

IOWA TODAY

The Flood 15 YEARS LATER

RECOVERY EFFORTS

IN CEDAR RAPIDS



People walk along First Avenue West toward downtown June 11, 2008, in Cedar Rapids. (Gazette photos)

IN IOWA CITY



Water flows across Dubuque Street on June 8, 2008, in Iowa City.

IN CORALVILLE



Part of First Avenue in Coralville remains under water June 16, 2008.

- Construction of Cedar Rapids' network of flood gates, walls, levees and pumps is underway
- In the hard-hit Cedar Rapids northwest quadrant, the 'future is bright'
- Cedar Rapids collaborates with upstream communities to manage flow of water downstream
- In Iowa City, projects include raising Dubuque Street and building a new UI Hancher Auditorium on higher ground
- Coralville raises First Avenue bridge, builds flood walls, adds berms and pump stations

Resilience

Flood protection continues along the river after devastating 2008 flood



Flood gates, berms and flood walls are visible Thursday on both sides of the Cedar River near the 16th Avenue Bridge (foreground). (Nick Rohlman/The Gazette)

THE FLOOD

On June 13, 2008, the Cedar River crested to its highest level in Cedar Rapids history — 31.12 feet — and inundated 10 square miles of the city, causing what the Army Corps of Engineers estimated to be \$5 billion worth of property and economic damages.

An influx of local, state and federal funding is accelerating construction of the city's flood control plan. The system's estimated price tag totals \$750 million.



Posts for removable flood walls and gates are shown in May along Third Avenue SE in Cedar Rapids. (Savannah Blake/The Gazette)



Traffic drives May 23 across the 5-in-1 Dam in Cedar Rapids, where flood walls and levees will line both banks of the Cedar River. (Savannah Blake/The Gazette)

How C.R.'s flood control works

Nearly one-third of the network of gates, levees and pumps is complete

By Brittney Miller and Marissa Payne, The Gazette

CEDAR RAPIDS — Watching a concert and grabbing a beer at McGrath Amphitheatre. Taking wedding photos along the flood wall in Czech Village. Biking the trail that spans the top of a Cedar Lake levee. Skateboarding at a newly rebuilt Riverside Park.

These are among the activities that construction of Cedar Rapids' flood control system has made possible 15 years after the historic 2008 flood devastated Cedar Rapids. On June 13, 2008, the Cedar River crested to its highest level in Cedar Rapids history — 31.12 feet — and inundated 10 square miles of the city, causing what the Army Corps of Engineers estimated to be \$5 billion worth of property and economic damages.

Since work began in 2014, city and federal crews have ramped up construction of permanent flood protection in preparation for the next time the Cedar River swells, seeking to hide flood control in plain sight by blending it with community amenities.

An influx of local, state and federal funding is accelerating construction of the city's massive network of flood gates, walls, levees and pump stations. The system's estimated price tag totals \$750 million, though record inflation may push that figure closer to \$1 billion by the time work is complete about 2035. Some projects may stretch beyond that date since the system is not fully funded yet.

Fifteen years after the devastating flood, Cedar Rapids' flood infrastructure construction is about 30 percent complete, said Public Works Director Bob Hammond. Work on the east side of the river is expected to be done by the end of 2026.

When floods threatened again in 2016, 9 miles of temporary HESCO-brand sand barriers were used to protect the city — the barriers stacked three high. With progress on the permanent system so far, that number would drop to



A flood wall hugs the Cedar River near 16th Avenue SW in Czech Village in Cedar Rapids. The concrete wall stretches 13 feet high, extending to the 16th Avenue Bridge. There, floodgates can be rolled into place to protect Czech Village from river flooding. (Savannah Blake/The Gazette)

7 miles.

Guided by the creative vision of Flood Control Program Manager Rob Davis, the flood control system is full of engineering marvels and projects that Davis said “give you the biggest bang for your buck” in terms of flood protection. Each segment of permanent protection reduces the amount of costly temporary measures the city must put in place when the river threatens to flood again.

“Trying to put a flood control system in a developed community for 150-plus years is not an easy task,” Davis said. “There are a lot of factors you have to consider.”

The Gazette looked at how various segments of Cedar Rapids' flood control system come together to fortify communities and businesses against flooding.

KEEPING WATER OUT

The National Czech & Slovak Museum & Library stands in Cedar Rapids' Czech Village, where in 2011 the 2.8-million-pound structure was moved away from the Cedar River nearly 500 feet and elevated after being flooded.

It gained a new neighbor last year: a flood wall that shields the museum from the river. But it has been carefully designed to blend into the community it protects.

The concrete wall stretches 13 feet high, extending to the 16th Avenue Bridge. On the Czech Village side, it's lined with grassy terraces for visitors to lounge or for events to take place. The design on its floodgate — left open for vehicles to pass through — matches the pattern of the bridge railing. A light-up sign stretches atop the roadway, signaling the destination across the river: the New Bohemia District.

“It can be imposing, but we don't want people to feel trapped by it,” Davis said about the flood wall.

It marks part of the 3.71 miles of flood walls and flood gates planned to line the Cedar River throughout Cedar Rapids and keep high water levels out of the city. Just under 1 mile has been completed so far.

Their height is typically 13 feet — based off 2008 flood-water levels and designed to handle 143,300 cubic feet of wa-

ter per second. The typically 5-foot-thick and 60,000-pound gates, usually open for vehicles and trains to pass through, can be rolled shut within an hour when needed. Some of the flood gates can be swung shut.

Not all the city's flood walls will be permanent. About 12 percent — or about 1 mile — of Cedar Rapids' flood infrastructure will be removable. When needed, approximately 11-foot-long panels can be floated horizontally between removable posts like Lincoln Logs to create flood walls. The removable sections, like one near the CRST building on Third Avenue SE, require less maintenance and maintain community access to the river but can take up to eight hours to erect.

On the other side of the 16th Avenue Bridge floodgate, the flood wall connects to a levee. Like flood walls, levees are flood infrastructure projects designed to obstruct water from entering the city. They are constructed by layering and compacting earthen materials into big, tall berms.

Upon the system's completion, there will be 3.64 miles

of levees throughout the city. One at Cedar Lake is in progress; another will sprout next year on F Avenue NW.

Just as the 16th Avenue flood infrastructure was made with the Czech Museum in mind, the city accelerated work on a flood wall between First Avenue W and E Avenue NW to align with construction of the Pickle Palace bar and grill and Big Grove Brewery on the nearby mixed-use First and First West development, off First Avenue W and First Street SW near May's Island.

First Street NW will be rebuilt and elevated over the flood wall, and moved closer to the development near the area that will host Pickle Palace. Davis said city staff also considered how future river recreation with a 5-in-1 Dam bypass channel would factor in.

“We said OK, let's put all those amenities there first, and then how do we fit the flood control system around that, because when you do that, then it truly blends,” Davis said.

River water can't just infiltrate Cedar Rapids from above ground — it can also creep through the storm sewer system that webs underneath the city. The network originally was built to bring precipitation to the Cedar River at 48 outfalls. But in flood stages, those outfalls get backed up with water that pushes up through the pipes and drowns the city from below.

During the 2016 flood, city staffers took days building 12-foot-tall concrete cones, placing them around storm sewer intakes in the street and lining them with sandbags and pumps. Now, Cedar Rapids is working on consolidating the storm sewer system into fewer outfalls, outfitted with storm-water gates that can be closed during floods.

“It's much more reliable” than using the concrete cones, Davis said. “To try to build hundreds of these versus having 12 gates at the river is much more sustainable.”

MOVING AND HOLDING WATER

Flood walls, flood gates and levees can be effective at keeping flooding rivers from

“Trying to put a flood control system in a developed community for 150-plus years is not an easy task. There are a lot of factors you have to consider.”

Rob Davis, flood control program manager

Flood control

swelling into nearby communities. But the barriers work both ways: Any precipitation that falls on the city side of the structures will be trapped.

On the west side of the Cedar River, for instance, 9 square miles typically drain into the storm sewers and then into the waterway. When stormwater gates are shut due to flooding, a large rainfall event could flood neighborhoods without a drop of river water.

That's where pump stations come into play. The facilities sit next to flood walls and levees and are outfitted with strong machinery that pumps water from the city side to the river side of the barriers. Cedar Rapids currently has five — 16 are planned in total.

Like the city's flood walls, some pump stations were designed to match the aesthetics of the communities they're built in. The brick pump station in NewBo, for example, was designed to match the Cedar Rapids Czech School in front of it.

The largest stormwater outfall to the Cedar River — a 9-foot diameter pipe — runs underneath a portion of that pump station. During floods, the outfall can be gated shut. Any stormwater from the city is diverted to a rotating trash rack that collects large debris. Then, three 12,500-gallon-per-minute pumps send the water up and over the adjoining flood wall into the Cedar River.

Pump stations can only do so much, though, before they're overwhelmed with drainage from storm sewers. Pairing the infrastructure with detention basins can help prevent that. The basins hold and slow stormwater before feeding it to pump stations — thus reducing the amount of work pump stations must do.

The city is constructing a detention basin where River-



Cedar Rapids Flood Control System Manager Rob Davis talks May 23 about the uses of the pipes behind him at a pump station in NewBo in Cedar Rapids. (Savannah Blake/The Gazette)

side Park's playground and skate park once stood. A pump station will be built alongside the nearby flood wall — but, thanks to the detention basin at its mouth, its size was reduced — saving \$6 million. Two storm sewer pipes with 7-foot diameters will be redirected into the basin instead of the pump station.

"Being able to store the water is a very efficient way to build your pump stations drawing on gravity and not mechanical equipment," Davis said.

