

# Home Flooding Prevention in Action

## Chicago's Galewood Neighborhood



Although first-time homeowners Marcela Bernal and Dejan Bajic knew their home had prior issues with foundation seepage, they were not prepared to handle the water in their basement after heavy rainfall. “We were hoping we would be safe forever,” Bernal said, since the basement was recently renovated. While the renovations did likely mitigate their water damage in comparison to what their neighbors experienced, Bernal and Bajic decided it was time to take action to further reduce their risk.

Bernal and Bajic had previously worked as ambassadors in the Chicago Sustainable Backyards program from the Center for Neighborhood Technology (CNT). As a result they intended to fill their yard with native plants that would help infiltrate rain in their yard. Through their research on green landscaping strategies, they discovered the RainReady Home program and applied.

Our analysts conducted a holistic site assessment of their property, which included: a 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 assessment revealed that the ground on the northern part of their lot had poor drainage, leading to water infiltration in the soil adjacent to the property's foundation. It also identified that the nearby downspout was still connected to the home sewer, potentially resulting in water backup after a torrential rain. Furthermore, the brick and concrete exterior foundation had hairline cracks that allowed water in the soil to enter the home.

We provided Bernal and Bajic with an assessment report recommending cost-effective solutions to resolve the flooding problem. The downspout should be disconnected and extended to discharge water at an infiltration site on the property. In addition to absorbing the water from the downspout, this infiltration site would also help absorb excess water



### ABOUT THE PROPERTY

- Single-family home constructed in 1959
- 1,064-square-foot building
- 7,462-square-foot lot
- Owned by Dejan Bajic and Marcela Bernal since 2012

### FLOODING ISSUES

- Foundation seepage
- Average of insurance claims for flood damage in the Galewood zip code between 2007-2011: \$4,677

### UPGRADES COMPLETED

- Elevated landscape to drain away from foundation; Installed rain garden
- Total cost of retrofit measures: \$1,700
- Total cost to owners after Green Infrastructure incentive: \$1,200

To learn more about the program, visit:

**[WWW.RAINREADY.ORG](http://WWW.RAINREADY.ORG)**

If you have questions about the program, please contact:

**[INFO@RAINREADY.ORG](mailto:INFO@RAINREADY.ORG)**







that would soak through the foundation. The green infrastructure recommendations for the infiltration site included a drainage swale, a French drain, or a rain garden.

Our analysts helped the owners solicit and review bids from a pool of landscape contractors, and select Art & Linda's Wildflowers to install the improvements. After the installation, Bajic and Bernal had a rain garden consisting of water-loving, native perennial plants established on their property. They also volunteered to be part of growing network

of RainReady customers who are monitoring local rainfall data for Community Collaborative Rain, Hail, Snow Network (CoCoRaHS). In return, we installed a free rain gauge in an easy-to-access location on their back porch. The rain gauge provides the owners a sense of how their investment is working in different size rainstorms. Their rain garden was put to the test during a heavy rainstorm just a few days after installation: no water entered their home.

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.

*RainReady<sup>SM</sup> 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.*