

Pierce County, Wisconsin



Bridge at Trenton Island. Photo by Rebecca Kihslinger.



Background

Pierce County (pop. 41,019) is located in northwestern Wisconsin and shares a border with Minnesota along the Mississippi River. Within Pierce County is Trenton Township, a community that includes the flood-prone Trenton Island. The island, located in the middle of the Mississippi River, was developed with homes and businesses before Pierce County adopted any restrictions on development in the floodplain. Trenton Island's floodplain properties included numerous homes and businesses that have been damaged by frequent flooding.

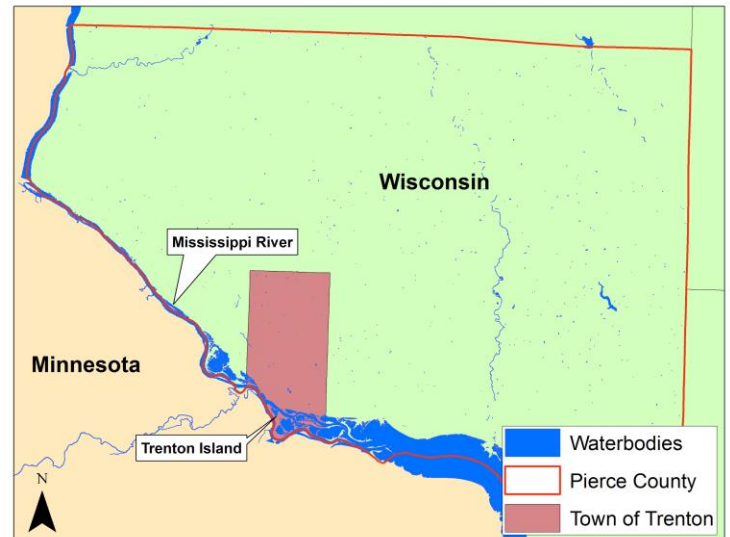


Figure 1: Pierce Location

Figure 2: Relevant Features in Pierce

History of Flooding and Mitigation

Trenton Island and the surrounding communities of Bay City, Hagar City and Spring Valley, experienced major flood events in 1952, 1965, 1969, 1993, 1997, and 2001 ("Mitigation Success," p. 1). These floods damaged the island's properties and overwhelmed its infrastructure, causing sewage leaks and the contamination of drinking water. Residents who found their homes unlivable were compelled to stay in costly temporary housing.

After the floods of 1993, the FEMA made Hazard Mitigation Grant Program (HMGP) funds available for mitigation projects, including the County's buyout program.

Table 1: Pierce Demographics

	Pierce	Wisconsin
Population (2010)	41,019	5,771,337
Median age	37	38.5
Housing units	16,132	2,648,317
Owner occupied	72.9	67.7
Black (%)	0.6	6.6
White (%)	96.6	87.8
Hispanic or Latino (%)	1.6	6.5
High school degree (%)	93.9	90.8
Bachelor's degree (%)	26.3	27.4
Median household income	\$61,613	\$52,738
Poverty rate	10.8	13.2

Source: US Census, 2010 and American Community Survey 2014

According to Census data, Pierce County is relatively affluent compared to the state of Wisconsin as a whole. The county's median household income is slightly higher than the state average, and the poverty rate is lower. White residents make up a substantial majority of Pierce County, at almost 97%.

The Buyout

In response to the flooding, Pierce County led an initial buyout program in 1993 and purchased 59 properties. Eight additional homes were acquired by the town of Bay City. The total cost of the project was \$6,147,186, which accounted for the pre-disaster value of the homes as well as a primary-residence premium, according to Andy Pichotta, Director and LUC of the Pierce County Department of Land Management.



Figure 3: Homes on Trenton Island, 1992

Figure 3 shows an aerial photograph of Trenton Island in 1992, a year before the devastating flooding in 1993. The Mississippi River splits and flows on both sides of the island. Homes located along the left leg of the split can be seen in the photograph. Following the 1993 floods, most of

these homes were acquired and demolished or relocated.