This segment has drawn perhaps the most community engagement of any flood control project. City staff worked with skate park users to design obstacles in the new concrete facility, which will open later this summer. The relocated park and skate park were moved closer to C Street

SW to make way for the detention basin.

GIVING WATER SPACE

Flood infrastructure better protects the structures it's carefully crafted around. But it also can constrict waterways, causing them to rise higher in times of flooding. By the end of the project, Cedar Rapids' own flood infrastructure would add about 3 feet of rise to upstream water levels if a flood comparable to 2008 happens.

That's why structures built along the Cedar River must be balanced by giving the waterway more space to expand.

The biggest example in Cedar Rapids is in the Time Check neighborhood, where the levee system was set back four blocks from the river. The city is looking to use eminent domain to acquire 27 remain-

ing properties in the Northwest Neighborhood to make way for flood protection.

Staff are designing a levee segment from Ellis Boulevard NW to O Avenue NW, but some homes are located where the levee is planned. Other projects in the area also are in the design phase, including the Time Check levee tie-off, where the north portion of westside flood control ends at Ellis Lane NW, and the O Avenue NW elevation over the levee.

Altogether, the city is opening up 77 acres of flood plain after purchasing more than 1,300 properties. And raising roads and bridges can give the Cedar River and its tributaries more room to expand, too.

Shaver Road, for instance, is a major truck route that crosses McCloud Run. Instead of installing a floodgate on the road, the city reconfigured it

as a raised bridge. That way, the route can remain open as floodwater rushes underneath.

Adjacent flood walls pass under the bridge, where McCloud Run will be widened and transformed from concrete to a meandering, low-flow channel. Bike trails, sidewalks and fishing spots also will line the waterway.

"All those things allow room for the river to breathe," Davis said. "From a regulatory standpoint, we can't just build right at the river banks and then back that water up and cause problems upstream."

Other bridges are being raised as well, including Edgewood Road SW and Sixth Street SW over Prairie Creek. But the biggest such project will be the demolition and reconstruction of the Eighth Avenue Bridge over the Cedar River. It will cost up to \$90 million, much of which the city is hoping to secure in grants.

The new cable-stayed bridge will have fewer bridge piers, be 15 feet higher and be accessible during high water levels. The modifications allow the Cedar River to flow more efficiently underneath — hindered by fewer obstructions and, if in a flood stage, allowed to rise higher than before.

The bridge will provide a key access point for residents and emergency services when all other city bridges over the Cedar River close during flooding and only Interstate 380 remains open downtown.

"Each one of those piers causes friction," Davis said. "If we can do some things to be more efficient with the friction ... that can actually take the water back down."

Brittney J. Miller is the Energy & Environment Reporter for The Gazette and a corps member with Report for America, a national service program that places journalists in local newsrooms to report on under-covered issues.

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Cedar Rapids looks upstream

The city gives tens of thousands of dollars annually to flood mitigation efforts in other communities

By Brittney Miller, The Gazette

CEDAR FALLS — Farm fields once blanketed the ground where the new Cedar Falls High School is taking shape. It's being built with sustainability in mind — and that extends to the land surrounding the structure.

Instead of precipitation falling onto the property, entering the storm sewer system and ending up in the Cedar River, water will be stored on-site through natural infrastructure. More than 20 acres of reconstructed prairie will encircle the high school, along with four bioretention cells that amount to 7,000 square feet. The combined projects will absorb and treat an estimated 5.4 million gallons of stormwater a year — enough to fill about eight Olympic-size swimming pools.

Every drop of water kept from the Cedar River counts. Projects like bioretention basins in developed communities or cover crops on agricultural land help catch and store runoff. Otherwise, the water can enter nearby waterways and devastate downstream communities — a fate Cedar Rapids knows all too well after the 2008 flood.

Ever since, the city of Cedar Rapids has been working with surrounding communities on flood mitigation projects throughout the Cedar River watershed, where 5 million acres of land drain into the Cedar River. These partnerships often come in the form of watershed management authorities, commonly referred to as WMAs. Iowa's 27 existing WMAs cover 40 percent of the state.

Those collaborations, among others, are helping reduce flood risks in Cedar Rapids and beyond in preparation for the next time the Cedar River inevitably rises.

BEGINNING OF WMAS

Much of the city's collaboration with upstream communities has been in the name of improving water quality. Those projects have traced back to the 2000s. But after the catastrophic 2008 flood hit, new motivations emerged.

The Iowa Legislature passed legislation in 2010 that authorized the creation of watershed management authorities, which are inter-governmental agreements between jurisdictions within a watershed to plan, manage and collaborate on projects. Cities, counties and soil and water conservation districts can all participate.

"Legislators began to realize ... we need to create some structure for communities to be able to partner on these flooding catastrophes that really don't seem to be going away," said Mary Beth Stevenson, the Cedar Rapids watersheds and source water coordinator.

Since then, WMAs have taken off around the state. The Cedar River watershed now hosts four WMAs: the Indian Creek WMA, created in 2012; the Upper Cedar WMA, created in 2013; the Middle Cedar WMA, created in 2016; and the Lower Cedar WMA, created in 2017.

Cedar Rapids is part of the Indian Creek, Middle Cedar and Lower Cedar WMAs. Stevenson currently serves as chair of the Middle Cedar WMA Board and helps coordinate the city's collaborations with surrounding communities.

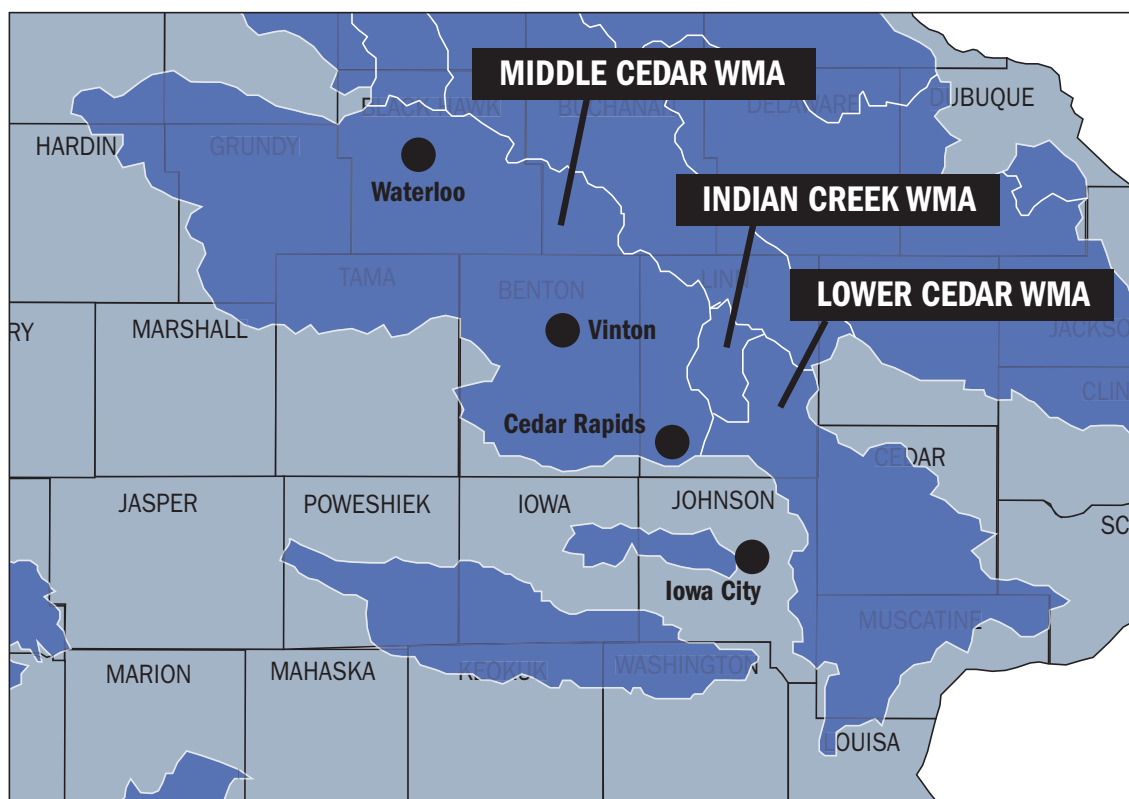
"They're not necessarily projects that we're ... doing all the legwork for, because that's really kind of difficult for us to do as a city," she said. "The best that we can do is contribute to those partnerships or write grants that bring the resources out, and then we have somebody go out and promote them for us."



AONE Geothermal employee Justin Corkrean watches Wednesday as he digs a hole for a pipe at the new Cedar Falls High School in Cedar Falls. More than 20 acres of reconstructed prairie will encircle the school, along with four bioretention cells. The combined projects will absorb and treat an estimated 5.4 million gallons of stormwater a year — enough to fill about eight Olympic-size swimming pools. The water that doesn't run into the Cedar River lessens the potential for flooding downstream in Cedar Rapids. (Savannah Blake/The Gazette)

Watershed management authorities in Eastern Iowa

There are 27 active watershed management authorities across Iowa. Cedar Rapids is involved with three in Eastern Iowa: the Indian Creek, Middle Cedar and Lower Cedar watershed management authorities.



Source: Iowa Department of Natural Resources

Gazette map

PROGRESS IN THE WATERSHED

Once the WMAs in the Cedar River watershed were established, collaborations began.

Those in the Middle Cedar WMA, which spans 10 counties, including Linn County,

were largely supported by the Iowa Watershed Approach — a statewide program promoting flood reduction efforts and water quality improvements. The U.S. Department of Housing and Urban Development awarded the statewide effort \$96.9 million in 2016.

