

**REQUEST FOR PROPOSALS
FOR
PROFESSIONAL ENGINEERING SERVICES**

**FISHING CREEK WATERSHED
FLOOD MITIGATION STUDY
COUNTY OF COLUMBIA
PENNSYLVANIA**

Proposals Solicited by:

**County of Columbia
Main Street County Annex
11 West Main Street
Bloomsburg, PA 17815**

February 10, 2021

Contact: Teri Provost, (570) 524-4491 or (570) 412-4563

REQUEST FOR PROPOSALS

The County of Columbia is seeking proposals from firms that wish to provide engineering services to undertake a flood mitigation study for the Fishing Creek Watershed in Columbia County. This study should include an investigation of the existing conditions, as well as potential flood resiliency and mitigation projects in the watershed. This project has been financed by grants from the Commonwealth of Pennsylvania, Commonwealth Financing Authority and the Department of Community and Economic Development.

The County is working in cooperation with SEDA-Council of Governments (SEDA-COG) to solicit Professional Service Providers to undertake the study. The Request for Proposals (RFP) describes the project, the anticipated scope of services, the required consultant expertise and experience, and the information that must be included in the proposal. Failure to submit information in accordance with the RFP requirements and procedures may be cause for disqualification.

A **mandatory** preproposal meeting will be held at the Sawmill Road complex: Large Meeting Room, 702 Sawmill Road, Bloomsburg, PA 17815. Entrance for the large meeting room is around the back of the building. The meeting will take place on Tuesday, March 2, 2021, at 2:00 PM, subject to COVID-19 restrictions. There is a limit of two (2) attendees from each firm to the in-person meeting and each attendee must follow all required COVID-19 protocols in place at the time of the meeting. You **MUST** register for the mandatory preproposal meeting by contacting Teri Provost via email at: tprovost@seda-cog.org or by phone at 570-524-4491 ext 7253. **If we are unable to conduct this meeting in-person due to COVID-19 restrictions, a link to attend a virtual meeting via RingCentral will be distributed to all registered applicants by email at least 7 days prior to the in-person meeting, announcing the change and including instructions on how to participate in the virtual session.**

The County of Columbia will evaluate written proposals on the basis of thoroughness, completeness, content, experience, and capacity. The County and/or its Agent will likely conduct interviews with the top ranked proposers.

Proposals will be accepted until 12:00 PM. prevailing time on Thursday, March 18, 2021. The proposals will be opened at 2:00 PM prevailing time on Thursday, March 18, 2021, at which time they will be publicly opened and read aloud at the regularly scheduled Board of Commissioner's meeting located at Sawmill Road complex: Large Meeting Room, 702 Sawmill Road, Bloomsburg, PA 17815.

Proposals shall be on the forms required, sealed, and clearly marked on the outside, "Engineering Services Proposal – Fishing Creek," and submitted to Mr. David Witchey at 11 West Main Street, Main Street County Annex, Bloomsburg, PA 17815. If you are mailing a proposal via United States Postal Service (USPS), please mail to: Mr. David Witchey, Chief Clerk, Columbia County, PO Box 380, Bloomsburg, PA 17815.

Proposals that are faxed or e-mailed cannot be accepted.

REQUEST FOR PROPOSALS
PROFESSIONAL ENGINEERING SERVICES
FISHING CREEK WATERSHED FLOOD MITIGATION STUDY
COUNTY OF COLUMBIA, TOWN OF BLOOMSBURG

The County of Columbia proposes to use recently awarded Keystone Communities Program Grant from the Commonwealth of Pennsylvania, acting through the Department of Community and Economic Development, and an award from the Small Water and Sewer Program Grant funding from the Pennsylvania Department of Community and Economic Development, Commonwealth Financing Authority.

The following narrative outlines the major responsibilities of the proposers. These responsibilities shall include an exhaustive list of mitigation opportunities, field reconnaissance, mapping, obtain local input, geomorphological, hydrology and hydraulic assessment, cost benefit analysis, listing of permits and all project costs associated with identified mitigation projects, documentation of needed easements associated with potential projects, potential impacts both positive and negative to communities when undertaking potential projects as it relates to local regulations, like that of zoning, SALDO, or floodplain management, surveying, technical reports, inundation mapping, and other plans as necessary to complete the watershed flood mitigation study. The Scope of work herein includes a listing that must be included in your proposal at minimum to meet the needs of the County's study.

