Technical Approach

This is a proposed scope of work (SOW) from Tetra Tech, Inc. (Tetra Tech) to the City of Hollywood, FL (City) Department of Public Utilities to prepare an update to the City's Floodplain Management Plan (FMP). The primary goal for this project is to develop a Floodplain Management Plan for the City that will maximize the CRS Activity 510 credit potential. This will enable the City to maximize its classification potential under the CRS program and pass that benefit on to the ratepayers within the City. The principal objectives of this project are as follows:

- Review the City's policies, ordinances, and documents related to flood hazard mitigation to identify changes since the previous plan was adopted.
- Organize a Planning Committee pursuant to the Community Rating System (CRS) activity 510 planning requirements.
- Revised the Flood Hazard risk assessment utilizing FEMA's HAZUS-MH risk assessment platform to enhance CRS credit and set up the City for future benefits under FEMA's "RiskMAP" initiative.
- To facilitate a planning process through the planning committee pursuant to the CRS activity 510 planning requirements.
- To assemble the 5-year CRS updated FMP that clearly meets the requirements specified under section 512.b of the 2017 CRS Coordinators Manual (FIA-15/2017) and 2021 CRS Addendum.
- Have the updated plan include the 5-year CRS Repetitive Loss Area Analysis (RLAA) update pursuant to the requirements specified under section 512.b of the 2017 CRS Coordinators Manual.
- Have the update plan include a CRS Natural Floodplain Functions Plan (NFP) update pursuant to the requirements specified under section 512.c of the 2017 CRS Coordinators Manual and 2021 CRS Addendum.
- Coordinate the courtesy review of the plan with FEMA's CRS contractor, the Insurance Services Office, Inc (ISO).

Project Initiation and Management

Project Initiation Meeting

Within one week of the issuance of a notice to proceed, Tetra Tech will conduct a one-hour virtual project kickoff meeting. During the meeting, Tetra Tech will confirm the project schedule, discuss stakeholders who should participate in the planning team and project steering committee, and discuss the documentation and studies to be reviewed in Phase 1 of the project.

Within one week of the meeting taking place, Tetra Tech will submit a project management plan that outlines project deliverables, roles, and responsibilities for both the City and Tetra Tech and confirms the project schedule. Tetra Tech will address one round of comments on the plan before considering it final.

Monthly Reporting

Each month, Tetra Tech will submit a report outlining key activities completed in the previous month, anticipated activities for the upcoming month, progress on completion of project deliverables, and an overview of the

project's financial spending to date. The reports will be submitted via email and Tetra Tech will be available to discuss the report via call at the City's request.

Deliverable 1 – Data Collection and Hazard Modeling

1.1 Form Flood Hazard Steering Committee

Under this task, Tetra Tech will organize a Planning Team and a plan oversight steering committee pursuant to the CRS section 512.a, steps 1, 2, and 3 requirements. The makeup of this committee will strive to include citizen's stakeholders, and appropriate City personnel to meet the CRS classification prerequisite criteria. Tetra Tech will work closely with City personnel to identify potential members of the steering committee. Once organized, Tetra Tech will facilitate a series of steering committee meetings to meet the planning process milestones required.

Planning Team. Tetra Tech will work with appropriate City personnel to identify City staff that will join Tetra Tech personnel as members of the Planning Team. The Planning Team's role in this project will be to refine the scope of work, facilitate the process, and develop the final plan update. The City staff assigned to this team will act as information conduits to Tetra Tech personnel as well as liaisons to City protocol and policy.

Tetra Tech will facilitate a one-hour virtual Project Kickoff Meeting with the Planning Team members. During this meeting, they will be provided an overview of their anticipated role in the FMP planning process, discuss the anticipated time commitment needed to update the plan, and discuss potential members that should be included in the Flood Hazard Mitigation Steering Committee. Tetra Tech will provide two team members to facilitate the call and will submit a meeting summary outlining participation and identified action items within five business days of the meeting taking place.

Tetra Tech anticipates the Planning Team will meet monthly to discuss project progress, review documentation, and coordinate public outreach.