The Middle Cedar WMA received \$11.2 million — the highest award of any WMA in the state, Stevenson said. That money went toward hiring a watershed coordinator and developing a watershed management plan. In total, the funds resulted in 88 best

management practices in the watershed:

- 28 ponds, which store water.
- 25 water and sediment control basins, which are small embankments constructed along slopes to reduce and manage runoff and erosion.
- 12 grade stabilization structures, which maintain channel stability in waterways and decrease erosion.
- 10 wetlands, which store and treat water.
- 7 grassed waterways, which divert and slow runoff from fields.
- 3 terraces, which are ridges constructed along a slope to manage runoff and reduce erosion.
- 2 buffer strips, which can line row crops and slow and filter runoff.
- 1 conversion of a row crop field into prairie.

"More than half of the projects are expected to provide a reasonable degree of flood storage capability" by slowing, storing, absorbing or decreasing runoff, according to a recent University of Iowa evaluation of the projects.

Cedar Rapids' other partnerships — many of which focus on water quality — have resulted in additional projects in the Cedar River watershed that also mitigate flood impacts.

For example, the city's Middle Cedar Partnership Project was funded by the U.S. Department of Agriculture and executed between 2015 and 2020. It resulted in 17,629 acres

"The best that we can do is contribute to those partnerships or write grants that bring the resources out, and then we have somebody go out and promote them for us."

Mary Beth Stevenson, Cedar Rapids watersheds and source water coordinator



A bioretention cell sits just outside the new Cedar Falls High School in Cedar Falls. The space will utilize water runoff to water future plants and natural wildlife. (Savannah Blake/The Gazette)

Upstream mitigation

of cover crops, 11,646 acres of conservation tillage and one oxbow restoration.

The latest round of USDA funding is dedicated to the Cedar River Source Water Partnership, which officially launched in January. In 2022, \$265,000 went toward more than 4,200 acres in cover crops. Funding for more than 5,100 acres of cover crops has been allocated in 2023.

“If we just spread the money out all over the place, it’s harder to track the actual benefits,” said Stevenson, who helps rank and approve the applications. “But if we’re more concentrated on the areas of high need, then I think we’re going to be able to show greater impact.”

MAPPING THE PROGRESS

The University of Iowa Flood Center was created after the 2008 floods and has had an active research role in several WMAs, said program manager Kate Giannini.

Researchers initially conducted hydrologic assessments of watersheds to map how water flows off their landscapes, to identify priority areas for flood mitigation and to measure the impact of possible mitigation projects.

They created a model, called GHOST, to run the different combinations of projects and watersheds through climate change scenarios to “predict” flooding in Iowa. The projections helped WMAs set long-term goals for their watersheds.

Modeling showed that the Middle Cedar WMA’s soil health projects through the Iowa Watershed Approach had great local impacts — sometimes up to 80 percent in flood reduction. But the Cedar River watershed and its 224 sub-watersheds will need many more of the projects to get the desired protections.

“Those projects were just a drop in the bucket,” Giannini said. “I think it really opened a lot of people’s eyes to the need that we have and how much more work and funding that will need to continue to address climate change in our watersheds.”

PARTNER RESPONSE

Getting farmers and landowners to install flood mitigation practices is tough, said Fred Abels, chair of the Grundy County Soil and Water Conservation District. But, by being part of a WMA, his jurisdiction has access to more resources and collaboration.

He has been the Grundy County representative in the Middle Cedar WMA since its inception. Last year, Grundy



Wapsie Pine employees work on moving dirt and removing rocks from it Wednesday at the new Cedar Falls High School. (Savannah Blake/The Gazette)



New grass grows Wednesday in a bioretention cell outside the new Cedar Falls High School. (Savannah Blake/The Gazette)

WATER QUALITY VS. WATER QUANTITY PROJECTS

Projects in the Cedar River watershed largely belong to two categories, Mary Beth Stevenson said: those that focus on water quality, and those that focus on soil health.

Bioreactors and saturated buffer strips, for example, are water quality projects that focus on removing contaminants from agricultural runoff.

Projects that improve soil health include cover crops, reduced tillage and flood plain restoration. Healthy soil contains more organic matter and becomes spongier than unhealthy soils — allowing it to absorb much more water. For every 1 percent of organic matter content, soil can hold 16,500 gallons of water. That reduction in runoff adds up in times of flooding.

Would those practices have prevented the 2008 flooding? Probably not, Stevenson said.

“But when we’re talking about more localized flooding, and we’re talking about lowering the peak and the flood impacts to some degree, that’s where those healthy soils really come into play,” said Stevenson, Cedar Rapids watersheds coordinator.

It became a series of dominoes going upstream.”

Cedar Rapids has a leadership role in many of its partnerships, said Jennifer Fencl, the environmental services director for the East Central Iowa Council of Governments. But since 2008, she has witnessed a general shift in the 60-plus cities in Eastern Iowa she works with. The growing collaborations between communities, agencies, retailers and more help move the needle on flood mitigation on a watershed scale.

“It just feels like there’s momentum,” Fencl said. “What happens higher in whatever watershed you’re in has an impact on you, and you in turn impact somebody else. I think cities have grasped that.”

MORE FUNDING NEEDED

The future of flood mitigation projects in the Cedar River watershed relies on the success of WMAs, Stevenson said. But many of the watershed-wide partnerships suffer from inconsistent funding.

The original legislation authorizing WMAs called for the formation of the groups but didn’t allocate them any money. Instead, they were left to find their own funding sources — like federal funds, local communities, grants and pandemic funds. Cedar Rapids contributes \$10,000, \$12,557 and \$9,324 annually to the Lower Cedar WMA, Indian Creek WMA and Middle Cedar WMA, respectively.

In early 2022 and January 2023, the nonprofit Center for Rural Affairs surveyed Iowa WMAs to “capture a snapshot” of each entity’s capacity, plans and needs.

More than two-thirds of the state’s WMAs reported having completed and having in-progress plans for shaping the local watershed. Yet due to funding constraints, the groups told the center they’re losing the employees and capacity needed for implementing such projects, creating unmet demand for local conservation practices.

“There’s never been a dedicated pot of money from the state of Iowa to help support these efforts,” Stevenson said. “Providing them with a consistent level of funding ... that would be an incredibly beneficial, reliable, stable funding source that creates job opportunities.”

Brittney J. Miller is the Energy & Environment Reporter for The Gazette and a corps member with Report for America, a national service program that places journalists in local newsrooms to report on under-covered issues.

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County installed about 45,000 acres of cover crops — among the top counties in Iowa, Abels said. The Black Hawk Creek and Wolf Creek watersheds both flow into the Cedar River and down to Cedar Rapids.

“I think that’s great that (Cedar Rapids) wants to work with farmers and landowners upstream because that’s where it all starts,” he said. “That’s where you’re going to get the most bang for your buck.”

Just east, Black Hawk County suffered an estimated \$7 million in damages during the flood, said Vern Fish, the executive director of the Black Hawk County Conservation Board during the disaster. Bridges were blown out; roads were destroyed; his own housing was decimated.

From then until his retirement in 2017, Fish said he spent his career “flood proofing” the county. He helped the board acquire habitats and open space to preserve natural infrastructure that absorbs water. He worked on creating more wetlands across the county. And, thanks to flood buyouts, the board restored more than 250 acres of flood plain in Waterloo to give the Cedar River more space.

With every project, his mind was on the rest of the river communities in Eastern Iowa.

“We’re all in this together,” said Fish, now a commissioner on the county’s Soil and Water Conservation District. “If we can do something to help Cedar Rapids, maybe some somebody in Charles City will do something that can help Black Hawk County — and they did.



Steve Lawrence of Central City waters plants for sale Tuesday at Pierson's Flower Shop in northwest in Cedar Rapids. The owner of the store, Al Pierson, is president of the Northwest Neighborhood Association. He chose to rebuild after the 2008 flood, assured with the promise of permanent flood protection. (Nick Rohlman/The Gazette)

'The future is bright'

C.R.'s Northwest Neighborhood on the cusp of recovery with promise of flood protection soon

By Marissa Payne, The Gazette

CEDAR RAPIDS — For decades, Linda Seger enjoyed the tight-knit fabric of the Northwest Neighborhood. Regularly, she'd hear the sounds of children laughing and playing. On her walks, she could take in the savory aroma of a neighbor cooking dinner.

She knew all the people who lived nearby for generations — the hard workers who filled jobs at Quaker Oats and Penford, before it became In-gredion.

"It was like the American dream," 79-year-old Seger said.

After the 2008 flood, those scenes are now just memories. Some, like Seger, stayed and rebuilt their houses, but the destructive floodwaters permanently forced out hundreds who once called this area west of the Cedar River home.

Fifteen years after rising river waters ravaged Cedar Rapids, it's evident the flood forever changed the face of the neighborhood. Where local businesses and hundreds of homes once stood, empty lots are all that remain in a large swath of the neighborhood.

But all these years later, although the flood wiped out much of the working-class neighborhood, it's on the cusp of recovery with permanent flood protection on the horizon in the coming years. Developers are investing in new homes and businesses again in this part of town, slowly but surely bringing it back to life.

As some residents work with city of Cedar Rapids officials and developers to forge a new vision for the neighborhood, though, other longtime residents feel that vision doesn't include them. Facing the city's acquisition of their properties using eminent do-



Aaron Saylor, then-neighborhood building manager at Matthew 25, stands April 15, 2021, on empty lots 1021, 1027 and 1033 Eighth St. NW in Cedar Rapids. (The Gazette)

main to make way for flood control, these residents fear losing a lifetime of memories and are fighting to hold onto their homes.