It should be recognized by all proposers that the Scope of Services included herewith might exclude some minor, incidental engineering responsibilities not currently identifiable.

Columbia County invites proposers to identify and/or suggest essential services not necessarily identified in this Request for Proposal. The scope of work includes a listing that must be included in your proposal at minimum to meet the needs of the County's study.

Proposals shall include the attached "Standard Engineering Estimate" and be submitted to: Mr. David Witchey, Chief Clerk at 11 West Main Street, Main Street County Annex, Bloomsburg, PA 17815. If you are mailing a proposal via USPS, please mail to: Mr. David Witchey, Chief Clerk, Columbia County, PO Box 380, Bloomsburg, PA 17815.

All proposals **must be received by the County no later than 12:00 PM prevailing time, Thursday, March 18, 2021.** The proposals will be opened at 2:00 PM prevailing time on Thursday, March 18, 2021, at which time the proposals will be opened and read aloud at the regularly scheduled Board of Commissioner's meeting. The bid opening will take place at the Sawmill Road complex: Large Meeting Room, 702 Sawmill Road, Bloomsburg, PA 17815.

Questions regarding this proposal should be directed to Teri Provost, SEDA-Council of Governments, 201 Furnace Road, Lewisburg, PA 17837, Office Phone (570) 524-4491 or Cell Phone (570) 412-4563.

INTRODUCTION/BACKGROUND

This section provides a brief description of the project and general scope of work. The County of Columbia expects the engineer will use his/her expertise and experience to make recommendations regarding the scope of work needed to satisfy the objectives of the project(s) in a timely manner.

The Fishing Creek Watershed is a 385 square mile watershed primarily in Columbia County, but also covers part of Lycoming, Sullivan, and Luzerne Counties. Tributaries in this watershed drain into Fishing Creek, located in Columbia County, and from there into the Susquehanna River south of the Town of Bloomsburg. This study is for the entire Fishing Creek watershed throughout Columbia County. A map of this area can be found by visiting: <https://gismaps.columbiapa.org/webapps/flooding/>

The primary problem areas are located along the main Branch of Fishing Creek within the watershed. While the County has a general idea of where some problem areas exist, we are seeking a comprehensive study of the entire watershed, to identify where all problem areas are located. There are several mitigation actions, such as conservation easements or groundwater storage or recharge areas, that may have benefit, while not being directly adjacent to the stream bank.

In preparation of the release of this RFP, the County worked with several entities and requires that the successful proposer continue to engage with the local Municipalities affected, the County Conservation District, the USGS, NRCS, DCNR, as well as local businesses and utilities who might be affected by stream flooding and are interested in collaborating on solutions after existing conditions are identified.

SCOPE OF WORK

This section provides the general scopes of work for the Fishing Creek flood mitigation study.

ENGINEERING SERVICES REQUIRED

This proposer must successfully identify and explain the following for the Fishing Creek Watershed in Columbia County.

1. Field reconnaissance, mapping, and local input:

Conduct field reconnaissance to gain insight and understanding into the local conditions and to inform models and assessments. This will include reviewing existing local information and available data, as well as input from county and state agencies, and community watershed partners needed to:

- Map areas prone to flooding (historic and predicted),
- Map locations of existing wetlands, intact floodplains, forests, and other largely undeveloped areas, including existing protected areas, and
- Identify potential locations for flood mitigation efforts including storm water detention, dam removal, wetland, forest/restoration/creation/protection, conservation easements, buyouts, and other mitigation measures that would enhance flood resiliency efforts and provide the feasibility of the proposed project and cost estimates for the same.
- Local input, including but not limited to: County, Municipal, Agencies, and utilities.

2. Geomorphic, hydraulic, and hydrology assessment:

- This task is designed to assess and characterize the geomorphic, hydraulic and hydrologic characteristics of the Fishing Creek Watershed including boundaries, drainage patterns, land cover/use and soil types.
- Identify the presence of wetlands, forests, and undeveloped areas as beneficial features, which have the potential to mitigate flooding in the watershed.
- Where applicable, assess the vulnerability on downstream flood hazard and inundation during heavy localized rainfall events.

