Once Upon A Millpond Dreary:

A case study in the intersection between shifting cultural perceptions and ecological states

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Environmental historians segment US history into distinct time periods that coincide with prevailing cultural values and how these play out in the political arena. Likewise, ecologists view ecosystems in states that correspond to the degrees of human impact and manipulation. As this case study of a former lumber mill pond on the campus of Gonzaga University in Spokane,

Washington demonstrates, both ecological states and cultural perceptions of the environment occur along a chronological continuum in which the changing values of American society regarding the natural world correspond to shifting ecological states. Our research found four distinct ecological states, plotted on the left side that correspond to four distinct cultural values, plotted on the right.

Natural



Former millpond suggesting original contours of the Bay, 1958

Hybrid

E

C

U

G

C

B

S

1880s

Romantic

Utilitarian

For much of the 19th century, America vacillated between two conflicting views of nature: Manifest Destiny and Romantic. During the 1880s in Spokane, white settlers exemplified the former, while Jesuit missionaries reflected the latter. Seeking to establish a college, in 1881, the Jesuits purchased 320 acres from the Northern Pacific RR on the north bank of the Spokane River, a couple miles upstream from the town. The Jesuits focused on the aesthetics of the site, shaped as they were by a spiritual tradition that recognized the inspirational power of beauty and nature. Their purchase included a bay, or large back eddy, formed by a peninsula jutting into the river, and the fathers regarded the location as conducive for contemplation and study.

But in 1887, just weeks before the college was to open, "suddenly a railroad appeared before the fathers like an ugly blight" as the OWR&N began constructing "a hated roadbed between the college and its lovely bay...not the last, nor most disturbing to the peace of the Jesuits." Two years later, the Jesuits took to the courts to stop a second railroad along the north side of the bay, but lost, as the right of way fell under eminent domain. Unable to win against the forces of industrialization, the Jesuits abandoned the hopeful serenity of the bay and moved the buildings farther inland and away from the railroads.

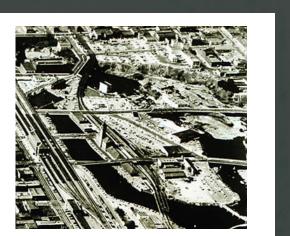
1900s-40s

Having shifted the focus of the campus away from the bay and the river, the Jesuits had little use for the lower campus, and, in 1904, leased the land along the river banks to a lumber company. The physical shift in the campus orientation mirrored a shift in cultural values from Romantic to Utilitarian in the early 20th Century. In 1906 five railroad lines bisected the mill with several trains per day dumping saw logs into the bay, which had become a log pond, partially separated from the river by the railroad bed. By 1922 five hydroelectric dams along the river had divided the river into a series of slow moving reservoirs, while completion of the Grand Coulee Dam in 1942 eliminated salmon runs from the Spokane River. Human activities that focused on the utilitarian value of nature caused both the bay and the river to pass beyond the range of historical variability into a new ecological state--a hybrid ecosystem.



Logs backed up in McGoldrick's millpond, early 1900s

Designer



In reaction to the excesses of industrialization and utilitarianism, a rising ecological consciousness permeated American culture in 1960s and 70s. Spokane and Gonzaga were no exception to this new view of nature and embraced the nationwide beautification effort. Spokane began preparation for the first environmentally themed World's Fair—Expo 74—by dramatically restructuring its downtown river corridor from an industrial railroad yard of warehouses "into a scenic asset."

1960s-70s

Spokane River, mill pond, McGoldrick mill, and City

Crematory. The lumber mill stack is on the right, while

the crematory twin stacks are in the center of photo,

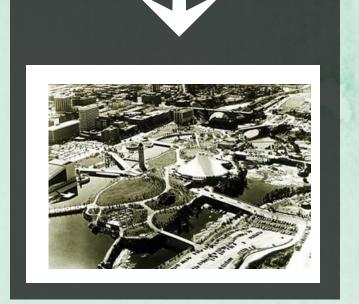
1941.



Overhead view of McGoldrick Lumber Mill, railroad yards, and the Spokane River, 1931

Beautification





Downtown Spokane before & after the World's Fair

Novel

Concurrently, Gonzaga's vice president, Fr. Arthur Dussault led a decade-long campaign to beautify the lower campus, which had become a dumping ground and eyesore after a fire destroyed the lumber mill in 1945. In the early 1960s students began a series of litter cleanups, and Dussault raised the funds to convert the former mill pond into campus park—Lake Arthur. Complete with a fountain, intensive landscaping, and a causeway that separated the pond from river, Lake Arthur was now a designer ecosystem, one requiring continual human maintenance.



