

STATE OF WISCONSIN
Division of Emergency Management
Section 404-Hazard Mitigation Grant Program
FEMA-4402-DR-WI
Pre-Application Form

1. APPLICANT: City of La Crosse Utilities COUNTY: La Crosse

2. PRIMARY CONTACT PERSON: Bernard Lenz

TITLE: Utilities Manager

STREET ADDRESS: 400 La Crosse Street

CITY: La Crosse STATE: Wisconsin ZIP: 54601-3296

TELEPHONE: 608-789-7588 E-MAIL: Lenzb@cityoflacrosse.org

3. ALTERNATE CONTACT PERSON: Tim Merrell

TITLE: Safety Coordinator

TELEPHONE: 608-738-8739 E-MAIL: merrellt@cityoflacrosse.org

4. TYPE OF PROJECT

- | | |
|---|--|
| <input type="checkbox"/> Acquisition and demolition | <input type="checkbox"/> Wind resistant retrofit or construction |
| <input checked="" type="checkbox"/> Elevation/floodproofing | <input type="checkbox"/> Safe Room |
| <input type="checkbox"/> Relocation | <input type="checkbox"/> Wildfire Mitigation |
| <input type="checkbox"/> Flood diversion/storage | <input type="checkbox"/> Soil Stabilization |
| <input type="checkbox"/> Aquifer storage and recovery | <input type="checkbox"/> Education |
| <input type="checkbox"/> Floodplain/stream restoration | <input checked="" type="checkbox"/> Utility Protection |
| <input checked="" type="checkbox"/> Infrastructure retrofit | <input type="checkbox"/> Other |

5. MITIGATION PLANNING

Name of current All-Hazards Mitigation Plan: **LA CROSSE COUNTY MULTI-HAZARDS**

MITIGATION PLAN 2015 - 2019

Plan approval date: Plan expiration date: 12/21/2019

Reference to proposed project/mitigation action in Plan (attach copy of relevant section):

Page number(s):

6. PROJECT LOCATION

Road or street address, legal description, latitude/longitude, etc. Include legible maps/drawings of the location. Attach a map showing the range and section for the project area.

The project area includes the 2800 and 2900 blocks of Fairchild Street West; the 2800, 2900, & 3000 blocks of Fairchild Street East; and the 2300 block of 29th Court S in the City of La Crosse, Wisconsin. (See attached maps of impacted homes)

7. IS PROJECT LOCATED IN A 100-YEAR FLOODPLAIN?

No

Yes (attach FIRM map): Floodway Flood fringe

8. PROJECT DESCRIPTION

There is an inflow/infiltration (I&I) problem in the sanitary sewer collection system. During extreme rain events water enters the sanitary sewer thru open conduits or via seepage into pipes and manholes. The sanitary sewer system is overwhelmed and pressure builds up, forcing a mixture of raw sewage and storm water backwards thru the laterals into people’s homes. This area is near where the Town of Shelby sewer pipes connect to the City of La Crosse’s pipe network. The City of La Crosse is working with the Town of Shelby to identify and fix the I&I problem thru Capital improvements to the sanitary sewer network. However, this I&I fix may take years or ten’s of years due to the cost and scope of such a large effort. In the meantime, the City is proposing that backflow prevention devices be installed into the sewer lateral lines of individual homes in the area impacted.

9. DESCRIPTION OF THE PROBLEM TO BE MITIGATED BY PROJECT

We need to stop the mixture of sewage and storm water back flowing into homes during extreme rainfall events. This water causes damage to the finished basements, damage to anything stored in the basement, and is a biological hazard to health and safety of the residents living there and those having to clean-up after the water recedes.

An example letter and photos from a back-up at one of these homes from the event are attached as an example of the typical impacts.

10. DESCRIPTION OF PAST DAMAGES

Include damages to improved property, infrastructure, as well as public safety costs, economic impact, etc.

A table listing homes that reported sewage back-up in their basements is attached.

11. PAST DAMAGE FREQUENCY

List the number of times or the years that the event has occurred causing damages or other problems.

See table in section 10

12. HOW WILL THE PROPOSED PROJECT ELIMINATE OR REDUCE FUTURE DAMAGES?

The backflow preventers have a flap gate that allows sewage to flow out of a home, but that flap shuts under any backpressure, stopping the sewage and storm water mixture from entering the homes during events. No backflow into the homes equates to no damages.

13. OTHER ALTERNATIVES CONSIDERED FOR SOLVING THE PROBLEM:

List at least two. One alternative can be "do nothing."

- We can do nothing and take damage/clean-up basements as backflows occur. A typical claim for one home with this type of back-up is in the \$10,000 to \$30,000 range.
- We could ask the residents to remove anything from their basements that might be damaged, including removing any carpets or finished walls and thus only have clean-up costs associated with back-ups. This does nothing to mitigate the health and safety concern.
- The City of La Crosse and/or the Town of Shelby could spend millions on fixing the I&I problem in the upstream pipes.
- The City of La Crosse could spend millions upsizing the downstream pipes and lift stations to handle this water and continue to incur additional cost for treating this water at the WWTP.

14. TOTAL ESTIMATED COST OF THE PROJECT:

Attach any available supporting documentation, such as preliminary engineering designs, estimated costs from contractors, studies or reports, pictures, etc.

A 869 series DWV Backwater Valve (see attached material specification sheet) is appropriate for the typical home and costs about \$100-\$150 to purchase. Installation is the expense part because it requires access to the sewer lateral, meaning removing and replacing a portion of the concrete floor (and anything over it). Alternately, an excavator could dig down just outside the home to the sewer lateral depth (typical exceeding 10 feet), protecting the hole from cave-in, to install these on the exterior. Each home will have it's unique challenges (or lack thereof). A study of installation need by home has not been conducted, but it has been determined that the typical installation cost including labor, supplies, and materials is estimated to be around \$3,000, with variation in individual home costs of +/- \$2,000.

Thus the total project cost estimate for all 30 homes is \$90,000.

15. POTENTIAL SOURCE(S) OF FUNDING FOR APPLICANT SHARE (12.5%):

Funding from the City would be from Sanitary Sewer Utility funds, Storm water Utility funds, or an appropriation by City Council thru a special resolution or via the Capital Improvement Budget process.

Please attach any additional supporting information that is pertinent to the proposed project.

RETURN COMPLETED PRE-APPLICATION FORM NO LATER THAN NOVEMBER 19, 2018 TO:

DMAWEMHazardMitigation@wisconsin.gov