3. Flood hazard mitigation strategies & cost/benefit analysis:

Recommend solutions to reduce flood risk for the communities and residents in the watershed. In addition to engineering approaches, solutions must include natural systems, such as wetlands and forests within the watershed that are important to maintaining hydrology and reducing flood risk. As much as possible the solutions will identify specific parcels, locations, or regions of wetlands, forests, farmland, or other undeveloped areas, which could be conserved to help reduce flooding vulnerability. If possible, estimate the flood attenuation benefits of natural systems. Include an estimate of the costs including permits required and benefits at a level of detail sufficient for the County to compare options among the recommendations.

Methods such as the FEMA Benefit/Cost analysis tool, and/or the HAZUS Mitigation Planning Tool may be used or other methods if approved by the County.

4. Public participation meetings and presentations:

Coordinate and participate in community meetings required to complete this project and inform and solicit input from the public and local leaders. This will, at a minimum, include:

- An opening kickoff meeting with key stakeholders, which could include local and county officials, community groups, watershed groups, businesses, and landowners,
- A project mid-way status meeting,
- A final meeting to the public to deliver findings.

5. Technical reports

The consultant will deliver one draft report for the County's review prior to the completion of the final report. The final report will be due to the County within 60 days after the draft report has been reviewed and accepted by the County. The final report must summarize the methods, community engagement, field work, findings, and suggested solutions. This will include electronic copies of any spatial GIS data.

The proposal must identify mitigation actions, successfully showing how the mitigation actions can work as a standalone project, as a larger project, or with a combination of activities. The County must receive a detailed benefit cost analysis for any mitigation actions identified in the study, enabling the governing body to make an informed decision when ranking potential projects based upon the return of investment of all potential mitigation strategies.

Some of the strategies to identify include, but are not limited to riparian buffers, Wetland and floodplain restoration, flood control structures, likelihood of attracting a developer to the area to build post and pier elevated structures and the outcomes realized from this type of activity, recreation in or near the floodway that is in compliance with local, state and federal floodplain regulations.

It should be noted that there are several bank stabilization projects along the stream reach. The study must investigate structures, like that of bridges, dams and other impediments that may be affecting the stream and its functions.

The successful proposer will be charged to fully describe the methods that will be used to survey the watershed and develop a design for any project work implemented as a result of the study. Furthermore, gathering and evaluating all existing data available from the County of Columbia, municipalities, industries, and others, including topographical data, hydrology, hydraulics, geotechnical, etc. will be the responsibility of the successful proposer. Said successful proposer must also conduct necessary survey(s) and fill any survey data gaps, establish the need of preliminary right-of-way requirements, (including temporary and permanent easements and deed restrictions and delineate the prospective rights-of-way), and prepare conceptual designs for flood protection. Technical studies (biological assessment, wetland delineation, subsurface geotechnical investigation, and soil testing for hazardous materials) may also be required and will need to be evaluated by the engineering firm and presented to the County as a change order if required, to ensure a potential mitigation project can be included in the final report of the study.

The County of Columbia will provide where and when available topographic mapping, stream/river data, survey points, at the request of the project engineer. The engineer is responsible for all necessary survey(s).

The successful proposer of the “Fishing Creek Watershed” flood mitigation study must be willing to communicate and coordinate with the successful proposer of the “West End” flood mitigation study. This requirement is necessary to ensure that a comprehensive plan is developed across both studies, as each benefit the residents of Columbia County and are paramount to the Board of Commissioners.

A draft and final report, along with a public presentation with study findings are requirements of successful completion of the study.

TERMS OF PAYMENT

The engineer will be required to enter into a written Professional Services Agreement with the County of Columbia, which will incorporate the information contained in this Request for Proposals. The Engineer will agree to a lump sum fee, which shall include all costs associated with the services outlined herein. Costs sometimes separately billed as reimbursable costs shall be declared and included in the lump sum amount of this proposal. Payment shall be made to the engineer on a monthly basis.

Invoices shall be provided setting forth the percentage of work completed to date, establishing the amount due based on the percentage completed, less any previous amounts.

SCHEDULE

A copy of the schedule has been included in the RFP as an exhibit.

