

Attachment A: Scope of Services

Hazen and Sawyer (CONSULTANT) shall provide services to the CITY of Hollywood (CITY) including conducting a city-wide climate change vulnerability assessment, prioritization of vulnerabilities, development of adaptation strategies, creation of a preliminary adaptation plan, informing the public about risks and adaptation opportunities and building the capacity of the city to include climate change data in decision making.

1.1 Determine Future Climate Change Impacts

The CONSULTANT shall review and inventory relevant science-based literature including regional climate change plans, vulnerability assessments, scientific publications, etc. to advise the City of Hollywood (CITY) on projected impacts upon the CITY from climate change. This process shall include a catalog of sources. In addition, the planning horizon of vulnerabilities will be identified.

The final work product from Task 1.1 shall be a concise Projected Impacts Documentation that illustrates scenarios and projections for, at a minimum, the following climate-related impacts:

- Sea level rise
- Storm surge
- Extreme heat events - (See Assumptions)
- Extreme precipitation events and inland flooding (Using FEMA flood maps)

CITY staff shall review the Projected Impacts Documentation and provide comments and other information, as needed.

Deliverable: The CONSULTANT shall prepare and provide four (4) maps that geospatially identify the location of the climate-related impacts. Spreadsheets of data will also be provided.

1.2 Identify Affected Systems

Upon completion of the Projected Impacts Report, the CONSULTANT shall identify the citywide systems that will be affected from geographic perspective. This scope assumes only “critical” infrastructure will be identified for the purposes of further vulnerability assessment. Examples include but are not limited to sea walls, transportation, fire rescue, police, critical facilities, etc. Additional areas of affected “systems” will include Two (2) “inland at-risk” categories (i.e., significantly disadvantaged socioeconomic communities, extremely low-lying locations) to be determined by the team under this Task. More extensive categories of vulnerability will be addressed under future authorizations. The CONSULTANT shall categorize specific components within the system to be further analyzed. Components that are not in direct control of the CITY shall be identified and any needed coordination shall be highlighted. CITY staff shall provide available and relevant data, reports, or other information, as needed.

Deliverable: The CONSULTANT shall prepare and provide six (6) maps that geospatially identify the location of the climate affected system. Spreadsheets of data will also be provided.

1.3 Conduct Vulnerability and Prioritization Assessment Workshop

After identifying climate-related impacts, the CONSULTANT shall prepare and hold a vulnerability assessment workshop using a pre-determined approach to aid in this and future decision-making processes, including the allocation of funding for capital projects. The CONSULTANT shall conduct the vulnerability assessment based on:

1. One (1) Workshop with staff from all City Departments
2. Maps of the components and the climate change impacts and
3. Review of existing assessments and/or maintenance logs.

The CONSULTANT shall use the information from staff interviews, along with data and maps to rank the sensitivity and adaptive capacity of each component. The CONSULTANT shall deliver a Vulnerability Assessment Report incorporating the above.

CITY staff shall review the Vulnerability Assessment Report (Spreadsheet) and provide comments and other information, as needed.

The CONSULTANT shall prioritize vulnerabilities by conducting an initial risk assessment and determining specific criteria that incorporates the CITY's specific concerns. The CONSULTANT shall evaluate the risk of a climate change impact and stress and rate the component based on the economic, health and safety, cultural and historical, and ecological factors as well as the likelihood the climate impact shall occur.

CITY staff shall provide input on the weighting factors to be used for the economic, health and safety, cultural and historical, and ecological factors.

The CONSULTANT shall provide a Vulnerability Assessment Report including a list of "systems/assets". CITY staff shall review the Vulnerability Assessment Report and provide comments and other information, as needed.

Deliverable: Vulnerability Assessment Report (spreadsheet format). The CONSULTANT shall prepare and facilitate one (1) workshop to present preliminary vulnerability assessment and develop prioritization of vulnerable assets under this task.