Flood Hazard Steering Committee. Tetra Tech will support the Planning Team in the formation of a Flood Hazard Steering Committee (FHSC) to oversee the plan development process from start to finish. Under this subtask, it has been assumed that the FHSC will meet at least 6 times at a date and time to be determined, during the plan development process. This will include developing ground rules and a charter to support Steering Committee participation, reviewing the risk assessments, reviewing the RLAA, and addressing actions outlined in the FMP to address the flood hazard in the City. Completion of this task will strive to meet the Step 2(a) and (b) requirements under section 512 of the 2017 CRS Coordinators Manual.

The list of members of both the Planning Team and Flood Hazard Steering Committee will be collated for the City's submission to the Office of Long-Term Resiliency to meet grant requirements.

Coordination with Other Agencies

Tetra Tech will identify other agencies involved in flood hazard mitigation that may have an interest in this effort to be invited to participate. The level of participation solicited will be determined by the Planning Team in coordination with the FHSC. At a minimum, this will include other local governments within the planning area, neighboring Counties, FEMA Region 4, the Florida Division of Emergency Management (FDEM), and the Florida Department of Environmental Protection (FDEP). Tetra Tech will prepare mailing lists and e-mail lists of the identified key agencies and provide them to the Planning Team, keeping them apprised of the phases of the plan's development. These agencies will also be provided a copy of the draft plan for their review and comment at the

end of the planning process. Completion of this task will meet the Step 3(b) requirements under section 512 of the 2017 CRS Coordinators Manual.

1.2 Review Existing Studies and Vulnerabilities

Tetra Tech will conduct a literature review of other studies and programs that could support or impact flood hazard mitigation in effect within the planning area. This will include a thorough review of relevant Hazard Mitigation Plans, studies, codes and programs, and available floodplain models that may overlap the watershed. Completion of this task will meet the Step 3(a) requirements under section 512 of the 2017 CRS Coordinators Manual. The key deliverable for this task will be a summary literature review of collected and reviewed information. Tetra Tech will address one round of comments on the summary document.

1.3 Develop, Study, and Execute Modeling Tools

Under this task, Tetra Tech will assist the City in assessing the characteristics and potential consequences of the Flood hazard that impact the planning area. This phase will be conducted in accordance with the Step 4 and 5 requirements specified for 5-year updates of the 2017 CRS Coordinators Manual.

A thorough assessment of the flood hazard as well as the vulnerability of the planning area will be accomplished using the HAZUS-MH (v.2.0 or newer) risk assessment tool, benefit-cost analysis tools, and historical/local knowledge of past occurrences. As a starting point, Tetra Tech will use existing pertinent studies or plans identified during the literature review, and the existing local and State Hazard Mitigation Plan, as the best available data to create the following elements:

- Define a planning area.
- A description of the type, location (map), and extent of the flood hazard that can impact the planning area.
- Flood hazard area depth grid production
- An inventory of levees and dams within the study area
- A description of the planning area's vulnerability to the flood hazard that includes an overall summary of the hazard and its impact on the planning area.
- The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the flood hazard areas.
- An estimate of the potential dollar losses to vulnerable structures in the studied areas.
- A general description of current land uses and development trends within the planning area.
- A review of identified National Flood Insurance Program (NFIP) repetitive loss properties. This review will meet the Section 503 requirements for repetitive loss communities under the CRS program. This review will be performed pursuant to the RLAA requirements specified under section 512.b of the CRS Coordinators Manual.
- For the flood hazard a review of properties within the defined planning area that have received flood insurance claims (in addition to those identified repetitive loss properties).

1.4 Gather and Compile Structure Data for Repetitive Loss Properties

The Planning Team will utilize data identified in the literature review of this scope of work in conjunction with local knowledge, to identify the best available data to support the development of the flood hazard risk assessment and identify gaps that may limit the options for completing this assessment. The key deliverable for this task will be a detailed inventory of assets (both the general building stock and critical facilities/infrastructure).

1.5 Map RLAs

Under this task, Tetra Tech will generate maps that will illustrate the extent and location of the flood hazard within the defined planning area. This will include those areas mapped by FEMA as flood hazard areas as well as those areas regulated by the City as flood hazard areas. This will include a map of the identified repetitive loss areas to support the RLAA update discussed below and the inventory of floodplain areas that provide a natural floodplain function in support of the Natural Floodplain Functions. Completion of this task will meet the Step 4(a) requirements under section 512 of the 2017 CRS Coordinators Manual.