HELPING NEIGHBORHOOD 'MOVE FORWARD'

Having formed in 2006, not long before the flood, non-profit Matthew 25 spearheaded much of the initial efforts to help restore the Time Check neighborhood to its original vibrancy.

Executive Director Clint Twedt-Ball said essentially starting out in a natural disaster clarified the needs quickly, providing an unavoidable glimpse at the tragedy of people's lives when their anger, depression and frustration was fresh.

But that also allowed Matthew 25 to point people toward the neighborhood's possibili-



Al Pierson, owner of Pierson's Flower Shop and president of the Northwest Neighborhood Association, stands for a portrait Tuesday at the store on Ellis Boulevard NW in Cedar Rapids. (Nick Rohlman/The Gazette)

ties and potential, not solely its pitfalls.

"The cool thing about the Northwest Neighborhood and

these gritty, blue-collar neighborhoods that we work in is that they're people that are accustomed to moving through

hard things and moving to a better future," Twedt-Ball said.

"The flood was devastating, but it was also true that people in these neighborhoods have been through layoffs. They've been through personal tragedies. They knew how to pull themselves up and move forward. I think that attitude has pervaded the whole neighborhood all along."

Since then, Matthew 25 has rehabilitated over 100 homes, established Iowa's first urban farm in 2012, provided a tool library to enable skilled residents to rebuild and grew Block by Block, a program that encouraged interaction among neighbors and empowered residents to invest anew in their block.

Most recently, Matthew 25 last year opened the Cultivate Hope Corner Store, a non-profit grocery store improving healthy food access — its very name capturing the possibilities that have propelled the neighborhood forward.

The corner store, located at a historic building at 604 Ellis Blvd. NW, was part of the Healthy Neighborhoods campaign that also will help build new housing and revitalize existing homes in Time Check.

In the next part of the campaign, Matthew 25 will start this summer to build some new housing and rehabilitate some existing properties with energy efficiencies on those "missing teeth" lots — those that remain empty after the flood but are surrounded by other properties.

Initially, the goal was to keep those homes owner-occupied, but they will start as long-term rentals because construction prices have spiked so much.

"You start to see in this area that those things start to

"The flood was devastating, but it was also true that people in these neighborhoods have been through layoffs. They've been through personal tragedies. They knew how to pull themselves up and move forward. I think that attitude has pervaded the whole neighborhood all along."

Clint Twedt-Ball, executive director at Matthew 25

Northwest

snowball,” Twedt-Ball said of Matthew 25’s collective efforts.

FLOOD PROTECTION ON ITS WAY

An infusion of federal funds is accelerating Cedar Rapids’ timeline for permanent flood protection in the neighborhood, which officials anticipate will be the ultimate catalyst for reinvestment.

With \$10 million in COVID-19 relief funds allocated through the American Rescue Plan Act, the city is designing a project to elevate a segment of O Avenue NW over the top of a levee. An disability-accessible ramp will run from the raised O Avenue NW to the nearby Northwest Gateway and Memorial Plaza.

Instead of previous plans calling for a flood wall across O Avenue NW coming onto Ellis Lane and a 16-foot-tall gate, a reconstructed Ellis Boulevard NW near Ellis Park will swing to the west and gently rise above a levee with no walls and gates. This was intended to better fortify the north end of the system. The flood control segment will blend into the greenery and provide an entrance to Ellis Park, with trail improvements there and sidewalks on Ellis Boulevard NW.

On a rainy night, Al Pierson, president of the Northwest Neighborhood Association and owner of Pierson’s Flower Shop, still finds himself restless, remembering the devastation that occurred 15 years ago.

To him, flood control represents peace of mind — a future when worries about an overflowing river won’t plague residents.

Before pursuing those plans, the city first has to acquire 27 remaining homes near the river to clear a path for construction on the infrastructure project to start in the coming years.

Using federal Community Development Block Grants after the flood, the city voluntarily acquired over 1,300 homes. But these final properties remain, their owners opposed to relocating, especially without offers they deem fair and sufficient to buy a comparable home nearby.

The Cedar Rapids City Council has referred some of these cases to the Linn County Compensation Commission, which will decide the amount of money people are offered to relocate from their homes. There’s at least one legal challenge already, with more residents likely to follow suit to challenge the city’s eminent domain authority.

Public Works Director Bob Hammond said these acquisitions could take another 18 months to three years to wend through the legal system.

Rick Ellis, 72, whose property on Fourth Street NW is slated to be acquired, said he doesn’t intend to go anywhere. It’s “a nice home with nice folks,” where nobody bothers him.

For what the city has offered residents to acquire their properties, with current home prices skyrocketing, Ellis said he couldn’t replace his house. He’d love to design and build his own, but he doesn’t anticipate that will be an option.

His wife, Donna Sanders, 74, was diagnosed and underwent surgery last year for brain cancer. She was given another two years to live at most and is bedridden, reliant on Ellis’ care.

The property is Sanders’ childhood home, and they chose to rebuild after the flood. He hasn’t told her yet that they might have to leave.

“Moving — I hate to even think about it, especially in her condition,” Ellis said.

There’s a lifetime of memories wrapped up in this two-story home. He’s already seen people with their lives strewn



A customer leaves after completing her purchases Oct. 4, 2022, at Cultivate Hope Corner Store, a nonprofit grocery store in the Time Check neighborhood. (Geoff Stellfox/The Gazette)



Rick Ellis poses for a portrait June 4, at in front of his home in northwest Cedar Rapids. He has resisted buyout offers from the city to purchase his property for flood protection, saying he and his wife want to stay in her childhood home. (Geoff Stellfox/The Gazette)

across the curb after the flood, Ellis said, and it’s unfair for the residents to be forced out when they want to stay.

“I can’t go through that again,” Ellis said.

Though many original residents of the neighborhood have scattered, these final holdouts remain close, banding together to guard what’s left of their neighborhood.

In the basement of his property nearby, Don Steichen, who still lives in the neighborhood and leases a property on Fourth Street NW that is marked for acquisition, said the city has caused hardships for residents who chose to stay to nudge them to move elsewhere.

Street connections have languished in this area and weeds run rampant as the city has lessened its investment anticipating flood control work, Steichen said, while allowing luxury condos and rowhomes to be built elsewhere in the neighborhood. To residents lamenting the impending loss of their homes, he said this feels “like a slap in the face.”

For many residents, their homes were all they had, Steichen said. With a high elderly, fixed-income population, rebuilding wasn’t an option for every flood-affected resident.

“That’s what hurt most people because they didn’t have a place to go,” Steichen said. “They didn’t have no way of fighting for themselves, but it was a beautiful neighborhood. We didn’t have any problems. I used to play kick the can until 2 o’clock in the morning when I was a kid. We used to have a blast.”

‘FUTURE IS BRIGHT’

The promise of flood protection and the investment of organizations such as Matthew 25 have spurred further investment in the neighborhood, bringing a host of amenities that has drawn residents back to the “hidden gem” of a neighborhood.

People can meet at the Corner Store as a gathering hub or go there to pick up groceries. Mirrorbox Theater offers arts and entertainment. Ellis Park is nearby, with its pool and golf course. The Mother Mosque still stands as the oldest surviving mosque in the nation. And the river flows, inviting residents to recreate in the warm weather months.

“This neighborhood has all of the right stuff,” Twedt-Ball said. “I think we’re at a place where we don’t necessarily need the amenities as much as we need housing.”

Hiawatha-based developer Joe Ahmann has brought many housing units online in the neighborhood over the years, including Ellis Commons townhomes and Ellis Flats rental duplexes on Ellis Boulevard NW. Developer Steve Emerson and Jim Happel in 2019 finished Ellis Landings Condominiums and its adjoining 16-foot flood wall at 1871 Ellis Blvd. NW. Eric Gutschmidt has completed rental houses and accessory dwelling units in the neighborhood.

Among the projects in the works, Emerson received \$4.75 million in federal disaster recovery funds related to the 2020 derecho to pursue construction of the 50-unit Johnson Gas project. Charlie Nichols’ JPAC Investments received \$380,000 to build four units as a Northwest Neighborhood infill project.

Cedar Rapids’ Paving for Progress street project to connect Ellis Boulevard and Sixth Street NW and improve First Avenue W, adding a connection between the neighborhood and downtown, is slated to wrap up this fall. Pierson and Twedt-Ball said this street work will further fuel the neighborhood’s development prospects.

Public grounds are slated to

get new life, too, in the coming years.

Cedar Rapids is undergoing a process to refresh a master plan guiding development of the greenway along the Cedar River, which could bring about additional opportunities for outdoor recreation — perhaps kayaking, fishing, a destination skatepark — and programmed green space in the coming years. The overall greenway encompasses Time Check in the north, Kingston Village in the center and Czech Village to the south.

Past riverfront development plans faltered shortly before the flood, and now the city will face some constraints tied to federal funding used to acquire properties in the Northwest Neighborhood. But the city is forging ahead with selecting a consultant to update its 2014 greenway plan by the end of this year.

“Over and over again, we heard the public say, yes, we want flood protection, but we do not want to be walled off from the river,” Community Development Director Jennifer Pratt said. “... It really showed us that planning process was important.”

Plus, the neighborhood association’s long-awaited plans to revamp Shakespeare Garden in Ellis Park will come to fruition in the coming months.

These are all signs of promising progress, Pierson said, but he hopes to see more housing to shelter a growing workforce, some additional commercial businesses and more restaurants to give the neighborhood the final spark it needs.

“The future is bright,” Pierson said.

