



Utility Mitigation Worksheet

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Team

Applies for the following mitigation activities: **UTILITY MITIGATION projects which include undergrounding electrical system, sewer system upgrade, upgrade of electrical components for a utility, etc.** For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project and the following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the reviewer will contact you to collect support documentation.

NOTE: Having a complete worksheet will expedite the Technical Review.

Requirements

To complete a successful project application, a minimum amount of technical information is required for review. Data collected in this worksheet will provide reviewers with preliminary information necessary to evaluate project eligibility, feasibility, and cost effectiveness. Carefully review and confirm that you are aware of the following information.

Utility Mitigation Projects:

All utility mitigation project components shall be protected against a 500-year flood event by implementing specific activities or by locating them outside the Special Flood Hazard Area (SFHA), comply with applicable National Flood Insurance Program (NFIP) requirements and shall be protected against wind with a rated enclosure and appropriate anchoring based on its location requirements per ASCE 7 standards, as applicable. Activities shall be completed in strict compliance with Federal, State and Local applicable Rules and Regulations.

I confirm that I have reviewed the requirements listed above (signature):

For additional information and resources, please refer to [FEMA Technical Review Job Aid](#) for Infrastructure Retrofit projects.

Section I – Project General Information

| | |
|-----------------------|--------------------------------|
| <i>Project Name:</i> | <i>Worksheet completed by:</i> |
| | <i>Name:</i> |
| | <i>Title:</i> |
| <i>Sub-Applicant:</i> | <i>Phone:</i> |
| | <i>Email:</i> |

Section II – Project Cost Information

| | |
|---------------------------------|---------------------------------|
| <i>Mitigation Project Cost:</i> | <i>Annual Maintenance Cost:</i> |
| | |



MITIGATION

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Section III – Project Specific Information

The table below allows data entry for up to 6 locations. If your project has more than 6 locations, you can either submit a second Utility Mitigation Worksheet or attach a separate list, providing the information requested below and in Section IV, as applicable.

| ID | Project Location (address) | Type of utility (e.g., Electrical, potable water, wastewater, etc.) | Number of customers directly served by utility system |
|----|-------------------------------|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |

If "Other" was selected, describe type of utility to be mitigated:

Section IV – Historical Damage Information

List documented utility outage data and/or physical damages associated with the specific project area due to a natural hazard event. Each location may include multiple damage events, please use the ID as a reference to the location listed in the table above.

| ID | Date of Event | Storm Name | Utility Outage Duration (Days) | Physical Utility- Related Damage (\$) | Describe Expenses Attending the Emergency | Expense Cost (\$) |
|----|------------------|---------------|-----------------------------------|--|--|----------------------|
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Section V – Additional Information

Please use this page to expand on the information provided above or to include any additional information relevant to the proposed mitigation project.



UTILITY MITIGATION WORKSHEET INSTRUCTIONS

Refer to the instructions below to complete the Utility Mitigation Worksheet using the best available data.

Section I – Project General Information

Project Name: Enter the name of the project title. The title should be short but descriptive (e.g., City of Orlando, Pump Station 3, Utility Mitigation).

Sub-Applicant: Enter your organization’s legal name.

Worksheet completed by: Enter name, title, phone number, and email of the person completing this Worksheet. This person must have the knowledge and/or the resources to accurately answer all questions and provide supporting documentation, as needed. Information may come from multiple credible sources.

Section II – Project Cost Information

Mitigation Project Cost: Enter the total cost of the project. A lump sum on this worksheet is acceptable for preliminary BCA, but a detailed breakdown attached to your application is required.

Annual Maintenance Cost: Enter the cost associated with maintaining the effectiveness of the components installed as part of the utility mitigation project.

Section III – Project Specific Information

Project Location: Provide a full description of the specific geographical location(s) of the project. May include address(es), latitude and longitude of each location, etc. If your project has more than 6 locations, you can either submit a second Utility Mitigation Worksheet or attach a separate list.

Type of utility to be mitigated: From the dropdown menu options, select the type of utility(es) that will be mitigated by the proposed project.

- **Electrical Power:** Potential structures include but are not limited to power generation facilities, transmission (e.g., overhead and underground transmission), distribution (e.g., overhead and underground distribution).
- **Potable Water:** Potential structures include but are not limited to source structures, potable water treatment facilities, water storage structures, pumping stations, piping, and appurtenances.
- **Wastewater:** Potential structures include but are not limited to gravity sewers, pumping stations, force mains, and wastewater treatment facilities.

- **IT Services / Communications:** Potential structures include but are not limited to emergency communication towers, telecommunications, etc.
- **Other:** Describe type of utility to be mitigated. Documentation is required that shows the economic value of the service in terms of dollars per person per day. In these cases, the value of the service is typically determined by the utility company.

Number of customers directly served by utility system: Enter the number of the customers (people) directly connected to the location(s) that will be mitigated. The number of customers affected by the loss of service can be obtained from the entity, agency, or company providing the utility service. The documentation should be in the form of a letter from the utility on their letterhead. For multiple locations, specify the number of customers connected to each specific location.

Section IV – Historical Damage Information

Date of Event: Enter the date of historical outage event.

Storm Name: Enter the name given to the natural hazard event when damage occurred.

Utility Outage Duration (Days): Enter the number of impact days caused by the loss of service. Utility outage duration can be obtained from the entity, agency, or company providing the utility service. The documentation should be in the form of a letter from the utility on their letterhead, and the letter should state the duration (days) they were affected for each of the historic loss of utility service periods.

Physical Utility-Related Damage (\$): Enter any documented costs from the repair of physical damage to the utility system components during the historic damage event. The documentation should be in the form of a letter from the utility on their letterhead, receipts from repairs, etc.

Additional Expenses Attending the Emergency: Describe any additional expenses incurred by the City or County while attending the emergency during the historic damage event. Documented expenses may include but are not limited to renting portable generators, chillers, sewage truck rental to clean up spills, overtime paid to personnel to attend the emergency, etc.

Expense Cost (\$): Enter the total cost of the additional expenses incurred by the County or City. Additional expenses may include renting portable generators, sewage trucks to clean up spills, overtime paid to personnel to attend the emergency, etc.