REQUIRED INFORMATION

Each proposer shall provide all information herein requested. Further, no proposal will be considered unless the documentation required below is included with the proposal submittal. In addition, the Standard Engineering Estimate form must be completed in its entirety.

Each proposer shall provide a minimum of three references (example projects) where flood protection engineering services have been performed during the past five years. Example projects should be similar in design, scope, and magnitude. Proposers shall also list any flood control projects currently underway or completed within the Commonwealth of Pennsylvania within the past ten years.

Each proposer shall provide a brief history of the firm including staff experiences and resumes of key persons and project design team, as well as accomplishments that are relevant to the scope of work stated in this Request for Proposals. It is imperative that the proposer demonstrate the firm's capacity and ability to undertake a project of this magnitude within the timeline specified in the attached schedule.

Firms may be requested to sit for interviews and/or negotiation of contract terms and fees prior to contract award.

If any part of the professional engineering services will be subcontracted for this study, a list identifying the firms and nature of the services to be provided must be included with the proposal.

Professional Liability Insurance is required for this project. Please indicate the level of coverage provided and include the certificate of insurance with your proposal.

GRANT REQUIREMENTS

Columbia County must comply with all applicable federal, state, and local laws and regulations regarding bidding and procurement.

Columbia County cannot execute or concur in any subcontract declared disapproved by the Grantor (DCED). Any subcontractor shall be automatically disapproved, without a declaration from the Grantor, if the subcontractor is currently or becomes suspended or debarred by the Commonwealth or the federal government. In any event, the Grantee (Columbia County) shall be responsible for the quantity and quality of the performance of any of its subcontracts.

It should be noted that all subcontracts must contain provisions of nondiscrimination/sexual harassment as specified in the Article entitled Compliance with Applicable Statutes and Regulations, subsection (b). In addition, all subcontracts involving the pass through of Contract funds to subrecipients must include the audit requirements contained in the Article entitled Contract Audit and Closeout Requirements. The Grantee is responsible for ensuring that all required audits of subcontractors are performed, and for resolving any findings contained in the audit reports. All costs deemed unallowable in the subcontract audit report are required to be returned to the Grantor, through the Grantee.

NONDISCRIMINATION/SEXUAL HARASSMENT CLAUSE

The County of Columbia and any contractor or subcontractor must abide by the following:

1. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the grant agreement or any subgrant agreement, contract, or subcontract, the Grantee, a subgrantee, a contractor, a subcontractor, or any person acting on behalf of the Grantee shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the *Pennsylvania Human Relations Act* (PHRA) and applicable federal laws, against any citizen of this commonwealth who is qualified and available to perform the work to which the employment relates.
2. The Grantee, any subgrantee, contractor or any subcontractor or any person on their behalf shall not in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
3. Neither the Grantee nor any subgrantee nor any contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under the grant agreement, subgrant agreement, contract or subcontract.

4. Neither the Grantee nor any subgrantee nor any contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the *Public Employee Relations Act*, *Pennsylvania Labor Relations Act* or *National Labor Relations Act*, as applicable and to the extent determined by entities charged with such Acts' enforcement, and shall comply with any provision of law establishing organizations as employees' exclusive representatives.
5. The Grantee, any subgrantee, contractor or any subcontractor shall establish and maintain a written nondiscrimination and sexual harassment policy and shall inform their employees in writing of the policy. The policy must contain a provision that sexual harassment will not be tolerated and employees who practice it will be disciplined. Posting this Nondiscrimination/Sexual Harassment Clause conspicuously in easily accessible and well-lighted places customarily frequented by employees and at or near where the grant services are performed shall satisfy this requirement for employees with an established work site.
6. The Grantee, any subgrantee, contractor or any subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor or supplier who is qualified to perform the work to which the grant relates.
7. The Grantee and each subgrantee, contractor and subcontractor represent that it is presently in compliance with and will maintain compliance with all applicable federal, state, and local laws and regulations relating to nondiscrimination and sexual harassment. The Grantee and each subgrantee, contractor and subcontractor further represents that it has filed a Standard Form 100 Employer Information Report ("EEO-1") with the U.S. Equal Employment Opportunity Commission ("EEOC") and shall file an annual EEO-1 report with the EEOC as required for employers' subject to *Title VII of the Civil Rights Act of 1964*, as amended, that have 100 or more employees and employers that have federal government contracts or first-tier subcontracts and have 50 or more employees. The Grantee, any subgrantee, any contractor or any subcontractor shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to their books, records, and accounts by the granting agency and the Bureau of Diversity, Inclusion and Small Business Opportunities for the purpose of ascertaining compliance with the provisions of this Nondiscrimination/Sexual Harassment Clause.
8. The Grantee, any subgrantee, contractor or any subcontractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subgrant agreement, contract or subcontract so that those provisions applicable to subgrantees, contractors or subcontractors will be binding upon each subgrantee, contractor or subcontractor.
9. The Grantee's and each subgrantee's, contractor's and subcontractor's obligations pursuant to these provisions are ongoing from and after the effective date of the grant agreement through the termination date thereof. Accordingly, the Grantee and each subgrantee, contractor and subcontractor shall have an