Activities for youth and a senior center for older residents to socialize are among the things Seger would like to see in the Northwest Neighborhood. She hopes that neighbors can connect again, like they did before the flood, instead of the area being treated as an afterthought.

“I don’t think you can manufacture friendship,” Seger said. “It just has to grow. Blank, empty areas don’t grow friendships ... We didn’t really appreciate what we had when it was gone. We just have to do a better version of making this a good place to live.”

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“... it was a beautiful neighborhood. We didn’t have any problems. I used to play kick the can until 2 o’clock in the morning when I was a kid. We used to have a blast.”

Don Steichen, Northwest resident

CEDAR RAPIDS FLOOD CONTROL PLANS

Highlights of the flood control system along the Cedar River in Cedar Rapids built out after the 2008 flood



SIXTEENTH AVENUE FLOODGATE

1 When motorists cross from New Bohemia into Czech Village, they pass through an open floodgate. The gate — 5 feet thick and 60,000 pounds — takes an hour to roll shut when needed. It's connected to a flood wall on either side that stretches about 13 feet tall.

LEFT: Flood Control System Manager Rob Davis talks about the roller gates at the entrance to Czech Village on May 23 in Cedar Rapids. (Savannah Blake/The Gazette)

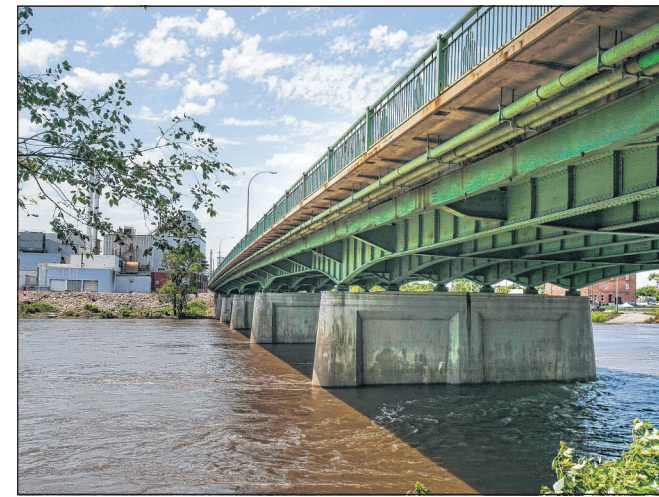
CZECH VILLAGE PUMP STATION AND DETENTION BASIN



Ayden Bright, 13, rolls up a ramp at the temporary skate park set up on the basketball courts in Time Check Park on March 28 in Cedar Rapids. The Parks and Recreation Department installed the temporary ramps and rails while the city's only permanent skate park at Riverside Park was closed for construction of a detention basin. The skate park at Riverside Park will be relocated, along with the park's playground. (Jim Slosiarek/The Gazette)

2 Riverside Park's playground and skate park were cleared to make way for a detention basin, which holds and slows stormwater before feeding it into pump stations. A pump station will be built south of the 12th Avenue Bridge with the capacity to move an estimated 100,000 gallons per minute over the adjacent flood wall — making it the city's largest pump station to date. This project will feature an improved park and concrete skate park as community amenities.

EIGHTH AVENUE BRIDGE



The Eighth Avenue bridge is shown in June 2016. A new cable-stayed bridge will be 15 feet higher to remain accessible during high water levels and to give the river more space to rise. (The Gazette)

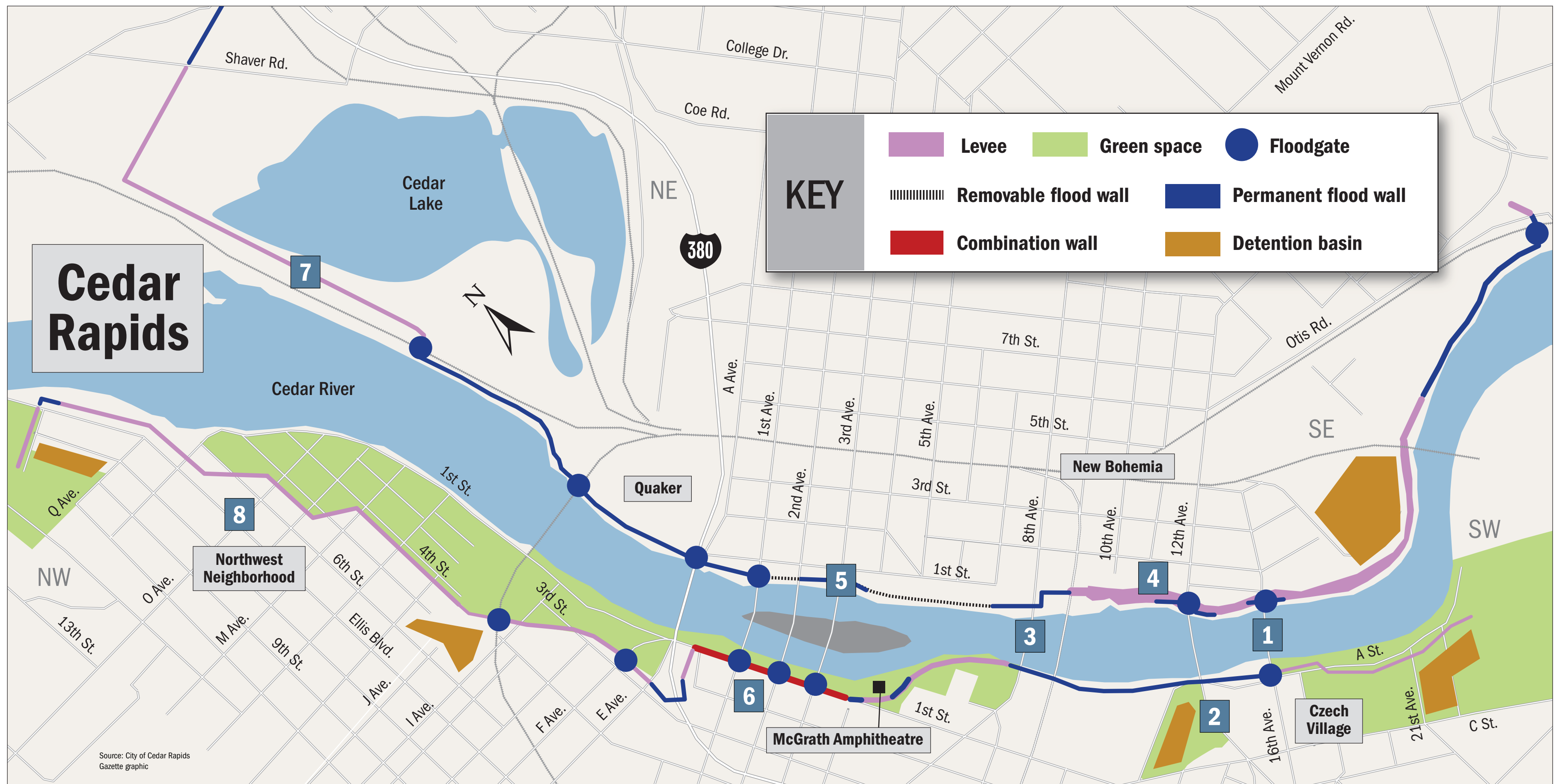
3 In the coming years, the bridge will be rebuilt for up to \$90 million. The new cable-stayed bridge will be 15 feet higher to remain accessible during high water levels and to give the river more space to rise. It will provide access for residents and emergency services when all other city bridges over the Cedar River close during flooding and only Interstate 380 is open downtown.

NEWBO LOT 44 PUMP STATION



The inside of the pump station on Lot 44 in Cedar Rapids is seen May 23. (Savannah Blake/The Gazette)

4 On the outside, the pump station looks like a regular brick building. But inside, it houses three 12,500-gallon-per-minute pumps that can send stormwater up and over the adjoining flood wall into the Cedar River during times of flooding. The largest stormwater outfall to the Cedar River — a 9-foot diameter pipe — runs underneath a portion of the pump station and can be gated shut when needed.



THIRD AVENUE FLOODGATE AND CRST PUMP STATION



Work is underway on the Third Avenue SE floodgate on April 5, 2021, in Cedar Rapids. The floodgate features stackable panels that can take up to eight hours to erect. (Jim Slosiarek/The Gazette)

5 This floodgate features stackable panels that can be deployed during a 22-foot river elevation. These gates can take up to eight hours to erect, though they require less maintenance and maintain access to the river during normal water levels. CRST's pump station is housed on the first floor inside the building — its entrance disguised as a garage door.

FLOOD WALL NEAR FIRST AND FIRST WEST



A worker welds tie backs for concrete forms into place as construction continues in September 2021 on the foundation of a flood wall near the intersection of First Avenue NE and First Street NE in Cedar Rapids. (Jim Slosiarek/The Gazette)

6 A flood wall between First Avenue W and E Avenue NW coincides with construction on the nearby mixed-use development off First Avenue W and First Street SW featuring Big Grove Brewery and Pickle Palace bar and grill. First Street NW will be rebuilt and elevated over the top of the flood wall and moved closer to the development.

CEDAR LAKE AND SHAVER ROAD



Sue Sedrel (left) and Michaela Recker, both of Cedar Rapids, walk past wells heads along the Cedar Lake Trail on March 2 in northeast Cedar Rapids. The wells were drawing water out of the lake in preparation for a flood protection levee. Work will begin on the ConnectCR Trail and amenities once the levee is complete. (Jim Slosiarek/The Gazette)

7 A levee will stretch 2,000 feet across Cedar Lake's west bank to protect the area from flooding. The city had to dewater a chunk of the lake to make room for the structure and make sure it's stable. Upon completion, the levee will reach about 22 feet tall.

