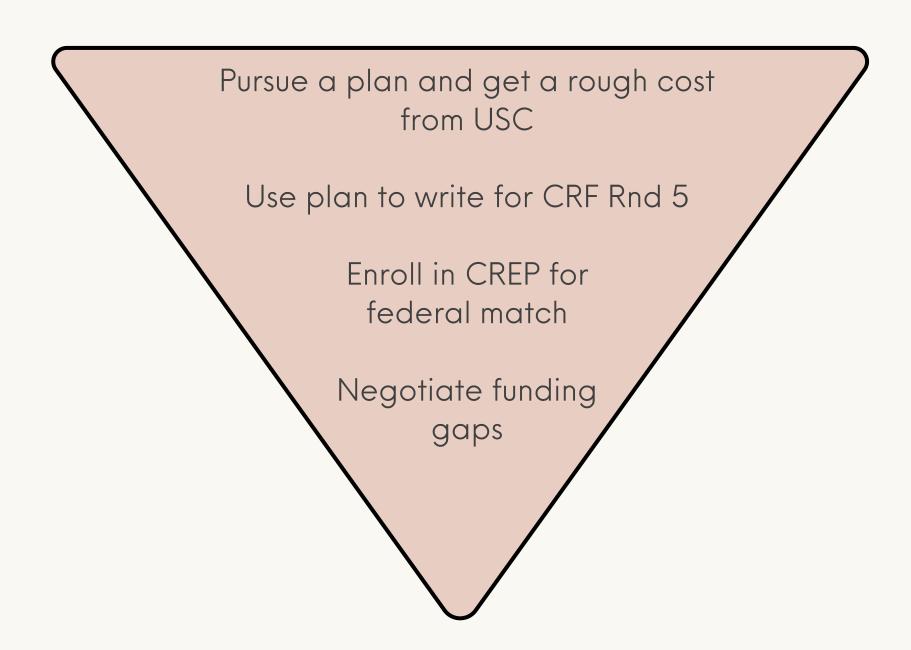
- Discuss landowner's objectives
- Field visit with USC and DEC
- Concluded the best course of action is to address stream from bridge to bridge
- Gauge USC's interest in pursuing the project



PROJECT FEASIBILITY 2018

DECISION

- Consider & communicate project feasibility to landowner
- Identify the risks and responsibilities of each stakeholder
- Landowner concession conversation
- Make a decision

