

Home Flooding Prevention in Action

Chicago's Albany Park Neighborhood



Homeowners Becca Carl and Sue Walsh were looking for a solution to flooding problems in the basement of their bungalow in the Albany Park neighborhood of Chicago. The RainReady team provided the expert guidance that Carl and Walsh needed. The homeowners were able to make smart, low-cost improvements to their property that will help to keep their basement dry in the future.

RainReady Home is a service for homeowners and building owners that evaluates flooding issues and coordinates the installation of flood prevention measures. Homeowners Becca Carl and Sue Walsh decided to work with the program after incurring more than \$10,000 in damages from two flooding incidents in their basement. During one of the flooding incidents, “water bubbled up from a floor drain like a fountain,” said Walsh.

The RainReady Home team visited the couple's home to conduct a property flood assessment, which includes: collection of previous flood information; examination of the building foundation, basement and landscape; camera inspection of the home sewer; and observation of the adjacent properties and stormwater rights of way.

The team confirmed that water was entering the home from two locations: through floor drains when excess water from the roof overwhelms the home sewer, and through porous foundation walls in the basement. Specifically, the assessment team found that while most of the building's downspouts had been disconnected from the home sewer, one downspout and the sump pump remained connected through the catch basin in the back yard.

In extreme rain events, the amount of water being directed into the catch basin, and then to the home sewer from outside the home was overwhelming the capacity of the pipes to get water off the property and into the city sewer system. The assessment results were included in a detailed report, helping the owners find the solution that best fit their needs.



ABOUT THE PROPERTY

- Single-family home constructed in 1917
- 1,795-square-foot bungalow
- 3,335-square-foot lot
- Located on the 2900 block of W. Wilson Avenue in Chicago's Albany Park neighborhood
- Owned by Becca Carl and Sue Walsh since 2006

FLOODING ISSUES

- Sewer backup, basement seepage, and overland flooding
- Estimated cumulative damage since 2006: \$10,000
- Average of insurance claims for water-backup damage in the Albany Park ZIP code between 2007 and 2011: \$8,073¹

RAINREADY HOME MEASURES IMPLEMENTED

- Disconnected downspout and sump discharge from private sewer drain²
- Connected discharge to a subsurface infiltration drain with an overflow route to the alley
- Total cost of retrofit measures: \$1,710

1 Unpublished data from dataset included in the report, 'The Prevalence and Cost of Urban Flooding', May 2013, Center for Neighborhood Technology

2 A private sewer drain connects a building's plumbing fixtures, catch basin, and downspouts to the municipal sewer.

Carl and Walsh had anticipated investing up to \$10,000 to reduce future flood risks. But thanks to the expert guidance from the Wetfit team, they were able to implement a landscape-based solution for approximately \$1,700. The team's recommendations included the following improvements:

- Divert rainwater from the private sewer drain using on-site stormwater infiltration with an overland flow route to the alley.
- Minimize the entryways for water adjacent to the property.
- Utilize existing dry-wells for infiltrating stormwater on-site.

The RainReady Home team helped streamline the process, including finding a quality contractor with experience installing similar systems to complete the project. Work was finished in November 2013.

“Everything went smoothly,” said Walsh. “Our contractor was easy to work with. He would email me the day before coming out to my home, and they cleaned up after their work.” Walsh also said she valued the expert, objective advice of the RainReady Home analyst. “That is very important,” she said. “It increases my confidence in the whole process.”

RainReady services are available to participating communities. Towns or cities wishing to offer the services to their residents will draw up a memorandum of agreement with CNT and agree to cover the costs of managing the program.



Subsurface infiltration drains, under recently placed pavers, help reduce the amount of rainwater being directed to the private sewer drain, and reduce the risk of water backup in the basement.

To learn more about the program, visit:

WWW.RAINREADY.ORG

If you have questions about the program, please contact:

INFO@RAINREADY.ORG

RainReadySM is a program of the Center for Neighborhood Technology (CNT), a Chicago-based nonprofit research and advocacy organization committed to improving urban economies and environments across the United States.