O AVENUE NW LEVEE



8 After using eminent domain to acquire properties in the Northwest Neighborhood, pending legal challenges, a levee will stretch from Ellis Boulevard NW to O Avenue NW. O Avenue NW will be elevated over the levee, which is built by layering earthen materials into large berms to block water from entering the city.

LEFT: Pat and Mark Ellis watch dump trucks and dozers create an earth berm along the north end of Ellis Boulevard NW in September 2016 in Cedar Rapids. (The Gazette)

Iowa City area works together

‘Something for the university and for our communities to be proud of’

By Izabela Zaluska, The Gazette

IOWA CITY — For nearly a month, Iowa City’s gateway from Interstate 80 sat waterlogged. Nearby, floodwaters destroyed the region’s premier performing arts center and damaged the home of one of Iowa’s most valued paintings, Jackson Pollock’s “Mural.”

To protect against another devastating flood, the Iowa City metro area looked up — literally and figuratively. A project that cost more than \$40 million to elevate Dubuque Street and the Park Road Bridge over 8 feet higher wrapped in 2018. A new Hancher Auditorium, costing \$176 million in federal and state dollars, insurance and donations, opened on higher ground in 2016. A new \$50 million Stanley Art Museum, paid for with state bonds and gifts, opened outside the 500-year flood plain last year.

On June 15, 2008, the Iowa River crested in Iowa City at a record 31.53 feet. Major flood stage is just 25 feet. The flood caused more than \$270 million in damage to the area, with the University of Iowa, which straddles the river, bearing the brunt of the damage.

Recovering from the flood and imagining a flood control system in the metro area took a collaborative approach. The UI, Iowa City and Coralville “were trying to help each other left and right” in the aftermath, said Rod Lehnertz, the university’s senior vice president for finance and operations, as well as university architect.

“A lot of the recovery was in coordination. We weren’t alone in suffering through this flood,” said Lehnertz, who was part of a core team charged with recovering the campus from the flood.

Over the decade after the flood, the cities of Iowa City and Coralville, along with the UI, worked on various flood control projects to protect the cities and campus from future disasters while also embracing the Iowa River as a key feature.

All three communities have since completed their flood control projects.

“We all felt the pain that summer — there’s no doubt about it,” Lehnertz said. “I’m very proud of how we recovered, and I wouldn’t want to do it again. I look back and wonder how we did it. But it is something for the university and for our communities to be proud of 15 years later.”

IOWA CITY’S RECOVERY APPROACH

In Iowa City, there were four main parts of recovery: removing hazards, updating the building code, raising Dubuque Street and consolidating the two wastewater plants.

Among the first parts of recovery was to get people out of harm’s way, said Ron Knoche, Iowa City’s public works director. There were two neighborhoods impacted the most by the flood, and this is largely where property buyouts occurred in the years after.

To date, the city has purchased 104 properties and continues to pursue buyouts, Knoche said.

A majority of homes purchased after the flood were in the “Mosquito Flats” and Idyllwild neighborhoods through a voluntary program funded by federal and state dollars. Mosquito Flats is in the Manor Drive/Normandy Drive area, and Idyllwild is between Taft Speedway and Foster Road.

These homes, except for the historic Ned Ashton House, were demolished and are be-



Dubuque Street runs along the Iowa River in Iowa City on June 5. The area saw extensive redevelopment as part of the city’s \$40.5 million “Gateway Project” following the 2008 flood, including raising the level of the road. (Nick Rohlman/The Gazette)



On June 10, 2008, floodwater covers Dubuque Street near the Park Road Bridge in Iowa City. Five days later, the Iowa River crested in Iowa City at a record 31.53 feet. (The Gazette)



Floodwater surrounds the University of Iowa Museum of Art after the Iowa River crested on June 15, 2008. The final piece of the UI flood recovery was a \$50 million museum, to be built above the flood plain next to the UI Main Library. The Stanley Museum of Art opened to the public in 2022. (The Gazette)

ing maintained as green space. Since the program wrapped up, the city has purchased a handful of additional homes, including a home at Manor Drive in February.

The city also modified its building code requirements to reduce future flood risk, Knoche said. Typical construction in the flood plain is one foot above a 100-year event, Knoche said. Iowa City modified its code to be one foot above a 500-year event.

Knoche said residents have asked why it was important to change building codes.

“I think the value in looking at the resiliency as we move forward is ... as we look at redevelopment in those areas, the code requirements help remind folks kind of what can happen,” Knoche said.

There were two major proj-

ects part of Iowa City’s recovery. Knoche said these two projects are the largest capital project the city has ever undertaken.

The \$40.5 million Gateway Project included raising Dubuque Street to protect against 100-year flood levels, as well as replacing and elevating the Park Road Bridge. The street and bridge had to be closed several times since a 1993 flood, impacting travel of a thoroughfare used by thousands of university employees, students and residents.

The other project was consolidating the city’s north wastewater plant — where Riverfront Crossings Park is now — with the south plant on Napoleon Street. This project cost \$45.6 million and was completed in 2014, Knoche said.

Voters approved a local-option sales tax to help fund flood recovery, which expired in 2013. More than \$34 million was generated for the two high-priority projects.

“Those two projects are key not only to the future resilience but also the future development of our community,” Knoche said.

CORALVILLE’S RECOVERY APPROACH

Conversations in Coralville on how to recover from the 2008 flood actually started before the flood, city engineer Scott Larson said. The city had its primary engineering consultant, HR Green, monitor what was happening as water was rising.

“During the flood event and then right after, we had a lot of information from our consultants, and we were able to start immediately thinking about what projects do we need to invest in,” Larson said.

One of the bigger projects was reconstruction and raising of First Avenue and the bridge over Clear Creek, Larson said.

Other projects included backflow prevention, sluice gates, stormwater pump stations, earthen berms, permanent and removable flood walls and elevating a portion of Fifth Street. The permanent and removable flood walls are largely along where the Iowa River and Clear Creek meet, near First Avenue and Second Street.

The city also completed property buyouts along Edgewater Drive, turning the area into park space.

“Instead of 20 plus homes that were at significant risk of flooding and many had flooded multiple times before 2008, now we have a green park corridor,” Larson said.

The city completed its flood control system in 2018, a decade after the flood. Funding for these projects included city, state and federal dollars.

“We’re super fortunate to be past where we’re still trying to get funding to build our flood mitigation projects, and we’ve built what we needed to do,” Larson said. “Now we’re in that ‘stay prepared, be ready’ and then make sure we’re maintaining our entire flood mitigation system.”

UI’S RECOVERY APPROACH

The university faced eight years of coordination and recovery from the 2008 flood, including 435 meetings among the core flood recovery team, Lehnertz said.

Immediately after the flood, the focus was on working with the state and federal government to fix short-term challenges. By fall 2009, the university was able to start long-term and permanent recovery, Lehnertz said.

There were 22 major buildings on campus that flooded. The recovery work included replacement projects, as well as “repair and protect” projects, Lehnertz said. The projects were largely paid for with Federal Emergency Management Agency dollars, in addition to other state and federal grants.

“We could not have recovered this campus without our partners at FEMA and the federal government,” Lehnertz said.

The Iowa Memorial Union has a permanent wall system around the outside of the building that created a new plaza. Lehnertz said this “protects the building from flooding, but it also added a place for students to gather outside at a safe distance from the river.”

Walkways on both sides of the river were replaced with wider sidewalks.

Eight years after the flood in fall 2016, the university celebrated the opening of three replacement buildings — Hancher Auditorium, Voxman

► IOWA CITY, PAGE 14D

“A lot of the recovery was in coordination. We weren’t alone in suffering through this flood.”

Rod Lehnertz, UI senior vice president for finance and operations

IOWA CITY FLOOD RECOVERY PLAN

Highlights of the flood control system in Iowa City and Coralville built out after the 2008 flood



Traffic moves along Dubuque Street as work continues May 30, 2018, on the Iowa City Gateway Project in Iowa City. (The Gazette)

GATEWAY PROJECT

1 The \$40.5 million Gateway Project included raising Dubuque Street to protect against 100-year flood levels, as well as replacing and elevating the Park Road bridge. This was completed in 2018.

WASTEWATER PLANT CONSOLIDATION

2 Iowa City's north wastewater plant was consolidated with the south plant on Napoleon Street after the flood. This project cost \$45.6 million and was completed in 2014.

RIVERFRONT CROSSINGS PARK

3 Riverfront Crossings Park is where Iowa City's north wastewater plant used to be. Now, it is a major park area with trails, nature playground and wetlands that highlight the riverfront.

IOWA CITY BUYOUTS

4 Majority of homes purchased after the flood in Iowa City were in the "Mosquito Flats" and Idyllwild neighborhoods through a voluntary program. To date, the city has purchased 104 properties and continues to pursue buyouts.

FIRST AVENUE BRIDGE

5 The city of Coralville raised the First Avenue Bridge and reconstructed the road from Sixth Street down to Highway 6. The First Avenue storm sewer system was also improved.

IOWA RIVER TRAIL

6 The Iowa River Trail in Coralville was added as a recreational amenity and to allow the city to easily access the flood walls near the Iowa River Power restaurant and surrounding area.

VOXMAN MUSIC BUILDING

7 Eight years after the flood, in fall 2016, the university celebrated the opening of the Voxman Music Building.



Patrons arrive for the opening night gala at Hancher Auditorium on Sept. 24, 2016, in Iowa City. (The Gazette)

HANCHER AUDITORIUM

8 The original Hancher Auditorium, built in 1972, was damaged by the flood. The new facility opened in 2016.

IOWA MEMORIAL UNION

9 The Iowa Memorial Union has a permanent wall system around the outside of the building that protects the building but also added a new plaza for students to gather.

