

Script - Water: Restoring Nature to the Chicago River

The City of Chicago was built around its river. At a time, the river system was used for shipping, trade, and waste disposal. The river's industrial era has come and gone, and now it's easy to forget that, once upon a time, this river was the beating heart of the city's infrastructure. While people may look at it today and see a polluted, industrialized waterway, some environmentalists see an opportunity— *to reintroduce native wildlife and restore the river's natural beauty.*

Along the North Branch Canal of the Chicago River, Urban Rivers, a river ecology organization, create and cultivate floating gardens. These gardens are planted with native flora, and are attached to the banks of the river— where the natural riverfront was otherwise replaced with concrete, wood, or steel pilings. This recreation of the natural riverfront and vegetation serves as a base for the river's ecosystem.

[00:01:01:06] Phil: Plants are the very foundation of any ecosystem. We tried to get the most amount of plant diversity on to these islands as we could. We probably planted around 70 or so species. Not only are we trying to grow native wetland and prairie plants, we also get some tree cover on there. Over the years, these islands mature and develop just like any normal ecosystem.

[00:01:27:21] Phil: Diverse plant life attracts a diverse amount of insects. Those insects then in turn produce the diverse amount of fish and diverse amount of birds. A lot of the birds especially they're pretty ubiquitous throughout the river systems. But we also might attract animals, plants, that really can't find any other place to do what they need to do. Not only is this plants above water. These plants' roots are growing hydroponically and they're providing a lot of underwater structure for things like fish, algae, different types of microbes to grow on— Things that become the underwater foundation of ecology. So not only do we help a lot of the more common species, we're also doing very specific things for species that have a really hard time existing without us.

Designing the Chicago River to be a space for wildlife comes a long way from its history of industrialization and pollution. Since the 19th century, Chicago would dump sewage, municipal, and industrial waste into the river. The presence of pollution and heavy metals made water uninhabitable, and the construction of the river walls removed any future access wildlife had to the river. Eventually Chicago stopped dumping waste in the river, and industrial and commercial uses have all but ended. After decades of abuse and neglect, Chicago is now assessing the river systems' ecological conditions, *and creating action.* The city along with

community partners are exploring ways to both rehabilitate water chemistry, and in the case of Urban Rivers, restore wildlife.

[00;03;05;21] Phil: Water quality has two big components: not only is it water chemistry, but also how much life can that same water support? and that's a huge indicator of habitat quality and water quality as well.

[00;03;19;24] Phil: All of this is an experiment, and so we want to figure out as best as we can, as we're adding these native plants and this native habitat back, is that going to have a scalable, measurable effect? Can we see changes in wildlife? can we see increases in diversity? Signs that an ecosystem is becoming revitalized.

Urban Rivers' ecology action expands far beyond their current island gardens. Beginning in 2020, they'll install the first of the Wild Mile Floating Eco-Park– the first of its kind in the world. This community-lead project works to reclaim the mile-long stretch of the North Branch Canal and Turning Basin. This will be a park *in* the river, with floating wildlife habitats, walkways, and recreation spaces.

[00;04;06;12] Phil: We're trying to make this a wildlife hotspot. When you're in an urban area, very rarely do you get a nice natural area to appreciate nature the way they should be. We're trying to get this area with all these people and we want to show them what just giving a little bit of effort can do to help the nature around them. We take that same effort and put it towards revitalizing it and making it a place for wildlife.

With a renewed focus on removing pollution and building habitat spaces, the river can have a new purpose in Chicago– as a wildlife sanctuary. These floating gardens can promote ecosystem reclamation. And with close proximity to the city, this area can become a place for people to learn, interact, and enjoy natural spaces.

By breathing new life into the river, Chicagoans can become closer to the landmark that once defined the city. The river may not be the centerpiece of industry that it once was, but now it can take on a new role in the story of Chicago: *enchanted citydwellers with nature*.