



In October, the Loeb Fellowship 2023 Fall Study Tour went to Denver, where one of the big stories is the shrinking water supply in the Colorado River. The questions on everyone's mind were: How do we design for climate change? How do we reconnect people to the river? And what solutions from the past can help us move forward?

Water in the West

By Tracy Metz



“Mighty” is the word. The Colorado River runs through four states, with a watershed encompassing parts of seven US states and two Mexican states. It provides water for 40 million people—including 30 Native American tribes that lived here long before the white man came—and supports much of the country’s food supply thanks to the agriculture in the fertile valleys of California. It is the motor of a 1.4 trillion dollar economy. But even a river as mighty as the Colorado can dwindle under the pressure of climate change and the multitude of “straws” sucking it dry.

Water in the West is one of the themes of the Loeb Fall Study Tour 2023 to Denver, Colorado. We learn about the big issues of the Colorado River, the role of Cherry Creek in Denver’s urban planning and, on a more local level, the role of the South Platte River. Good to know: half of Denver’s water comes from the Colorado River.

Peter Pollock '98 kicks off the plenary session with the acknowledgement that “we recognize that we are on unceded territory of the Ute and Arapaho nations.” Here in the arid West, he says, where the population is growing but the aridity is too, “water is now top of mind in city planning.” Journalist Allen Best, however, points out that 70 percent of the water is used for agriculture and a mere 7 percent is used in the cities. “Manual labor has been replaced by high capacity pumps that deplete the aquifer while making it possible to increase the amount of arable land. Farms are now as big as 30,000 acres while the towns are depopulating.” The state of Colorado, therefore, has authorized a grant of 30 million dollars to help take 25,000 acres of land out of production by 2030. Why, Best

asks rhetorically, are we tapping the Ogallala aquifer to grow corn to feed cattle and to make ethanol for export?

As an example of a urban area that is stepping up to the plate, Best mentions the towns of Castle Rock, which as of this year prohibits the planning of non-native bluegrass in front yards, and Aurora, which is not permitting any new golf courses.



Anne Castle, supervisor at the Upper Colorado River Commission, gives some examples of popular sentiment around the water crisis, with people calling to “turn off the fountains in Las Vegas!” and “stop irrigating the Phoenix golf courses!” She walks us through the contentious history of the distribution of the Colorado River water, from the 1922 Compact, to that of 1948, to the emergency measures by the federal government this year, which stepped in when the states could not reach an agreement. (They have now announced that they will develop their own alternatives for 2026).

Compacts and legislation aside, Castle says, 500,000 Native Americans still have no access to reliable sources of clean water and sanitation. And Native American households are 19 times less likely to have indoor plumbing. “For us, climate change is a double threat,” says Daryl Virgil, a member of the Jicarilla Apache nation and cofounder of the [Water and Tribes Initiative](#). For the past twelve years he has negotiated his tribe’s water rights. “It is threat to our planet and to indigenous communities. In the whole complex system of distributing the water from the Colorado River, tribal water rights were never taken into account. This narrative was not written by us.”



Adolescent city with an old soul

An adolescent city with an old soul. That's how Peter Park '12, former planning director of Denver, describes Denver at the afternoon session on redesigning the downtown, held at the office of Tryba Architects. Behind him is an image of the "birth" of Denver during the 1859 goldrush, with teepees and covered wagons at the confluence of the South Platte River and Cherry Creek – where Indigenous peoples had already lived for thousands of years. Denver once had 300 miles of streetcar tracks and walkable neighborhoods – now there are just 118 miles of rail, seas of surface parking for 41,000 cars, and lots of wide roads with isolated pockets of buildings. Peter describes the waterways frankly as "open sewers." He says, "In the early 20th century, Mayor Speer was an advocate of the 'City Beautiful' movement, but he neglected the river." The city's relationship with water has always been awkward.



We are there to hear about the River Mile, a 62 acre private redevelopment project with workplaces, 15 percent affordable housing in every building, a 100 million dollar reclamation of the South Platte River, bike crossings, a new bridge and--for the first time ever in Denver--parking maximums. All in all it's a billion dollars' worth of infrastructure, a new park, and revitalization of the waterfront. The project's [website](#) waxes lyrical about the pedestrian-friendly experience, the increased (ADA) access to the water, the trees, the seating, the natural habitat... But the Loebes are clearly not convinced.

"Where are the climate measures? There is no evolution of the past twenty years in this plan, this is all just top down," says one.

"This is a grand land maximalization scheme," says another.

"Are you actually 'giving' something to the city?" asks a third, "because you know there is a tradeoff here."

