



Case Study



Water Management

Case 1 Nijmegen, The Netherlands: A Dutch City Makes Room for Its River and a New Identity

Problem to resolve: High flooding risk from the river Rhine

Solution: Construction of a parallel canal

Description: Nijmegen is turning a flood-control project on the River Waal into an opportunity to redevelop its inner core. The Dutch city of Nijmegen is building a flood-control channel for the River Waal (left). In the process, it is also creating an island for recreation as well as prime property that can be developed into a new heart of the city. In this city along the River Waal, this year marks the 20th anniversary of a scary event that quite nearly turned into a catastrophe. Heavy rains upstream in France and Germany, where the river is known as the Rhine, sent a surge of water toward Nijmegen. The city of 170,000 people is protected by dikes. But as the water rose and fear built that the dikes would break, many people and cattle in and around Nijmegen evacuated. Luckily, the dikes held, and after several harrowing days, the water level dropped again.

The people of Nijmegen aren't taking their good luck for granted. With climate change expected to bring more intense storms like the one in 1995 (and a previous one in 1993), the city is embarking on a massive flood-control project. That may be expected in the Netherlands, a low-lying country where most homes are built behind protective dikes (There's a saying here that "God created the world and the Dutch created Holland"). But even here, the approach underway in Nijmegen is unusual, and filled with ideas that river cities anywhere can learn from. There's two reasons why. First, Nijmegen is not simply raising or strengthening its dikes, which might seem like the obvious solution. Instead, it is moving some dikes back from the river, essentially creating a much wider floodplain. Into that floodplain, excavators and cranes are carving a new channel for the River Waal. That channel is broadening the river—and giving future floodwaters more room to flow without threatening the city. The second reason is that all this engineering work is creating a whole lot more than flood control. Construction of the new channel also means that a new island is being made in the middle of the Waal. The island's elevation is high enough in some spots that it will be possible to construct a whole new section of the city here, along with parks and nature areas.





Credentials:

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Sources and Further Reading

Source: Reimerink, L. 2017. A Dutch City Makes Room for Its River and a New Identity. *Cityscope*. 15 May 2017. <http://www.cityscope.org/story/2015/dutch-city-makes-room-its-river-and-new-identity>