STANLEY MUSEUM OF ART

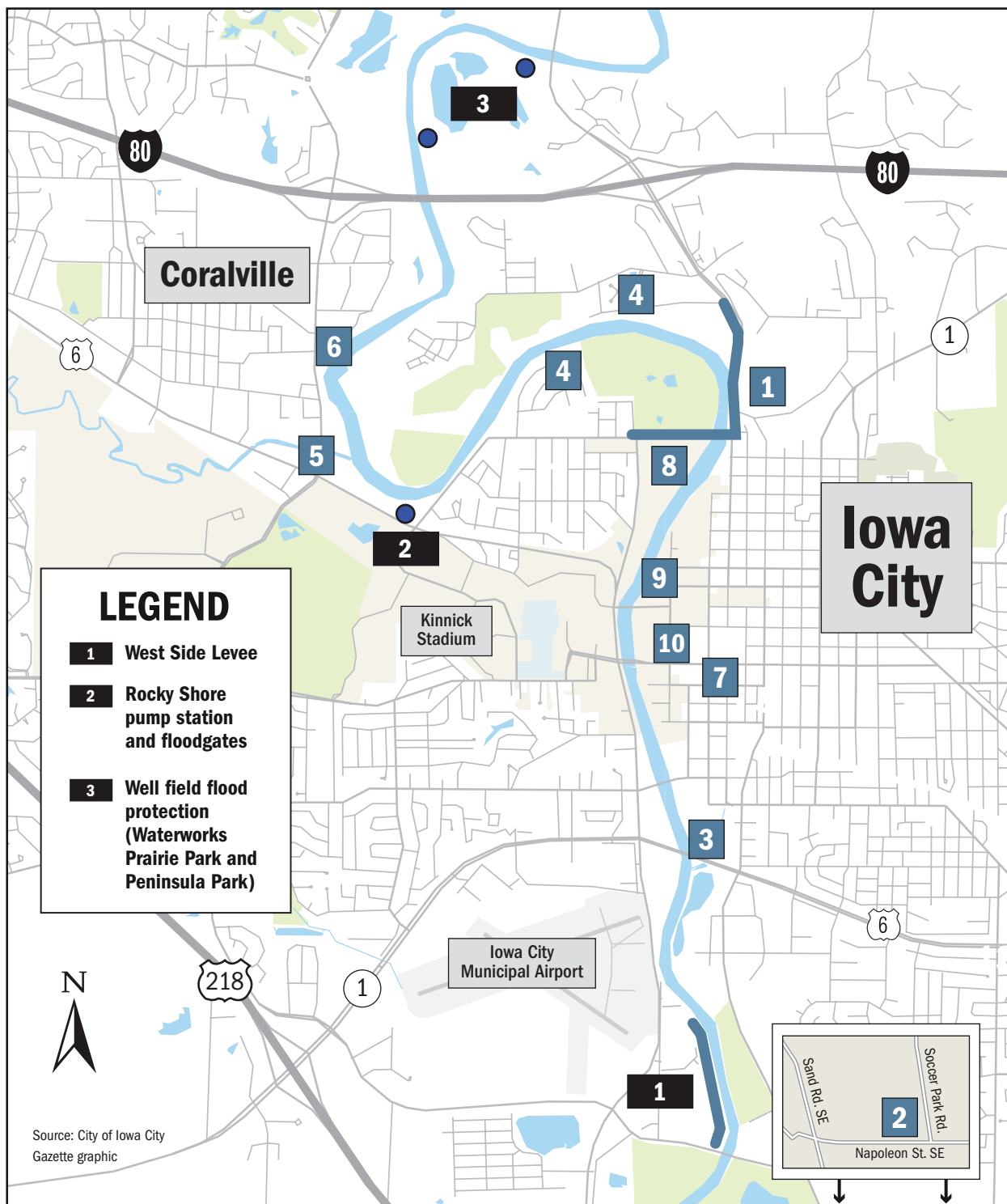
10 The Stanley Museum of Art opened in August 2022 and marked the final recovery project for the university.

— Curated by Izabela Zaluska, The Gazette

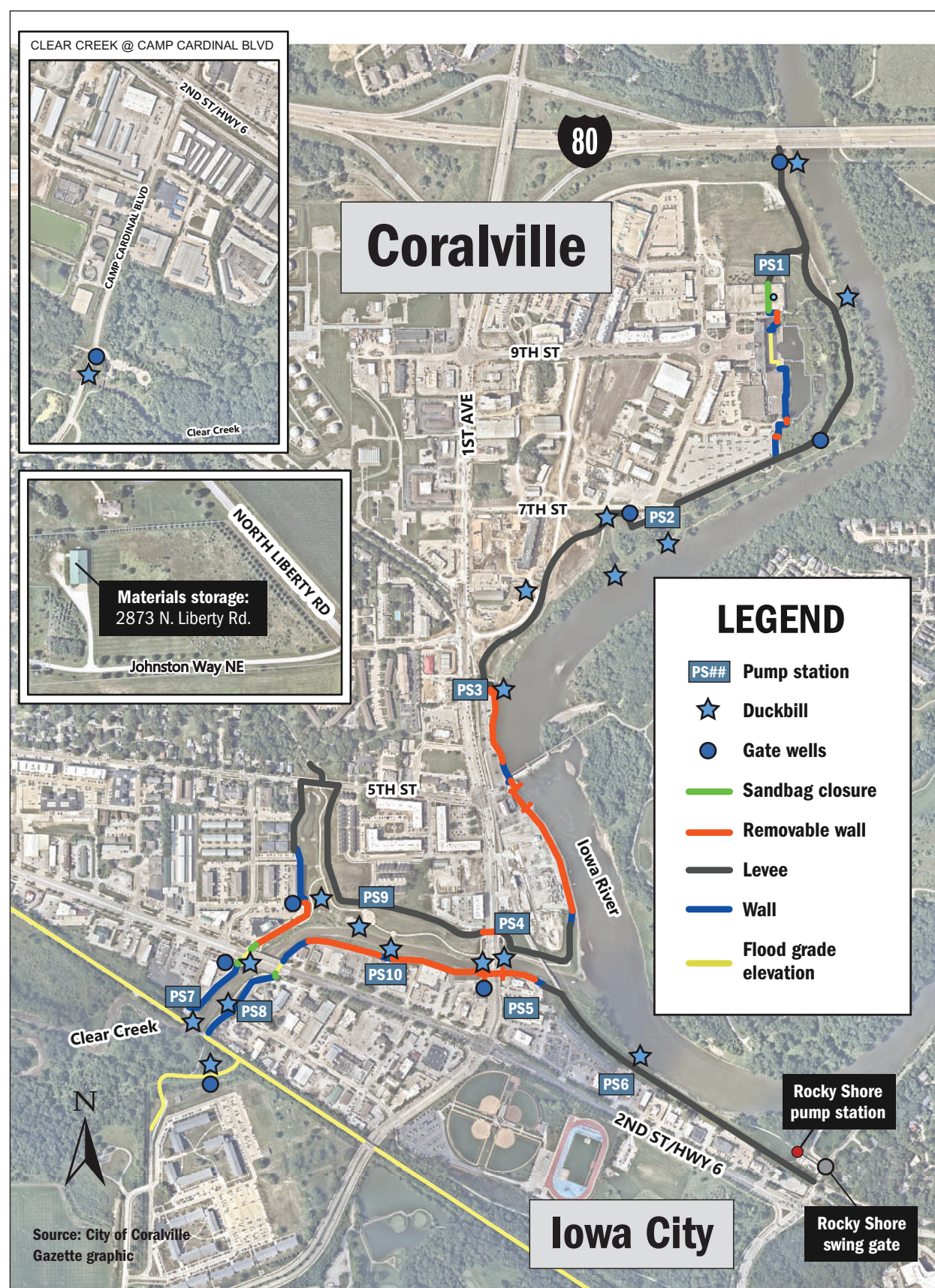


Larry Shostrom of Iowa City takes a moment to look at the piece titled "Mural" by Jackson Pollock during the opening weekend event at the Stanley Museum of Art last August in Iowa City. (Savannah Blake/The Gazette)

IOWA CITY FLOOD MITIGATION PLAN



CORALVILLE FLOOD MITIGATION PLAN



THE FLOOD



Volunteers form a human chain to carry sandbags in an effort to protect Mercy Medical Center from rising floodwaters early June 13, 2008, in southeast Cedar Rapids. (Jim Slosiarek/The Gazette)



LEFT: Marine One flies over flooded areas of Coralville at Highway 6 and the intersection of First Avenue (top right) on June 19, 2008, as then-President George W. Bush surveys damage from flooding in the Cedar Rapids and Iowa City areas. (The Gazette)
TOP RIGHT: Chair backs placed on the bar at Zins show the height of floodwater in the restaurant June 16, 2008, in southeast Cedar Rapids. (Jim Slosiarek/The Gazette)
ABOVE RIGHT: Floodwaters flow over a sandbag dike June 16, 2008, at the Voxman Music building on the UI campus. (The Gazette)



ABOVE: People watch June 12, 2008, as houseboats in the Ellis Park Harbor are tipped from their moorings by the rising floodwaters of the Cedar River in Cedar Rapids. (Jim Slosiarek/The Gazette)

LEFT: Bicycles damaged in the flood sit in a jumbled pile awaiting pickup June 27, 2008, in the Time Check neighborhood in northwest Cedar Rapids. (The Gazette)

FAR LEFT: A boat was left behind June 15, 2008, in southwest Cedar Rapids after floodwaters receded. (The Gazette)

THE PROTECTION



Flood control infrastructure surrounds the National Czech & Slovak Museum & Library in an aerial photo Thursday in southwest Cedar Rapids. Flood walls are visible in the bottom left, while the site of construction on flood control measures around the 12th Avenue Bridge and a retention basin in Riverside Park are also visible. (Nick Rohlman/The Gazette)



Construction work continues Thursday on a flood wall and a mixed-use development along First Avenue W in Cedar Rapids. The city accelerated work on a flood wall, seen in the bottom right portion of this aerial photo, between First Avenue W and E Avenue NW to align with construction of the Pickle Palace bar and grill and Big Grove Brewery on the nearby mix-use First and First West development. (Nick Rohlman/The Gazette)



Crews work May 23 on the new skate park at Riverside Park in southwest Cedar Rapids. The city is constructing a detention basin where the playground and skate park once stood, so the city is moving the skate park and park close by. (Savannah Blake/The Gazette)



A truck May 23 drives over the Shaver Road Bridge in Cedar Rapids. Instead of installing a floodgate on the road, the city configured it as a raised bridge. That way, the major truck route can remain open as floodwater rushes underneath. (Savannah Blake/The Gazette)

Iowa City

► FROM PAGE 10D

Music Building and the Visual Arts Building.