Source: Google earth, 1992

Figure 4: Map of Buyout Areas

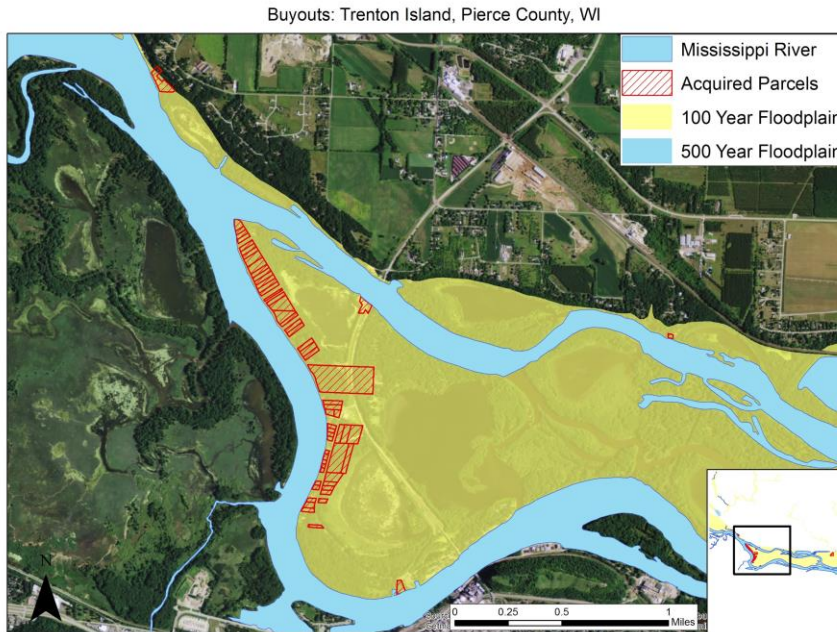


Figure 4 highlights in red the parcels that were acquired on Trenton Island. They form a mostly-contiguous stretch of land along the Mississippi River. If all parcels were bought in this stretch of land, the county would own around 0.7 miles of contiguous, natural open space.

Seventy-five percent of the buyout was financed by FEMA, with the remaining 25% divided between Wisconsin Emergency Management and the

Wisconsin Department of Administration, Division of Housing. The sale of salvage from the acquired properties supplemented these funds with an additional \$199,425 (\$187,989 went to HMGP projects and \$11,436 went to CDBG projects). Of that, \$52,239 was used to fund another HMGP buyout project in Darlington, Wisconsin ("Mitigation Success," p. 3).

Table 2: Homes Acquired in the Buyout

Total homes in Pierce County	16,132
Homes acquired in buyout	73
Homes remaining in flood hazard area	20
Total cost of buyout	\$6,147,186
Average cost per home	\$84,208

An acquisition offer was extended to every resident on Trenton Island, and all but 20 property owners accepted the buyout. Those who agreed to participate were compensated with the fair market value of their properties as well as moving expenses and the state-required replacement housing cost differential. Under state law, the cost differential "made up the difference, if any, between the acquisition cost and the reasonable cost to purchase a replacement, or the actual cost of the replacement dwelling, whichever is less" ("Mitigation

Success," p. 4). With this financial assistance, 80% of relocated homeowners were able to move to a new home within Pierce County and no farther than 5 miles away from Trenton Island ("Mitigation Success," p. 5).

Pierce County's buyout program incorporated a unique flood-related ordinance, the second of its kind in the state of Wisconsin. According to the ordinance, for a given structure located in the floodplain, renovation and repairs can only take place if flood-related structural damage does not exceed 50% of the property's value.