And a fourth: "How can you reconnect parts of the city with the River Mile without taking out those swaths of asphalt? Seems ingenuous to me."

And another: "Haven't we learned by now that planning needs to be incremental, and not all at once? It's no longer: 'scrape and start over.'"

The argument that such a large piece of privately owned land in the center of the city is unique didn't help. The Loebes' parting shot:

"We can't build a city by leveraging off a private development!"



Blessing Box

For the Day of Service, a Loeb institution since 2019, spearheaded by Rob Lane '09, we meet at Johnson Habitat Park along the South Platte River. Inadvertently we interrupt an unhoused man having a bath. The park, which has been designed to accommodate flooding, sits at the northeast

edge of our study area, which has three zones. There is a green belt along the river's edge, comprising the new Habitat Park and the older and much larger Vanderbilt Park, cut off from the river by a wide highway; and there is an active industrial district to which the city is committed and which clearly needs more greenery. The third zone is the residential area called Athmar Park, 70 percent nonwhite and low income.



We have landed here because the city will soon revisit the neighborhood plan, and so some disruptive Loeb brainstorming is welcome. This area also epitomizes a host of conditions that are typical for riverine corridors in Denver and other cities: a highly channelized river reach is crowded by mid-century highway infrastructure that is immediately adjacent to a vitally important industrial area. One of the big questions, according to Jessica

Stevens and Matthew Bossler of the city, is how to connect the industrial and residential to the water's edge. One guest, urban designer Tom Klein of the landscape firm Wenk Associates, cycles by Vanderbilt Park daily--"the park is beautiful but I never see anyone using it." The city has yet to do a needs assessment in these areas, and the suggestion is that they should: "Then local residents will own the park rather than feeling like they are being told what to do."

The increasing pressure of climate change and development have pushed Denver toward a more integral approach to its water, such as the just-completed Healthy River Corridor Study that brings together water quality, ecology, mobility and recreation with river-appropriate land use and development.

A long hot walk to the venue of our charrette--need more trees!--leads us past a Blessing Box, a pantry for the needy where anyone can put things in and take things out, along "strodes" (an

awkward combination of a street and a road, or actually neither) and “deficient width sidewalks” from the ‘50s and ‘60s. In the industrial area we pass a garage with a striking likeness of Steve Jobs painted on the garage door.



As we pore over the maps of this part of Denver, the river is the red thread running through the conversation. The city is looking in a more holistic fashion at water, but the surrounding area is still parcelled into a 50 foot wide “riparian priority area,” a 150 foot wide “influence zone” and another 150 feet of “health and access area.” Why? wonders Thad Pawlowski '15. “This is 19th century horizontal thinking in offsets. If we think of a river as two lines, we limit ourselves and that causes so many of our problems. No! A river is a network of wetness that extends into our cities.”

Rob Stein '94 concurs with a broader critique of urban planning in general: “The design is a grid, but the landscape is not. We need to develop green spaces and housing and work together--not in squares, but in areas.” Joseph Zeal-Henry '24 sees right away that there are a lot of social and physical barriers before you get to the river. “The parks need more identity, and places to go.” Tom Klein adds, “Dog parks. Motor bike trails. Coffee places. Sport facilities. A place to hold a celebration.” Suddenly we are all reaching for our markers, activating the empty green spaces with fun stuff to do.

We are joined by Jorge Figueroas of the Denver Office of Climate Action, Sustainability and Resilience. He tells us that the city had commissioned 5 neighborhood surveys to ask people what the two rivers are that provide Denver with most of its water. “In three of those neighborhoods, 99 percent of the people didn’t know.” The city knows it needs to get the word out, and is doing so partly with a 40 million dollar climate fund, including \$3 to 4 million a year for environmental justice.



Circling back to the hot topic of water rights, Figueroas suggests that the solution lies--as so often--in the past. “Already hundreds of years ago a system originated in Spain called *aséquias*, community-managed irrigation channels. The problem with water rights in the US is that you either own the full amount, or nothing. *Aséquias*, on the other hand, work on the principle of a shared interest. Each farm or ranch along the irrigation ditch is given an equal vote in how water is distributed. Water is viewed as a resource, not as a commodity.”

Water in the West--our study trip taught us that there is still much to do as we move forward, and that at the same time we should look back.

Akeem Dixon '24, LaShawn Hoffman '15, Rob Lane '09, Tracy Metz '07, Thaddeus Pawlowski '17, Rodolpho Ramina '04, Rob Stein '94, Sally Young '21, and Joesph Zeal-Henry '24 participated in the Day of Service.

Images courtesy of Tracy Metz