obligation to inform the commonwealth if, at any time during the term of the grant agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

- 10.** The commonwealth may cancel or terminate the grant agreement and all money due or to become due under the grant agreement may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee, subgrantee, contractor, or subcontractor in the Contractor Responsibility File.

PROPOSAL SUBMISSION AND EVALUATION

Three (3) copies of the proposal must be submitted to:

Mr. David Witchey, Chief Clerk
11 West Main Street
Main Street County Annex
Bloomsburg, PA 17815

If you are mailing a proposal via USPS, please mail to:

Mr. David Witchey, Chief Clerk
Columbia County
PO Box 380
Bloomsburg, PA 17815

Proposals must be received no later than 12:00 PM, Thursday, March 18, 2021. **Proposals that are faxed or e-mailed cannot be accepted. We cannot guarantee the receipt of proposal packages by shipping/parcel handlers to the County. Hand delivery of the proposal is acceptable, and the package will be recorded as being received by the County.**

Proposals will be reviewed and evaluated by the County of Columbia and/or its agent, SEDA-COG. The evaluation will include the following areas in order of relative importance:

- Adequacy of proposal in the terms of addressing the needs that are set forth in the Request for Proposals.
- Relevant experience, past performance, capacity.
- Detailed schedule with milestones.
- Adequacy of resources/record of completing projects on time.
- Quality of previous work.
- Cost.

Note: Cost is only one of several criteria to be considered in evaluating proposals. Accordingly, proposal cost summaries will not be published. Proposers are, however, invited to attend the opening.

FISHING CREEK WATERSHED
STANDARD ENGINEERING ESTIMATE

FIRM NAME: _____

ADDRESS: _____

EMAIL: _____

TELEPHONE: _____

REPRESENTATIVE: _____

LUMP SUM

I. Engineering Services \$ _____

II. Draft report \$ _____

III. Final report and findings of report -
public presentation \$ _____

IV. Meetings with County, Agent,
Municipalities, other interested parties \$ _____

V. Number and frequency of Meetings anticipated

TOTAL LUMP SUM: \$ _____

Additional Meetings:

Lump sum cost for
additional meetings, if requested,
by the County of Columbia.

\$ _____

I, _____, a licensed professional Engineer
in the Commonwealth of Pennsylvania and an authorized representative of the above-
indicated firm, have reviewed and understand the _____ Request
for Proposals, and I/we am/are prepared to provide the required services for the above
costs.

(SEAL)