According to Pichotta, some property owners who chose to remain on Trenton Island were able to carry out repairs and flood-proofing under this ordinance. However, most of the twenty remaining properties flooded again in the severe flood events of 1997 and 2001 ("Mitigation Success," p. 5). Yet, it is clear that, as a result of the buyout, flood damage was greatly reduced. Compared to the flood of 1993, later flood events were less damaging.

Pichotta noted that Pierce County held on to 57 of the buyout-acquired properties until 2010, when Trenton Township took ownership of them. The remaining two properties are still held by the county, which restored them for use as boat landings.

Current Status

According to Pichotta, Pierce County manages the acquired land as forested floodplain on which development is forbidden. It is not managed for recreation or wildlife protection purposes. The boat ramp is mainly used for walleye fishing in the winter, an activity that attracts visitors to Trenton Island. Finally, although camping is currently forbidden by a town ordinance, the county has discussed the development of campgrounds. No plans are currently in place to establish camping in the buyout areas.

Integration with Hazard Mitigation Plan

Buyouts are an integral part of mitigation planning for Pierce County. Contributors to the "Mitigation Success" document, which include FEMA Hazard Mitigation staff, Wisconsin Emergency Management, the Pierce County Department of Land Management and Resources, the United States Army Corps of Engineers, the National Weather Service, and the Wisconsin Department of Natural Resources, list four goals of hazard mitigation:

- To acquire flood-prone properties from willing sellers
- To provide property owners with an opportunity to recoup investments and equity
- To ensure that the land use of acquired properties remain compatible with open space, recreational, or wetlands management practices
- To reduce the need for future county, state, and federal disaster response and recovery expenditures

Consistent with these goals, Pierce County applied for hazard mitigation grants from the state (2016 State of Wisconsin Hazard Mitigation Plan, p. B-15, B-34). Wisconsin's State Hazard Mitigation Plan was most recently updated in 2016. Remaining largely consistent with previous versions, the 2016 Plan emphasizes the importance of local mitigation planning, especially for flooding. Flooding is listed in the plan as a major potential hazard with both high probability of occurring and high mitigation potential.

Additionally, Pierce County's Emergency Management Director, Gary Brown, applied for a Pre-Disaster Mitigation planning grant to achieve hazard mitigation targets in 2011 (Pierce County Herald, 2011).

The objectives of hazard mitigation are supported by Wisconsin's Hazard Mitigation Plan, which plans for coordination between local, state, and federal organizations to acquire flood-prone properties and protect property owners in floodplains. For example the National Flood Insurance Program makes funds available for communities who enforce floodplain management ordinances (like Pierce County's) with federally-backed flood insurance. The Department of Natural Resources assists with the administration of local ordinances and mitigation programs in the event of flooding (2016 State of Wisconsin Hazard Mitigation Plan, p. 6-179, 6-182).

Conclusion

Overall, the results of the buyout in Pierce County have been mixed. The acquisition of 59 homes on Trenton Island reduced the county's vulnerability to future floods, but the piecemeal nature of the buyout limits the county's options for using the acquired lands. An estimated 65 to 68% of properties on Trenton Island were acquired and converted to open space ("Mitigation Success," p. 5). The financial support provided to property owners by Pierce County facilitated acceptance of the buyout on a large scale. Furthermore, the majority of homeowners were able to relocate within a distance of 5 miles from their original property, remaining settled within the county.

Pierce County's sale of salvage from acquired properties, which recouped some of the costs of the buyout, is significant for its use in funding another buyout project in the state of Wisconsin, in the town of Darlington. Pierce County deserves recognition for its financial management of buyout programs.

References

Wisconsin Emergency Management. "Mitigation Success -- Trenton Island, Pierce County, Wisconsin." Undated.

Pierce County Herald. "Pierce County starts hazard mitigation plan update." 19 Jul 2011.

Wisconsin Emergency Management. 2016. 2016 State of Wisconsin Hazard Mitigation Plan.
Accessed at http://emergencymanagement.wi.gov/mitigation/state_plan.asp