



## City By Nature: ReWILDING the North Texas Branch Waters Network for Urbanism

By Kevin Sloan, ASLA, Honorary AIA

### City in the Blackland Prairie

The North Texas Blackland Prairie is a 16-million acre ecological subset of the Great Plains that was once the largest in a series of tallgrass prairies. Originally surrounded by forests, the tallgrass prairie swept across the low hills and drier topography of a region that was interspersed by an extensive network of sheet springs, which to the eye would have looked like creeks, ravines and swales. The original grassland was taller than a human, or any animal species that lived in it. The pioneers noted how they went “through” the Blackland Prairie, never “over,” nor were they ever “on” it. This was a landscape

that a person inhabited just by passing through.

Less than one tenth of one percent of the original Blackland Prairie remains. (White 2006; Eidson and Smeins). It is considered one of the most endangered ecology in North America. The Blackland Prairie has been civilized.

In a 1957 issue of *Architectural Record*, two young architecture professors at the University of Texas-Austin, Colin Rowe and John Hejduk, published “Lockhart, Texas.” (Reprinted in Rowe 1996). The essay made one particular case, among many, that the gridded and Greek-like planning of the Texas County Courthouse

towns with their cathedral-sized courthouses conspicuously positioned at the center, was a unique invention to Texas that patterned the state in the early nineteenth century. Unbridled growth in the twentieth century merged 13 counties in North Texas into a seven-million-acre urban agglomeration that is generally known today by only two of the thirteen county seats: “Dallas/Fort Worth” (or alternatively the “DFW Metroplex” or “DFW”).

When observed in satellite view, DFW reads like a multi-exposure photograph with patches of urbanism seemingly interspersed amongst the agriculture. As world cities change and expand

before our very eyes, DFW is a unique case study of a new and unprecedented mega-form that offers both problems and potential. The existing pattern and form is at a scale that is statistically impossible to urbanize with “density.”

San Francisco has an average human density of approximately 30 residents per acre, while the residential density of Paris exceeds 100 persons per acre and, during the workday, Manhattan spikes to 500 to 1000 persons per acre in the financial districts. In DFW, approximately 7 million continuous acres of incorporated services supports 7.5 million residents. Thus, the average human density of Dallas Fort Worth is roughly one person per acre.

The thinly settled pattern is punctuated with nodes that are building clusters. In between the clusters, the vast watershed network original to the Blackland Prairie remains as a continuous urban system of trees, deep topsoil and waterways that were too “wet” for development, too expensive in many cases to culvert or bury, but easy to bridge with streets and infrastructure. Miraculously, somewhere around 600 to 900 continuous miles escaped the twentieth century land rush.

Moreover, DFW is teaming with wildlife. Several reasons account for this astonishing characteristic. First, a city settled at one person per acre contains an abundance of space for wildlife. In addition to the abundant area, DFW is the largest city in North America

that is directly on the path of the Central Migratory Flyway. These two conditions account for the unique and flourishing presence of nesting bald eagles, egret rookeries, all species of waterfowl and flocks of wild turkeys. The avian life supports predation that includes bobcats, red fox and coyotes. Most of the species traverse the original watershed network of the Blackland Prairie in DFW and much more can be done with it.

### Rewilding Landscape Architecture

Rewilding is an approach to environmental design that is sweeping the world. Continental programs already exist in Europe. The UK has a national campaign and a director of rewilding who reports to the Prime Minister. Since 2013, Ireland has undertaken a national campaign to rewild its rivers, which has led to the recent news that Dublin is going to rewild Phoenix Park, the largest urban park in Europe since 1785. In the United States, The Wild Mile in Chicago is transforming a significant length of the Chicago River into a “wildlife sanctuary.”

Blair Kamin, the Pulitzer Prize winning architectural critic of the Chicago Tribune notes: “Adding wildlife into a city is the next step in a revolution that’s been transforming former industrial landscapes into places that are inhabitable, vital and spur economic development.” Kamin continues: “what’s interesting here is the notion of integrating natural systems and wildlife into recreational culture and thereby enriching both of them.” (Phone interview with Kevin Sloan Studio, July 2019).

When rewilding is understood as the process of biologically and ecologically programming landscapes, what began as an ecological method to correct the environmental imbalance of large regions and nature preserves is transformed into a process that can apply to virtually any landscape, regardless of its scale or context.

A rewilding project begins by defining a program of non-human species that the project can appropriately and reasonably shelter. Not all species are appropriate for every site or project, given the circumstances





or potential conflicts of a particular context. Instead, rewilding offers landscape architects the opportunity to select, design and manage biodiversity, and to optimize the potential to reconstruct concentrations of biodiverse habitat for virtually any project and occasion. Next, the program of species generates horticultural and ecological relationships that are necessary for rewilding to succeed. Lastly, human activity is then mapped into the rewilding by design, so both human and non-human co-exist and without interference to each other.