1.6 Calibrate to Verify Delineation of RLA

The Planning Team will use GIS to develop an inventory of parcels within the floodplain that provide a natural and beneficial floodplain function, or that could be restored to provide a beneficial floodplain function. The Planning Team will review the existing documents utilized for 510 NFP credit with the 2020 FMP and review new or updated documents for NFP credit criteria and inventory updates. This inventory will be the basis for the NFP chapter update of the plan discussed under Deliverable 4.

1.7 Prepare and Distribute Public Notices to RLA Property Owners

This task will be implemented as part of the CRS-required RLAA credit criteria. Section 512.b of the CRS Coordinators Manual requires an outreach effort be made to the properties identified in the repetitive loss areas that advise them of the RLAA update process and requests their input on recommended actions. This task will be dedicated to this outreach effort and will be conducted separately from the other outreach efforts in this scope of work.

1.8 Hold (2) Public Meetings to Gather Data and Engage

Under this task, Tetra Tech will work with the Planning Team and the FHSC to develop and implement a public involvement strategy that will meet the requirements of the CRS program. This includes the Step 2 requirements for 5-year plan updates in the 2017 CRS Coordinators Manual. The key to this task will be to utilize multiple media within the capabilities of the City that will give the public multiple opportunities to provide comments on the subject matter. This strategy will focus on 4 primary objectives:

- Assess the public's perception of risk associated with flood hazards.
- Assess the public's perception of vulnerability to those risks.
- Assess social vulnerability and identify outreach solutions.
- Identify possible mitigation strategies that will be supported by the public.

It should be noted that the level of effort for this task will be totally at the discretion of the Planning Team and FHSC. This strategy will focus on how to best share the information with the public and thus allow for the

opportunity for public comment. The following subtasks are recommended components of a public involvement strategy that meets or exceeds the requirements of the CRS program.

Website

A key component of the outreach strategy will be the development of a website that will become the "one-stop-shop" for information pertaining to the plan update process. This website will house the plan, meeting announcements, meeting minutes, press releases, and points of contact for the process. This website will be advertised as the principal source for information on the tasks under this scope of work. Tetra Tech will develop the material to be posted, while the City will provide the website.

Survey

Tetra Tech will develop a flood hazard mitigation survey pertinent to issues within the planning area to gauge the public's perception of risk, vulnerability, and willingness to support flood hazard mitigation initiatives. This survey will be set up in an electronic format that can easily be disseminated and tallied electronically. The survey questions will be chosen by the Planning Team and FHSC, in effect tailored to the City and its residents. Tetra Tech will provide a list of potential questions created for other FMP planning processes which will be provided to the Planning Team and FHSC to help with the survey development. This subtask will include a tabulation of the questionnaire responses and an analysis of the results.

Media Releases

Tetra Tech will support the preparation of press releases and social media message materials via multiple media providing plan update details and announcing public meetings. One press release and media post will be made to introduce the project, for each of the public meetings, and for the plan public comment period.

Public Meetings

Tetra Tech will support the Planning Team in the facilitation of two (2) public meetings during the course of the plan update process. One (1) meeting will be held during the risk assessment phase to share findings of the risk assessment and to gauge the public's perception of risk. Additionally, one (1) public meeting will be held once the draft plan has been assembled to allow the public to comment on the plan. These meetings will be held at locations within the floodplain to allow an opportunity for floodplain residents to comment on the risk assessment.

Deliverable 2 – Assess Current and Future Sea Level Conditions

2.1 Assess RLA Flood Maps for Existing Conditions and Summarize Hazard

Under this task, the Planning Team will perform the required analysis to determine the repetitive loss areas as defined under section 512.b of the CRS Coordinators Manual. This will include an identification of each structure within each area, the expected depth of flooding (if available), and determination of the cause of repetitive flooding. Each repetitive loss area will be mapped, and the inventory will be segregated by repetitive loss area. Site visits may be necessary to complete this task, but access to structures will not be necessary.

