

SUBJECT: A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY APPROVING THE COMPLETION OF THE UNITED STATES ARMY CORPS OF ENGINEERS SECTION 205 TALKEETNA FLOOD RISK REDUCTION STUDY AND APPROVING THE PLANNING ASSISTANCE FOR STATES STUDY ON THE 50-YEAR EROSION HORIZON ANALYSIS.

AGENDA OF: March 15, 2022

Assembly Action:

*Approved under Consent
Agenda 3-15-22 BSA*

MANAGER RECOMMENDATION: Present to Assembly for consideration.

APPROVED BY MICHAEL BROWN, BOROUGH MANAGER: *MB*

Route To:	Department/Individual	Initials	Remarks
	Originator, T. Boothby	Taunnie L Boothby	<small>Digitally signed by Taunnie L Boothby Date: 2022.02.22 14:39:26 -0900</small>
	Development Services Manager	<i>MB</i>	
	Planning and Land Use Director	<i>MB</i>	
	Finance Director	<i>MB</i>	
	Borough Attorney	<i>MB</i>	
	Borough Clerk	<i>MB 3/7/22</i>	<i>BSA</i>

ATTACHMENT (S): Fiscal Note: YES ☒ NO ☐
PAS Scope of Work (3 pp)
Resolution Serial No. 22-027 (3 pp)

SUMMARY STATEMENT: The Borough Planning Department and Administration are requesting Assembly approve the Manager enter into an agreement with the United States Army Corps of Engineers (USACE) Planning Assistance for States (PAS) program.

On May 19, 2020, the Assembly adopted Resolution No. 20-050 to engage with the United States Army Corps of Engineers (USACE) 205 Continuing Authorities Program for Small Flood Damage Reduction Projects. The 205 authority only allows the USACE to assess flood damage projects. During the project, it became clear that the community had limited concerns for flooding compared to the erosion occurring along the front of the community.

Although the Borough Planning Department understands that erosion is a process where either wind or water are primary components to the erosion process, the USACE can not study and provide analysis under the 205 project for erosion. The Federal Government separates flooding from erosion. The USACE program authority that can complete a 50-year horizon erosion analysis and provide recommendations is the Planning Assistance to States (PAS) program. The 205 & PAS programs require a fifty percent (50%) cost-share on the study analysis. Information completed under the 205 authority is a substantial piece of the full problem statement and analysis with the completion of fieldwork and Hydrology and Hydraulics for the changed conditions along these rivers since the 2012 flood. The PAS scope of work is attached, and the 205 project is being closed.

Under the 205 authorization, \$754,295 dollars were encumbered for the Matanuska-Susitna Borough cost share. This was paid for through the River Management grant from the State of Alaska. Currently, we have approximately \$339,000 remaining in the allocation. The estimated Borough cost share to complete the PAS analysis is no more than \$200,000.

RECOMMENDATION OF ADMINISTRATION: Approve legislation as submitted.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: March 1, 2022

SUBJECT: USACE PAS project Talkeetna

ORIGINATOR: T. L. Boothby

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <u>YES</u> NO
AMOUNT REQUESTED <u>*200,000*</u>	FUNDING SOURCE
FROM ACCOUNT #	PROJECT
TO ACCOUNT: <u>490.00.00 3xx. xxx</u>	PROJECT # <u>75006</u>
VERIFIED BY: <u>[Signature]</u>	CERTIFIED BY:
DATE: <u>2/25/22</u>	DATE:

EXPENDITURES/REVENUES:

(Thousands of Dollars)

OPERATING	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						

CAPITAL		<u>200.0*</u>				
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REVENUE						
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FUNDING:

(Thousands of Dollars)

General Fund						
State/Federal Funds						
Other		<u>200.0*</u>				
TOTAL		<u>200.0*</u>				

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary) * contingent to receiving funds from USACE.

PREPARED BY: _____ PHONE: _____
 DEPARTMENT: _____ DATE: _____
 APPROVED BY: Chugennel Dendel DATE: 2/25/22

SCOPE OF WORK:

Talkeetna Site Assessment PAS Study Provision of Certain Technical Assistance.

PM: Dave Williams

Planner: TBD

H&H Engineer: TBD

Non-Federal Partner: Matanuska Susitna Borough

1. **Study Authority:** Section 22, WRDA 1974 (P.L. 93-251), as amended.
2. **Study Purpose:** The purpose of this Planning Assistance to the States (PAS) study is to identify probable erosion rates along the east bank of the Susitna River from Billion Slough (north of the Talkeetna River) downstream to the point where the Alaska Railroad Right-of Way has been partially eroded by the Susitna River. The purpose for this information is to inform decisions by the Borough and private landowners regarding development of erosion reduction structures. In recent years many of the river-front properties have undergone significant and rapid erosion. This erosion is expected to continue and threaten the longevity of any new development. This study will directly support the States Hazard Mitigation Plan by addressing mitigation and response to riverine erosion while providing assistance with the resilience and long-term sustainability of the Talkeetna Community.
3. **Study Work Plan:**
 - Evaluate the Susitna Riverbank, using multiple series of available aerial photographs or satellite imagery, starting prior to 2012 and going to the present time, so variations in the rate can be identified.
 - Once rates are identified, potentially sites of concern may be visited by a technical team to determine what the surficial geology looks like to see if there are any issues with recommendation for protective measures.
 - Develop a technical report with the findings and descriptions/maps of areas where protective measures may be required.
 - This work will not provide estimates for future erosion rates, and will not include the potential impact of climate change.
4. **Budget:** The total budget for the PAS study is \$400,000. The cost share for this program is 50% so the local cost for the study is \$200,000.

Budget By Task	
Erosion mapping	\$150,000.00
Site evaluations	\$50,000.00
Reports, review, and oversight	\$150,000.00
Contingency (approx. 12.5%)	\$50,000.00
Total	\$400,000.00

Cost Share Table	
Total cost	\$400,000.00
Federal Share (50%)	\$200,000.00
Local share (50%)	\$200,000.00
Total	\$400,000.00

5. **Deliverables:** The deliverable for this study will be a report that provides average erosion rates for reaches of the Susitna River, and variations where data is sufficient to define extreme rates. The historic rates of erosion, surficial geology, and any other information collected at each site will be included. Figures will be included to show where erosion rates were calculated, and historical erosion lines identified so changes in rates can be seen by the varying distances between the lines.
6. **Schedule:** The intent is to perform the aerial interpretations as soon as funds are available, so on-site visits can be done in 2022. If samples are taken during the site visit, some analyses may be done before the final write up of the findings. Task completion is estimated by or before March 2023.

Aerial Photograph	
Erosion Analyses	Spring - Summer 2022
Site Evaluations	Fall 2022 (must be complete before snow and ice)
Reporting and Review	Winter2022 – Early Spring 2023

RS 22-027
DM 22-053



7. Location Map:

The Susitna River with Talkeetna and the Talkeetna River Confluence. The investigation is from Billion Slough south to a point where the Alaska Railroad is being impacted by erosion of the Susitna Riverbank. This is about 2.5 miles of riverbank.