1.4 Develop Adaptation Strategies Catalog

The CONSULTANT shall develop an Adaptation Strategies Catalog (Tabular Format) of potential adaptation strategies for given vulnerabilities. Upon completion of the Prioritized Vulnerability List, the CONSULTANT shall research regional, state-wide, national and global adaptation options and best practices for greatest vulnerabilities. The CONSULTANT shall hold one public meeting to solicit adaptation option ideas for the greatest vulnerabilities. CITY staff shall also submit adaptation option ideas for the greatest vulnerabilities.

The CONSULTANT shall identify co-benefits of adaptation strategies, including when actions also reduce greenhouse gas emissions. Recognizing that adaptation strategies may address more than one vulnerability within the CITY, the Adaptation Strategies Catalog shall identify these co-benefits as well.

Adaptation options shall be organized into the following categories, according to how they reduce vulnerability:

- Reducing exposure (reducing the presence of assets in harm's way)
- Reducing sensitivity (changing the way an asset is potentially affected)
- Increasing adaptive capacity (enhancing the ability to cope or withstand)
- Emergency Responsiveness

CITY staff shall review the Adaptation Strategies Report and provide comments and other information, as needed.

Deliverables: Adaptation Strategies Catalog (Tabular Format). The CONSULTANT shall prepare for and facilitate one (1) public meeting to present the Vulnerability Assessment Report (Task 1.3) and the Adaptation Strategies Catalog to receive feedback related to prioritization of vulnerable assets and adaptations.

1.5 Create Preliminary Adaptation Plan and Community Outreach

The CONSULTANT shall compile and process the results of Tasks 1.1 through 1.4, into a concise Preliminary Adaptation Plan with approaches, sources, background, outcomes and a relative timeline for preliminary scheduling clearly identified. The Adaptation Plan will prioritize the vulnerabilities and associated adaptations. This document will be developed for use as an exhibit for grant applications and to determine short and long term planning.

The CONSULTANT shall hold one public outreach meeting to incorporate public comment and to catalog comments and integrate such comments, if relevant, in consultation with CITY staff, into the Adaptation Plan. CITY staff shall also provide comments to the Draft Preliminary Adaptation Plan before the public outreach meeting.

The CONSULTANT shall attend a CITY Commission meeting to present the Final Adaptation Plan.

The CONSULTANT shall include in the Final Preliminary Adaptation Plan. The intent of the Plan shall be to communicate critical findings and information as well as to provide detailed technical information to the CITY

The Final Adaptation Plan shall use maps and visual aids to increase user-friendliness and reduce text. The CONSULTANT shall provide graphics for use on CITY websites and community outreach materials. The CONSULTANT shall also prepare a Final Adaptation Plan Summary Report and Presentation intended for community audience.

The CONSULTANT shall present the Final Preliminary Adaptation Plan to the CITY Commission. The CONSULTANT shall also develop materials as requested by the CITY (such as one-page visual summaries, and brochures) for the projected impacts, vulnerability assessment and adaptation plan creation, which are suitable for community audiences, to be used by internal staff for public outreach.

Deliverables: The CONSULTANT shall prepare and deliver one (1) electronic version of the Preliminary Adaptation Plan.

One (1) presentation of the results to the City Commission.

Assumptions

1. Inland Flooding, sea level rise and storm surge will be based on FEMA values and Southeast Florida Climate Compact projections
2. Extreme heat events will be limited to for potential exposure to un-mitigated heat (i.e., power outages, socio-economic limitations to mitigation). Due to the relatively high regularly occurring temperatures and density of Hollywood, FL, heat island phenomena will not be analyzed.
3. All necessary topographic and survey information is available. No new surveying will be accomplished through this phase of work.
4. The following are assumed to be developed under a future Phase 2
 - a. Develop/recommend policies, ordinances, codes, and/or standards for new buildings and modification of existing buildings
 - b. Review/development of impact fees for stormwater utility
 - c. Identify/develop triggers for SLR and GW rise for infrastructure improvements (how far to go before "strategic retreat" begins
 - d. In-depth building review (review of equipment age and As-Builts for facilities to develop cost estimates)
 - e. Cost estimates
 - f. Interagency action - where/when should contact/participation be made/occur with other stakeholder agencies. (For example, C-10 w/ SFWMD/FDOT modelling)
 - g. Large scale land preservation definition.