2.2 Develop Models Based on SFRCCC Rise Condition Recommendations

Tetra Tech will work with the County to identify the rise condition recommendations for the planning area that have been identified in the Southeast Florida Regional Climate Change Compact's (SFRCCC) 2024 Statement of Continued Use of the 2019 Southeast Florida Regionally Unified Sea Level Rise Projection. The projections will be used to assess during the future conditions assessment and compared with outcomes from the Hazus modeling mentioned above.

2.3 Assess RLA Flood Maps for Future Conditions and Summarize Hazards

Under this task, Tetra Tech will analyze the flood insurance policy coverage within the defined planning area pursuant to CRS Activity 370 requirements for the Flood Insurance Coverage Assessment (FIA) element. This will be a spatial analysis utilizing publicly accessible flood insurance policy statistics provided by FEMA and spatial data created under this phase of the project. Data analysis will be formatted for inclusion in the plan text to augment the findings of the flood hazard risk assessment. This analysis will be broken down by the communities within the FMP-covered area.

Under this task, the Planning Team will analyze the loss results generated by HAZUS and validate those results by looking at the following:

- Past Disaster assistance claims
- Flood insurance claims
- FEMA repetitive loss data
- Property owner information

Deliverable 3 – Repetitive Loss Area Analysis

3.1 Determine Goals for Flood Mitigation for Historically Damaged Buildings

After the hazard identification and risk assessment documentation have been updated and reviewed, Tetra Tech will work with the Planning Team and FHSC to set goals and objectives based on information gathered through the risk assessment and initial public involvement phases of the project. This will meet the Step 6 requirements for 5-year plan updates per the 2017 CRS Coordinators Manual. Once goals and objectives have been refined, the range of mitigation alternatives and actions will be updated. Preference will be given to those mitigation actions that provide multi-objective risk reduction. Tetra Tech will work with the Planning Team and FHSC to establish priorities to make clear which types of strategies and activities are true mitigation measures and which should be closed out or removed from the list.

Goals, Objectives, Actions

Under this subtask, Tetra Tech will facilitate the confirmation of a guiding principle, goals, objectives, and actions. The Planning Team and FHSC will strive for confirmation of linear planning components, which means each component directly supports the other. For example, goals will be confirmed that support the guiding principle. Objectives will be identified that meet multiple goals. Actions will be prioritized based on meeting multiple objectives.

Review of Prior Action Plan

Tetra Tech will facilitate the review of the action plan identified in the City's previous plan. This task will also include a review of the annual progress reports completed by the City. Tetra Tech will summarize the status of each identified action based on the review of the progress reports in a memorandum to the Planning Team and FHSC. The FHSC will review this memorandum at one of their scheduled meetings and provide recommendations to the City on which actions to carry over into the plan update. Completion of this task will meet the Step 8 requirements for 5-year plan updates per the 2017 CRS Coordinators Manual.

Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

Tetra Tech will support the Planning Team in a facilitated exercise with the FHSC that looks at the strengths, weaknesses, obstacles, and opportunities within the planning area as they pertain to dealing with flood hazards. The principle objective for this session is to identify the range of alternatives that may be considered as actions; by considering the City's strengths, weaknesses, and obstacles it must address to implement actions. The "opportunities" portion of this exercise will become part of the mitigation catalog discussed below. Completion of this subtask along with task 3.2 is meant to meet the Step 7 planning requirement specified under section 512.a of the 2017 CRS Coordinators Manual.

3.2 Review of Mitigation Measures for RLA

Mitigation Catalog

Tetra Tech will develop a catalog of mitigation alternatives to be considered in the City's action plan. This catalog will be broken down by scale (personal, corporate, and government) as well as mitigation category (prevention, property protection, public education, natural resource protection, emergency services, and structural projects). The basis for this catalog will be the "opportunities" identified above. The mitigation catalog will represent the range of alternatives considered by the City as required under Step 7 of the CRS planning requirements.