“It was a series of recoveries over that eight years and then culminating in the christening of those new replacement buildings that symbolically completed our flood recovery,” Lehnertz said.

The Stanley Museum of Art, which opened in August 2022, was “really our final recovery project” but it was not part of the work partly covered by FEMA, Lehnertz said. Fundraising and university bonds paid for the \$50 million project.

EMBRACING THE IOWA RIVER

All three communities highlighted the importance of embracing the Iowa River as part of the flood recovery approaches, including adding green space along the river.

Riverfront Crossings Park is where Iowa City’s north wastewater plant used to be. Now, it is a major park area with trails, nature playground and wetlands that highlight the riverfront. The park was designed to protect neighboring residential and commercial properties from flooding.

The university’s recovery philosophy was “not to run away from the river but to make ourselves safe from it, to make ourselves a model for protection from flooding,” Lehnertz said.

“When the river hit us in the face, it was an amazingly painful event and survival. However, the river is what also makes the university very special,” Lehnertz said.

Lehnertz said the university will continue to do projects along the river with flood protection and mitigation in mind.

“We live with the river — we’re not running from it,” Lehnertz said. “But ... we design for the next flood, not the last flood.”

Embracing the river also was a top priority for Coralville, Larson said. This included a combination of permanent and temporary flood walls designed to protect residential and commercial businesses while also providing access to the river and Clear Creek.

Two areas where this was done that

Larson highlighted are behind Monica’s restaurant on Second Street and near the Iowa River Power restaurant on First Avenue. The nearby Iowa River Trail was added as a recreational amenity and to allow access by the city to the flood walls.

WHAT HAPPENS WHEN THERE’S ANOTHER FLOOD?

With a flood control system, there’s often not a chance to test before it’s needed. But the university had an opportunity to do just that during the severe weather in June 2014.

The UI put up miles of HESCO-brand sand barriers on new, wider walkways along the river in a couple of days, as well implemented a 12-foot wall that goes around Art Building West during a flood event, Lehnertz said. The water did not go over the walkways and did not hit the barriers, Lehnertz said.

“We practice putting up those HESCO barriers regularly,” Lehnertz said. “We make sure that all of our systems are ready to go.”

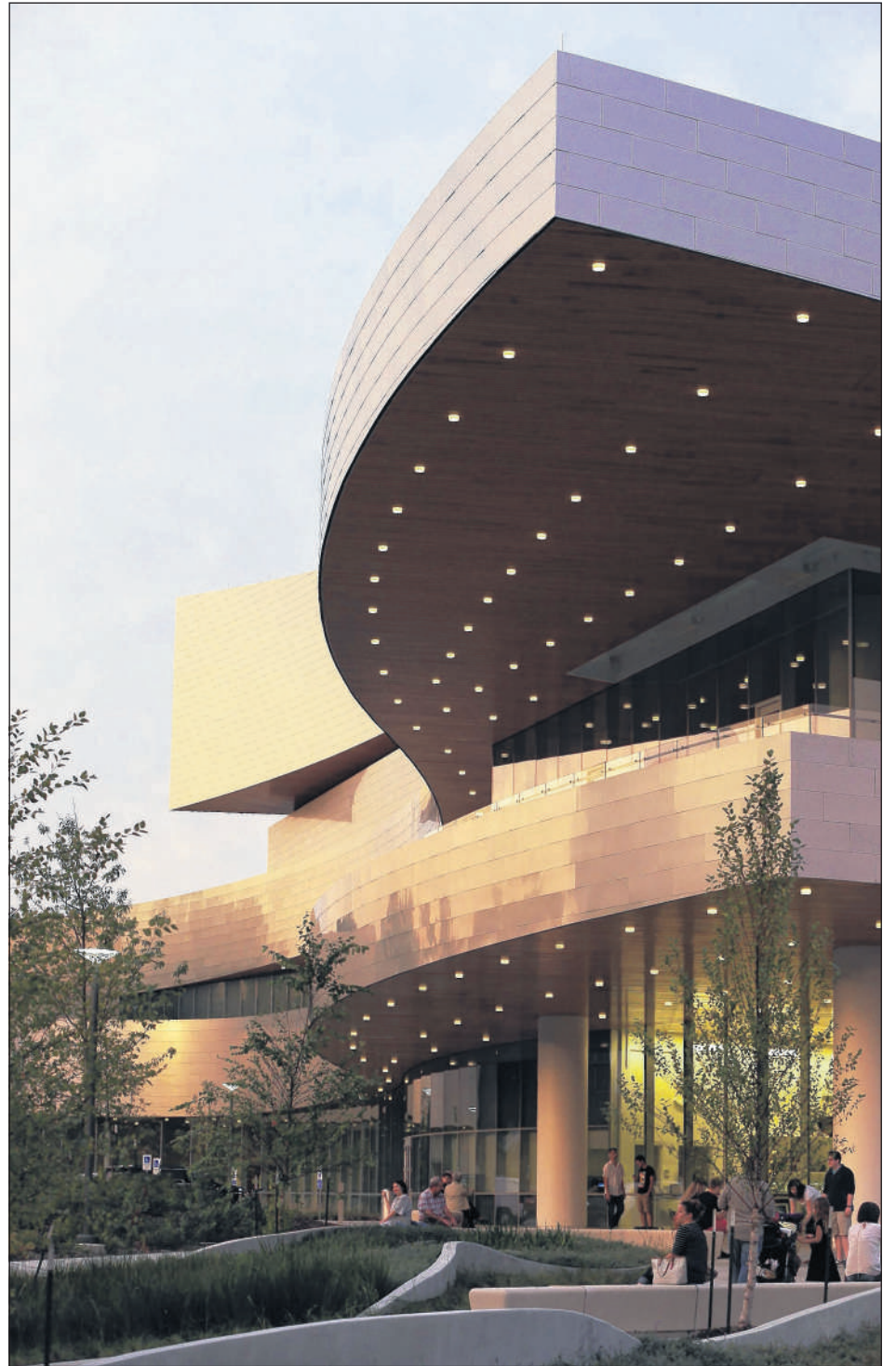
Having the Coralville Lake gives the communities some time to implement their flood response. Knoche said Iowa City emergency response measures — such as implementing pump stations and adding barriers — would take less than a week.

All removable flood wall panels in Coralville could be installed in about a week using a combined crew of 20 to 25, said Eric Fisher, the city’s streets superintendent. This timeline could be accelerated by bringing on additional crews if needed.

If the same exact event were to occur again, Larson said, the Coralville areas flooded in 2008 would be dry now because the water from the Iowa River and Clear Creek would be contained.

“Everything we did here was built to protect to the 2008 plus one foot,” Larson said. “... Even if we had a 2-inch rain event behind that flood protection, that’s when the stormwater pump stations kick in.”

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The sun sets on Hancher Auditorium on Sept. 16, 2016, the weekend the new \$176 million building opened on the University of Iowa campus in Iowa City. The first band to play at the old Hancher in 1972 — the Preservation Hall Jazz Band — came back to present a free outdoor concert on the Hancher lawn to christen the new arts venue. (The Gazette)

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PCI Medical Pavilion 1, located at 202 10th Street SE, is home to:

- Clark & Associates Prosthetics & Orthotics
- Forefront Dermatology
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- PCI Bone, Joint & Sports Medicine Center/ Orthopedics
- PCI Diagnostic Imaging Center
- PCI Diagnostic Laboratory
- PCI Ear, Nose, Throat/Head & Neck Surgery
- PCI General Surgery
- PCI Hematology & Oncology
- PCI Plastic & Reconstructive Surgery
- PCI Rheumatology
- PCI Urology Center
- Rock Valley Physical & Hand Therapy
- Rock Valley Vestibular Therapy
- St. Luke’s Heart Care Clinic
- St. Luke’s Hospital Radiation Center
- UnityPoint Breast & Bone

PCI Medical Pavilion 2, located at 275 10th Street SE, is home to:

- Eastern Iowa Sleep Center
- Eastern Iowa Sleep Supply
- PCI Diagnostic Imaging Center
- PCI Diagnostic Laboratory
- PCI Family Medicine
- PCI Neurology & Sleep Medicine
- PCI Physical Medicine & Rehabilitation
- PCI Podiatry & Foot Health
- PCI Spine Center
- PCI Vascular & Endovascular Surgery
- PCI Walk-in Care
- UnityPoint Home Medical Equipment