Rewilded landscapes embrace change, unpredictability and what artists in the twentieth century referred to as “chance operations.” They are nurtured to evolve, change, to “go-with-the-flow” since rewilding is ever-seeking to remain in balance as its own nature is driven to evolve. Rewilded landscapes avoid heavy maintenance as an activity that perpetually returns a project to an originating image.

### Branch Water Urbanism

“The North Texas Branch Water Network” is a concept to utilize the nature of the entire watershed network in DFW as an attraction to draw, aggregate and form walkable urbanism along the creeks, streams, and springs of the watershed. The Network is a proposal that is less a master plan of totalizing ideas, and more an initiative to guide an otherwise ad hoc set of interventions, with awareness and a set of game-like rules. It is a tool and process that can

manage, predict and reconstruct new urban relationships with nature. With it, we can rewild DFW and cities like it.

This is not a “new” or original idea. Segments that demonstrate the concept are already complete. Growing like sugar crystals on a string, innumerable projects have occurred along the DFW watershed network from 1911 to the present.

For example, as the only greenway proposed in the 1911 Dallas Master Plan by George Kessler that was implemented, the 7.5 mile Turtle Creek Greenway in the Highland Park area of Dallas is a one hundred year old demonstration that the nature of a Blackland Prairie ravine and sheet springs can generate culture, economic prosperity and high-rise urbanism. When the good life in Texas meant the largest house possible on a noble estate, the bucolic nature of Turtle Creek still compelled a significant



Airfield Falls Rewilded Path  
Photo Credit: Kevin Sloan Studio

population in Dallas to live in high-rise condominiums and apartments along the creek and greenway from 1960 to the present.

A second segment to consider is Vitruvian Park, a 112-acre mixed-use infill quarter for 16,000 residents in Addison, Texas, which is a city just north of Dallas in the DFW Metroplex. Begun in 2008, the planned development is an array of blocks that spatially envelop the 17-acre Branch Water Park; a public park which arose when a section of the despoiled and spring-fed Farmers Branch Creek was transformed into a public park.

To strengthen the spatial linkage between the mixed-used residential blocks and the park, the massing of the urban blocks became hybrids of space: creating tenant access to the park while simultaneously generating semi-private amenity spaces and swimming pool courtyards between that are contiguous

with the public park space. Kevin Sloan Studio completed both the urban planning and landscape architecture for Vitruvian Park.

### Case Studies

Two case study projects by Kevin Sloan Studio follow. While they were not rewilding projects when originally produced, each provided incremental discoveries as research that eventually lead to the realization of the need for ecologically and biologically programming landscape works as a first condition for design.

#### The Dallas Urban Reserve – 2008 to present

The Dallas Urban Reserve is a residential enclave of 50 modernist houses organized along a continuously bio-filtering street. The project repurposed 12 acres of despoiled and environmentally damaged land between a 1950s north Dallas subdivision and White Rock Creek. The biofiltering street asymmetrically slopes stormwater into a repetitive system of rain gardens that gather, process and direct water into irrigation ponds that are bridged by architecture. The asymmetry reinforces two distinct landscape edges. To handle the deluge and drought cycles of North Texas, they created a robustly planted edge of horsetail reed and cypress and a “dry” non-irrigated side that consists only of desert willow trees in museum gravel. Proximity to White Rock Creek accounts for an abundance of wildlife that has taken hold



Airfield Falls  
Photo Credit: Kevin Sloan Studio

in both the existing groves of volunteer hardwoods and the system landscape of the project.

#### Airfield Falls – 2013 to present

The Airfield Falls Conservation Park materialized when Carswell Air Force Base in Fort Worth downsized, making a relic of the original Blackland Prairie, the tallest natural waterfall in North Texas, accessible for public recreation. The waterfall was untouched by design, but the quarter mile path to it was rewilded for a program of songbirds, migratory pollinators and flocks of wild turkey. The arrival “trailhead” park is a highly designed landscape that includes a historic jet aircraft display, a water harvesting parking lot, a bio-filtering percolation field along with a family shade and picnic pavilion that marks the former location of the base commanders house. Authentic aviation lighting in the park furthers the client and Water

District’s agenda for water and energy conservation, and the park elements make palimpsestic references to the Cold War site history and its North American defense.

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### Resources

Matt White (2006). *Prairie Time: A Blackland Portrait*. College Station, Texas. Texas A&M University Press.

J Eidson and F.E. Smeins. Texas blackland prairies. World Wildlife Fund. <https://www.worldwildlife.org/ecoregions/na0814>.

Colin Rowe (1996). *As I Was Saying: Recollections and Miscellaneous Essays*. Edited by Alexander Caragonne (Ed.) Cambridge, MA. MIT Press.