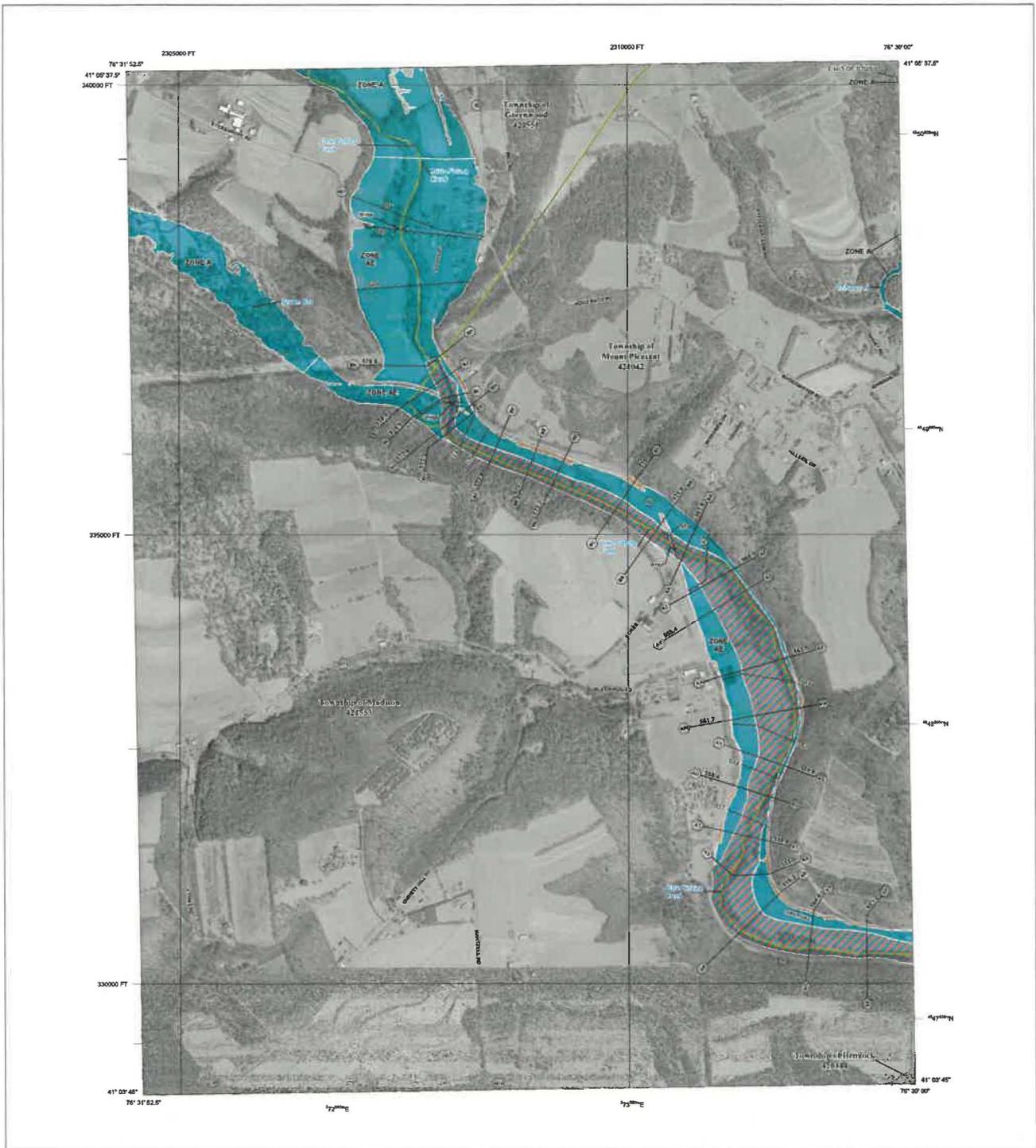
EXHIBIT A

TASK	EXPECTED COMPLETION DATE
Proposal opening	March 18, 2021
Evaluate proposals	End of March
Interview shortlist proposers (Optional)	End of March
Board of Commissioners to consider approval to contract with successful proposer	April 1, 2021
Develop contract between successful proposer and County – obtain successful fully executed agreement	May 2021
Kick off meeting	May/June 2021
Study to be undertaken by contracted firm	June 2021 – January 2022
Draft Report and presentation to Board of Commissioner's with findings of the study; study completion	February 2022
Final Report and public presentation	April 2022

Columbia County Schedule for the Fishing Creek Study

EXHIBIT B
PRELIMINARY FIRMS

County GIS URL is: <https://gismaps.columbiapa.org/webapps/flooding/>



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
 DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE)
Zone A, V, AG
 - With BFE or Depth: A, AG, AH, VE, AR
 - Regulatory Floodway
 - 0.2% Annual Chance Flood Hazard, Areas of less than one square mile Zone X
 - 1% Annual Chance Flood Hazard, Areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee See Notes, Zone A
 - Area with Reduced Flood Risk due to Levee Zone D
- OTHER AREAS OF FLOOD HAZARD**
 - Areas Determined to be Outside the 0.2% Annual Chance Floodplain Zone X
 - Area of Undetermined Flood Hazard Zone D
- OTHER AREAS**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
 - Coastal Transverse
 - Profile Baseline
 - Hydrographic Feature
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
- OTHER FEATURES**