Sam Weaver Fountain in Lake Arthur, 1987

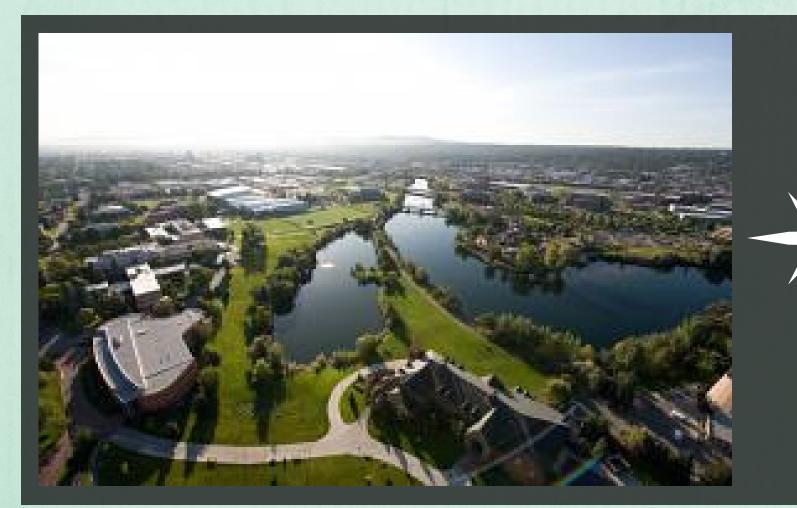


Helicopter pad on Lake Arthur, 1974

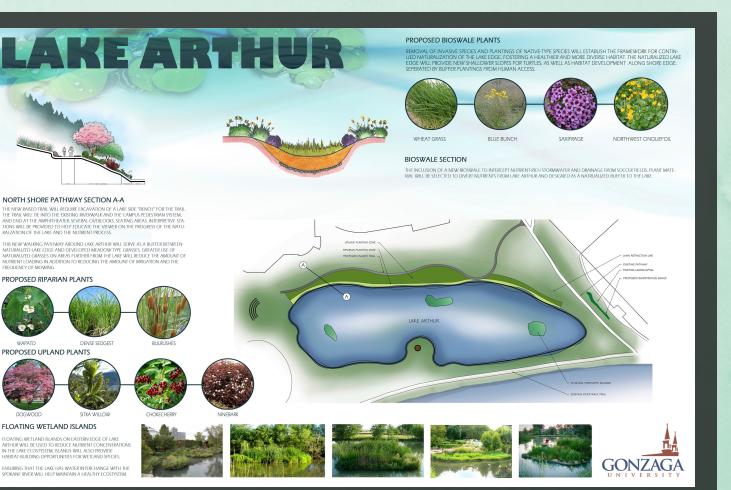
Restoration E

Although Lake Arthur and the surrounding manicured lawn improved the aesthetics of the lower campus, it attracted little more than a passing flock of Canada geese, which contributed to the lake's nutrient load and subsequent algae blooms. By the 21st Century, painted turtles began showing up in the pond, along with a pair of beavers, and occasional great blue herons and wood ducks. With the colonization of native species, the state of Washington identified Lake Arthur as the only wetland on the Spokane River within the city limits.

In 2012 Gonzaga students and faculty began to advocate for an ecological enhancement plan for Lake Arthur, and after three years of studies, students received a grant to install floating wetlands and begin the reintroduction of native flora along with an expansion of the riparian zone along the Spokane River. While Lake Arthur is a human artifact, Gonzaga students are working to enhance its ecological resilience so that it can become a self-sustaining ecosystem.



Lake Arthur, Gonzaga Campus, and the Spokane River, 2016



Artistic conception of Lake Arthur as a functioning ecosystem, 2016

 $2000s \rightarrow$

Conclusion Sources

The history of Lake Arthur reflects changing perceptions about the natural world. We broke these views into four distinct periods: Romantic, Utilitarian, Beautification, Restoration. Each of these stages also correspond to states of naturalness. The natural state corresponds to the establishment of Gonzaga and the Jesuit conception of nature as a place for reflection and contemplation. The construction of upriver dams, weirs, railroads, pollution, and seeing natural as a resource led to a hybrid ecosystem in the early 20th century. With urban renewal and beautification efforts in the 1960s, the bay was transformed into a pond with landscaping and a fountain—a designer ecosystem. An increased understanding of the role of wetlands, ecosystem services, and urban ecology in the 21st century is moving Lake Arthur into a novel ecosystem, one that is a product of human action but not longer requires manipulation.

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Photos courtesy of Gonzaga University Archives