Establish a Prioritization Schedule and Action Plans

Tetra Tech will work with the Planning Team and FHSC to develop a prioritization schedule that will be utilized by the City in the selection of its mitigation action plan. The prioritization will be established with a special emphasis on estimated project costs versus the estimated project benefits. Under this subtask, Tetra Tech will support the Planning Team in establishing a priority schedule that includes:

- Use of the flood hazard mitigation catalog.
- Establish criteria for action selection.
- Categories that can be assigned to each project's cost and benefits that are reasonably measurable (i.e., high, medium, and low) to show ratios of 1.0 or higher.
- Identify other measurable elements to be considered when prioritizing an action (i.e., the number of goals and or objectives an action will meet).
- Identify funding options (i.e. grants, local sources. private sector sources).
- Clearly identify whether the initiative will impact new or existing structures.

Deliverable 4 – Recommendations and Final Report

The principal objective of this entire project is to submit to FEMA's CRS contractor, the Insurance Services Office (ISO), a plan that will meet the CRS planning requirements and maximize the credit potential for the City under CRS activity 510. Under this deliverable, Tetra Tech will assemble the updated plan utilizing the updated or enhanced data generated in deliverables 1-3. The format and layout of the updated plan will be determined by the Planning Team and approved by the FHSC.

4.1 RLA Analysis Results and Recommendations

RLAA Chapter

This subtask will be implemented as part of the RLAA update. The final plan will include a chapter dedicated to the RLAA that will include the elements required under Section 512.b of the CRS Coordinators Manual. This chapter will be supported by results generated under deliverables 2 and 3 and include identifiable actions to address the repetitive flooding problems identified. This chapter will be laid out such this it meets the requirements specified under section 512.b of the 2017 CRS Coordinators Manual and will address each identified repetitive loss area.

NFP Chapter

This task will be implemented as part of the NFP status update. The update will include a chapter to meet the natural floodplain functions planning requirements specified in section 512.c of the CRS Coordinators Manual and 2021 CRS Addendum. This chapter will be a review of the literature identified in existing plans and programs that support the creation and maintenance of natural and beneficial floodplain functions as well as an inventory of existing parcels within the floodplain that provide natural and beneficial floodplain functions. It should be noted, that to receive the maximum possible credit for this element under the CRS program, the NBF chapter would have to be reviewed and approved as a "Habitat Conservation Plan" by a federal agency (NMFS or USFWS). The objective for this task would be to receive as much credit as possible without having the chapter reviewed and approved as an HCP by a federal agency.

4.2 Document & Summarize Level of Service Criteria and Prioritization per Watershed

Develop Plan Maintenance Strategy

Tetra Tech will work with the Planning Team and FHSC to confirm a plan maintenance strategy for the updated plan. Tetra Tech will make recommendations for changes or enhancements to this strategy that may result in an increase in CRS credit. This phase will meet the Step 10 planning requirement specified under section 512.a of the 2017 CRS Coordinators Manual. This strategy will strive to include:

- A review of the plan maintenance protocol identified by the original plan (what worked, what did not?)
- Recommendations for Steering Committee involvement
- A template for annual progress reporting
- A strategy for continuing public involvement

- Methodology for incorporation into other planning mechanisms

Author Updated Plan Text

The draft updated plan will be authored and assembled by Tetra Tech. Tetra Tech will prepare a plan that will include the following parameters:

- A description of the planning process.
- A description of the public involvement campaign.
- A capability assessment that includes: an inventory of the planning area's missions, programs, and policies and an analysis of the capability to carry them out.
- Illustrate the goals of the plan.
- A review of the possible mitigation activities for each hazard including those not recommended by the plan.
- Include an action plan that will target agencies/departments for implementation, a targeted time frame for completion, and potential funding.
- A summary of how the plan's progress will be monitored and establishing a timeline for progress reports and updates.
- Identification of the process for incorporating the plan requirements into other planning mechanisms within the planning area.
- A review of prior actions identified in the previous plan

Technical Edit/Format

Once the initial draft has been developed, the draft plan will be submitted for a technical/format edit to prepare the final draft plan that will be presented to the public for their review and comment and provided to ISO for pre-adoption (courtesy) review and draft approval.

Tetra Tech will address one round of comments from the Planning Team and FHSC. This will be used to develop the public comment version of the plan. This will be available for public comment for a period of two to four weeks. Tetra Tech will address one round of comments following the public comment period before developing the final plan to be submitted to the ISO for courtesy review.