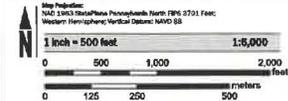
NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), products produced in accordance with the FIRM, including zoning, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-4646 (1-877-368-2627) or visit the FEMA Flood Map Service Center website at <http://www.floodmaps.gov>. Questions regarding any individual property should be referred to the local community's Flood Insurance Study Report, which includes digital versions of this map. Many of these products can be ordered or obtained directly from the website.

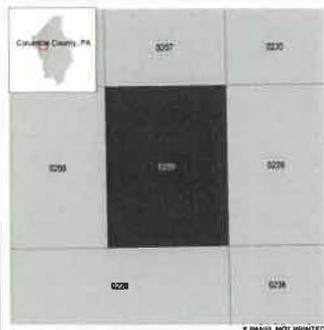
For community and individual map data, refer to the Flood Insurance Study Report for this jurisdiction. In instances of flood insurance, it is recommended that you contact your insurance agent or call the National Flood Insurance Program at 1-800-625-8502.

Base map information shown on this FIRM was provided in digital format by the PA Department of Environmental and Natural Resources, Bureau of Topographic and Geologic Survey. This information was verified using digital orthorectification at a 1-foot resolution from false photography dated 2016.

SCALE



PANEL LOCATOR



FEMA
 National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP**

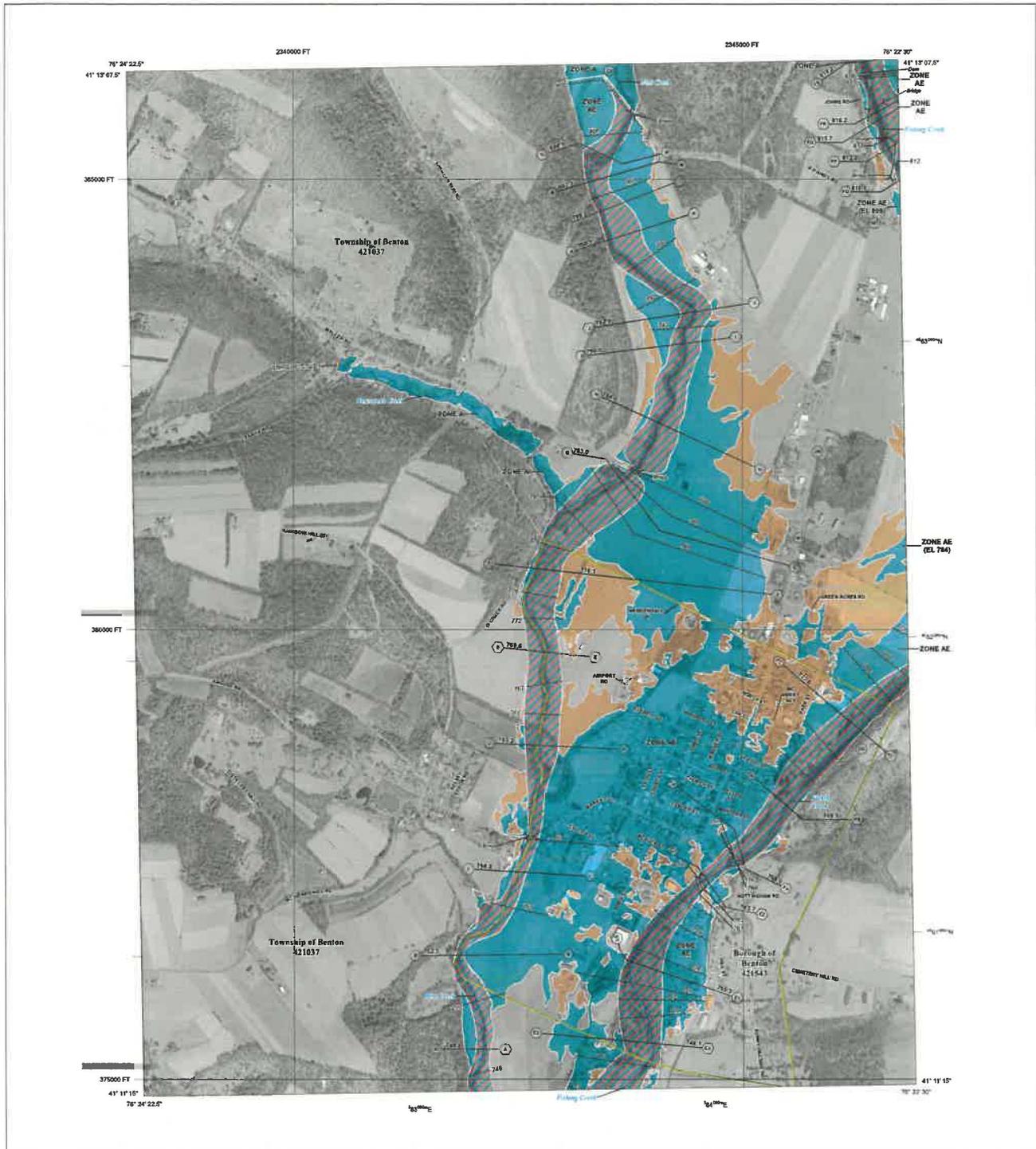
COLUMBIA COUNTY, PENNSYLVANIA
 Panel 209 of 470