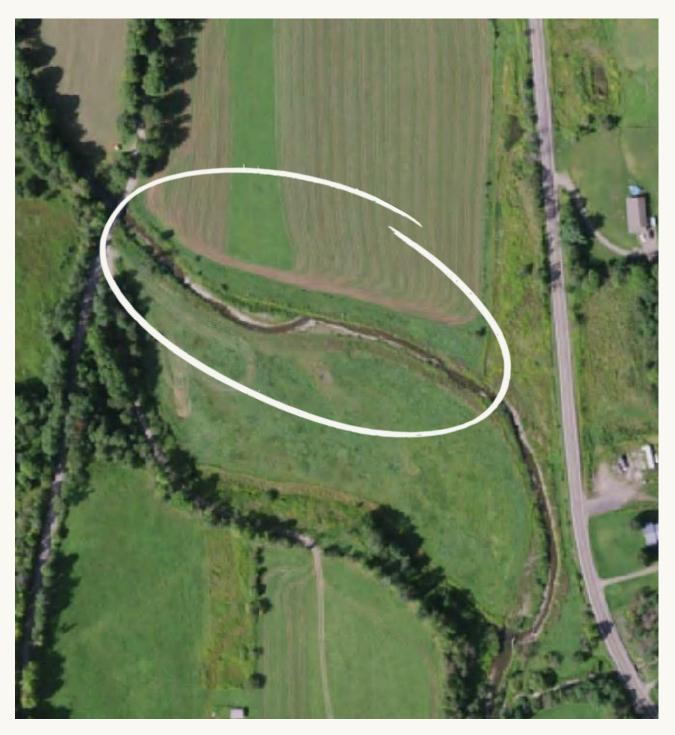




PLAN FUND DESIGN 2019-2021

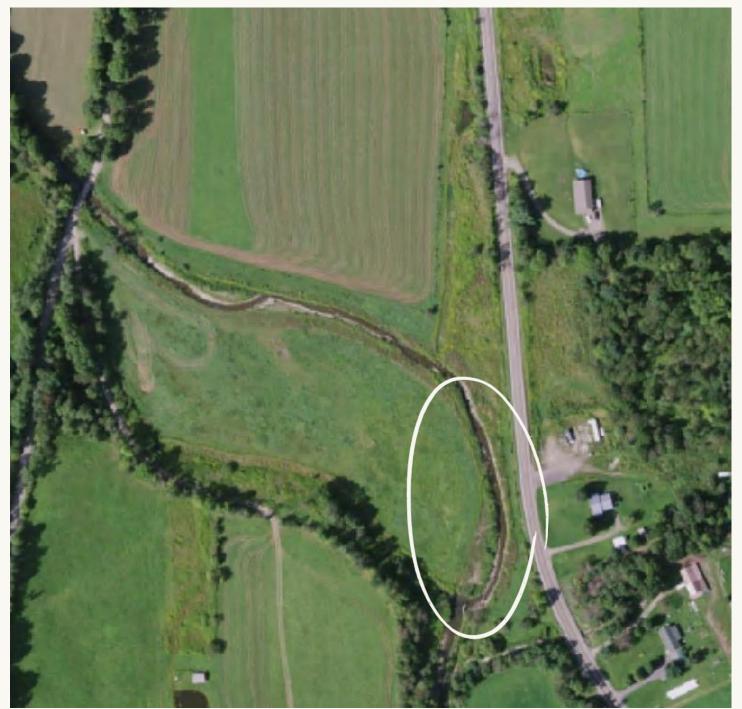
GATHER RESOURCES

- USC stream team conducts survey, initial plan and develops a cost estimate.
- High confidence of successful CREP
- Used cost estimate and wrote Rnd. 5 grant application and was funded.
- Plan for future CREP contract.
- Design completed USC staff.
- Permit application submitted by USC staff.





350' RIPRAP CONSTRUCTED RIFFLE/WEIR 8 BARBS



SECTION B

400' RIPRAP
ABUTMENT REMOVAL
8 BARBS
STREAM REALIGNMENT
WILLOW TRENCHES



PERMIT REQUEST SPRING 2018

LANDOWNER INITATES

- Discuss landowner's objectives
- Met with USC and DEC
- Concluded the best course of action is to address stream from bridge to bridge
- Gauge USC's interest in pursuing the project



PROJECT FEASIBILITY 2018

2019

 Consider & communicate project feasibility to landowner

DECISION

- Identify the risks and responsibilities of each stakeholder
- Landowner concession conversation
- Make a decision



PLAN FUND DESIGN 2019-2021

GATHER RESOURCES

- USC stream team conducts survey, initial plan and develops a cost estimate
- Write a CRF Rnd. 5 grant application & discuss USC funding
- Plan for future CREP contract.
- Design completed USC staff.
- Permit application submitted by USC staff.



IMPLEMENT 2022

EXECUTE

- SWCD bid out stream stabilization design
- Bid awarded to USC
- SWCD bid out tree planting for fall 2022
- USC constructs stabilization structures and provides engineering services
- SWCD manages planting and CREP project

SECTION A

RIPRAP INSTALLATION







SECTION A:

AT GRADE CROSSING

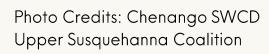
BARBS

WILLOW TRENCHES



SECTION B RIPRAP





SECTION B - STREAM REALIGNMENT AND ABUTMENT REMOVAL



BUFFER PLANTINGS:
10.8 ACRES
1,875 TUBELINGS
100- 3 GALLON CONTAINER TREES
PLANTING COST: \$32,157.76





PERMIT REQUEST SPRING 2018

LANDOWNER INITATES

- Discuss landowner's objectives
- Met with USC and DEC
- Concluded the best course of action is to address stream from bridge to bridge
- Gauge USC's interest in pursuing the project



PROJECT FEASIBILITY 2018

2019-202

 Consider & communicate project feasibility to landowner

DECISION

- Identify the risks and responsibilities of each stakeholder
- Landowner concession conversation
- Make a decision



PLAN FUND DESIGN 2019-2021

GATHER RESOURCES

- USC stream team conducts survey, initial plan and develops a cost estimate
- Write a CRF Rnd. 5 grant application & discuss USC funding
- Plan for future CREP contract.
- Design completed USC staff.
- Permit application submitted by USC staff.



IMPLEMENT 2022

EXECUTE

- SWCD bid out stream stabilization design
- Bid awarded to USC
- SWCD bid out tree planting for fall 2022
- USC constructs stabilization structures and provides engineering services
- SWCD manages planting and CREP project



MAINTENANCE

MONITOR

2023 -

- SWCD and the landowner will work together to maintain trees
- SWCD to assist the landowner with maintaining CREP contract obligations.
- Monitor structures for damage
- Assess challenges