4.3 Project Finalization and Closeout

Complete CRS Plan Review Tool

Tetra Tech will complete the CRS plan review tool to illustrate the plan's compliance with the requirements of section 510 of the CRS Coordinators Manual and 2021 CRS Addendum.

Pre-Adoption Review Request

Tetra Tech will prepare and submit the draft plan to the Insurance Services Office to request their pre-adoption (courtesy) review and comment on the draft plan. Tetra Tech will address one round of comments from the ISO on the draft plan.

Adoption Support

Once pre-adoption approval has been received from ISO, Tetra Tech will support the Planning Team in the adoption phase of the planning process. This support will include the following:

- Sample resolutions for adoption
- Preparation of PowerPoint presentation to be utilized by the City in their presentation for adoption.
- Support the Planning Team in the preparation for the public meeting(s) to present the draft plan to the public for review and comment.

Project Closeout

Once the plan has been formally adopted, Tetra Tech will provide the final electronic copies of the plan and mapping/modeling outputs. Tetra Tech will submit the final project invoice within 30 days of project completion.

Project Responsibilities and Deliverables

The table below provides an overview of the responsibilities and deliverables that will be completed by both Tetra Tech and City personnel throughout the project.

Table 1: Responsibilities by Entity

Tetra Tech	City Personnel
• Facilitation of Planning Team and Steering Committee meetings including agenda development and meeting minute recordation • Agency coordination with partners and stakeholders • Facilitation of documentation and study review • Documentation of recommended changes and enhancements to the plan • Maps that illustrate the extent and location of the flood hazard areas. • Depth grids for the 10, 50, 100, and 500-year food events • Review of past occurrences since the completion of the prior plan. • The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas for each scenario event. • Loss estimates for each scenario event for residential, commercial, and industrial buildings within each hazard area. • An analysis of identified vulnerable critical facilities for each scenario event. • A land use analysis for each scenario event that	• Identify a planning lead for the City that will act as the primary point of contact for the Tetra Tech Planning Team. • Identify a minimum of one (1) staff member to sit on the FHMSC • Secure venues for in-person meetings scheduled during this process • Produce appropriate copies of meeting materials prior to each meeting • City will assume responsibility for granting any exceptions to timelines established under this phase. • Provide the best available information on general building stock (County Assessor Data) • Provide the best available digital elevation model for the planning area • Provide the best available data on the extent and location of the flood hazard in a digital format. • Provide venues for public meetings • Advertise public meetings • Disseminate press releases on the planning process and public meetings • Provide website • Maintain website

Tetra Tech	City Personnel
includes a look at land with potential for future development (i.e.: buildable lands analysis) • Facilitation of public meetings • Preparation of content for public meetings • Documentation of attendance at public meetings • Survey development and deployment • Analysis of survey results • Press release content • Website support documents • Facilitation of the confirmation of a guiding principle (mission statement), goals, and objectives. • Prior action plan review memorandum • Facilitation of SWOO session • Flood Hazard Mitigation catalog • Facilitate the review of the prior plan maintenance strategy • The method and schedule of monitoring, evaluating, and updating the flood plan on a five-year cycle. • Establish a protocol (template) for a progress report to be completed annually on the plan's accomplishments. • Development of an action plan prioritization schedule • Author plan update text • Develop RLAA updater to plan that meets CRS section 512.b requirements • Develop NFP update that meets CRS section 512.b requirements • Review and final drafts of the updated plan • Technical/format edit of the draft plan • Completion of the CRS plan review tool • Transmittal of the draft plan to ISO with a request for pre-adoption (courtesy) review • Example model resolutions and instructions provided to planning partner • Production of a standardized PowerPoint presentation to be used by planning partners during their adoption processes.	• Provide annual progress reports from the previous plan • Participate in the SWOO process • Confirm the plan maintenance strategy for the updated plan. • Provide review and comment on the draft plan. • Assume responsibility for hard copy production of review drafts and final drafts of the plan. • Adopt the plan update.

Schedule

Tetra Tech is prepared to complete this scope of work by January 31, 2026. The table below provides a schedule by project phase and task. This will allow the City to conduct the necessary closeout activities needed for grant purposes by the March 2026 deadline in Contract MT-008 General Program Support – Floodplain Mgmt Plan Modification #4.