Panel Contains

COMMUNITY	NUMBER	PANEL	SUFFIX
GREENWOOD TOWNSHIP OF	421561	0209	F
HEALOCK TOWNSHIP OF	420344	0209	F
INDIAN TOWNSHIP OF	422563	0209	F
MOUNT PLEASANT TOWNSHIP OF	421042	0209	F

REVISED PRELIMINARY
 8/28/2020

VERSION NUMBER: 2.3.3.3
 MAP NUMBER: 42037C0209F
 MAP REVISED



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
 DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone AE, AD, AE, AF, VE, AP
 - With BFE or Depth Zone AE, AD, AE, AF, VE, AP
 - Regulatory Floodway
 - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Fatigue Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee See Notes, Zone X
 - Area with Reduced Flood Risk due to Levee Zone D
- OTHER AREAS OF FLOOD HAZARD**
 - Areas Determined to be Outside the 0.2% Annual Chance Floodplain Zone X
 - Area of Undetermined Flood Hazard Zone D
- OTHER AREAS**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
 - Coastal Transport
 - Coastal Transport Baseline
 - Profile Baseline
 - Hydrographic Feature
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
- OTHER FEATURES**

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with the FIRM, including names, versions, the current map data for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Data Information Center at 1-877-634-6247. For more information on the NFIP, please visit the FEMA website at <http://www.fema.gov>. Flood insurance products may include previously issued editions of this Flood Insurance Rate Map, which differ from this version. A complete list of these products can be ordered or obtained directly from the website.

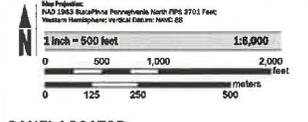
Communities pending final NFIP panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be obtained directly from the Flood Map Service Center at the number listed above.

For community and countywide map data refer to the Flood Insurance Study Report for this jurisdiction.

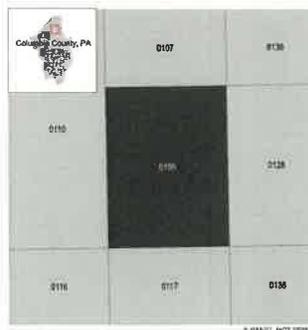
As determined if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6322.

Some map information shown on this FIRM was provided in digital format by the FEMA Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Cartographic Survey. This information was derived from aerial orthorectification at a 1-foot resolution from photography dated 2016.

SCALE



PANEL LOCATOR



FEMA
National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP**

COLUMBIA COUNTY, PENNSYLVANIA
(All Jurisdictions)

Panel: 109 of 470

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BENTON, BOROUGH OF	421543	0109	F
BENTON, TOWNSHIP OF	421537	0109	F

**REVISED
PRELIMINARY
8/28/2020**

VERSION NUMBER
2.3.3.3

MAP NUMBER
42037700109F

MAP REVISED