Table 2: Proposed Project Schedule

Deliverable/Task	Date
Project Initiation and Management	
Project Initiation Meeting	February 2025
Monthly Reporting	February 2025 – January 2026
Deliverable 1 -	
1.1 Form Flood Hazard Steering Committee	February 2025 – January 2026[1]
1.2 Review Existing Studies and Vulnerabilities	February 2025
1.3 Develop, Study, and Execute Modeling Tools	February – April 2025
1.4 Gather and Compile Structure Data for Repetitive Loss Properties	February – April 2025
1.5 Map RLAs	February – April 2025
1.6 Calibrate to Verify Delineation of RLA	May 2025
1.7 Prepare and Distribute Public Notices to RLA Property Owners	May 2025
1.8 Hold (2) Public Meetings to Gather Data and Engage	April 2025 – September 2025[2]
Deliverable 2 – Assess Current and Future Sea Level Conditions	
2.1 Assess RLA Food Maps for Existing Conditions and Summarize Hazard	May – October 2025
2.2 Develop Models Based on SFRCCC Rise Condition Recommendations	May – October 2025
2.3 Assess RLA Flood Maps for Future Conditions and Summarize Hazards	May – October 2025
Deliverable 3	
3.1 Determine Goals for Flood Mitigation for Historically Damaged Buildings	May – October 2025
3.2 Review of Mitigation Measures for RLA	May – October 2025
Deliverable 4 – Recommendations and Final Report	
4.1 RLA Analysis Results and Recommendations	October – December 2025

[1] This date differs from the schedule in Modification #4 to allow for the updated project start timeline of February 2025.

[2] This date differs from the schedule in Modification #4 to allow for one meeting to take place during the risk modeling activities and during the action strategy development.

Deliverable/Task	Date
4.2 Document and Summarize Level of Service Criteria and Prioritization per Watershed	October 2025 – December 2025
4.3 Project Finalization and Closeout	January 2026[3]

[3] This date differs from the schedule in Modification #4 to allow for the updated project start timeline of February 2025.

Cost

Tetra Tech proposes performing the project for a **firm fixed price of $400,000.00.** The fixed price is based on Tetra Tech's experience performing projects of similar scope and complexity. The fixed price is derived from estimating the number of work hours for each task; estimating the cost of materials, administrative expenses; logistical costs; and budgeting for reasonable and customary travel expenses for on-site meetings. Table 3 shows a breakdown of our proposed cost by project Phase and Task. Cost for Project Initiation and Management are included with the deliverable tasks and not accounted for separately.

Table 3: Proposed Project Cost

Deliverable/Task	Cost
Deliverable 1 -	
1.1 Form Flood Hazard Steering Committee	$10,000.00
1.2 Review Existing Studies and Vulnerabilities	$7,500.00
1.3 Develop, Study, and Execute Modeling Tools	$26,505.00
1.4 Gather and Compile Structure Data for Repetitive Loss Properties	$10,000.00
1.5 Map RLAs	$32,500.00
1.6 Calibrate to Verify Delineation of RLA	$20,000.00
1.7 Prepare and Distribute Public Notices to RLA Property Owners	$7,500.00
1.8 Hold (2) Public Meetings to Gather Data and Engage	$45,500.00
Deliverable 2 – Assess Current and Future Sea Level Conditions	
2.1 Assess RLA Food Maps for Existing Conditions and Summarize Hazard	$32,500.00
2.2 Develop Models Based on SFRCCC Rise Condition Recommendations	$35,000.00
2.3 Assess RLA Flood Maps for Future Conditions and Summarize Hazards	$25,000.00
Deliverable 3	
3.1 Determine Goals for Flood Mitigation for Historically Damaged Buildings	$25,000.00
3.2 Review of Mitigation Measures for RLA	$30,000.00
Deliverable 4 – Recommendations and Final Report	
4.1 RLA Analysis Results and Recommendations	$15,000.00
4.2 Document and Summarize Level of Service Criteria and Prioritization per Watershed	$63,045.00
4.3 Project Finalization and Closeout	$14,950.00
Total	**$400,00.00**