

By Patrick Thibaudeau

BREATHING *Life* INTO THE *Badlands*



The Theodore Roosevelt Presidential Library is a destination for conservation education

The need for transformation is more urgent than ever. The threat is no longer invisible; we can feel it and see it. Record temperatures and weather events are killing many people and sickening others, damaging property, crops, and treasured, abundant natural resources. Unless we change, we will have more drought, rain bombs, fires, smoky skies, displaced people, and more damage to cherished natural places, not to mention homes, businesses, parks, community recreation centers, and sports facilities.

Ending The “Syrup Syndrome”

Changing “business as usual” starts by ending the “Syrup Syndrome.” Picture pancakes on a platter, representing business as usual. The syrup represents pouring on sustainability separately, after the fact. Imagine designing a community recreation center, then once it’s nearly complete, pouring on watered-down sustainability like low-emitting materials or LED lamps.

Sustainability is a key ingredient to success, mixed



RENDERING BY: PLOMP AND SNOHETTA.
USED WITH PERMISSION.

into the batter from the start—not an optional condiment or afterthought. Larger buildings and tourism destinations have the power to make a noticeable environmental impact. To achieve a net positive future, sustainability must be a prominent part of conversations, community culture, and economic growth.

Accelerating a decarbonized future and circularity are prevailing and pressing trends, a pivotal part of ending the Syrup Syndrome. Public and private organizations across the



RENDERING BY: PLOMP AND SNOHETTA. USED WITH PERMISSION.

country and throughout the world are pursuing more ambitious net-zero goals, providing carbon-positive, biophilic experiences that help make people and places better.

On behalf of changing the status quo, three basic categories must be addressed:

- Human thriving
- Positive performance
- Financial prosperity



RENDERING BY: PLOMP AND SNOHETTA. USED WITH PERMISSION.



RENDERING BY: PLOMP AND SNOHETTA. USED WITH PERMISSION.

Designing The Theodore Roosevelt Presidential Library

While embarking on the adventure of designing the Theodore Roosevelt Presidential Library (TRPL) in Medora, N.D., the design team made sure the project began where other syrup-laden approaches end. TRPL will be a destination for conservation education and recreation that seeks to set relevant criteria for the next 100 years. This will be a living library that embraces nature, honors the natural ecology of the surrounding Badlands, and provides opportunities for all visitors to find healing, recovery, and resilience within the landscape, just as Roosevelt once did.

TRPL will serve as a global

platform for conservation research, policy, interactive activities, and discussion. It will have interactive exhibit experiences and more than 20 biophilic and immersive design moments throughout the site.

Overall, the project shows how to build a better educational and recreational space that gives back more than it takes. TRPL is a cutting-edge example of a total net-positive design for human thriving, energy, carbon, water, ecology, waste, and financial performance.

Theodore Roosevelt once said conservation and leaving the land even better for our descendants are “central tasks.” His efforts were aimed at working with nature, not against it. TRPL

seeks to give back more than it takes, verified by three concurrent certifications at the highest level:

- Living Building Challenge full certification
- LEED Platinum
- SITES Platinum

Ed O’Keefe, CEO of the Theodore Roosevelt Presidential Library Foundation, says, “We want every visitor to the T.R. Presidential Library and Museum to walk out understanding the role of nature as a restorative force in T.R.’s life, and that each of us can be the change we want to see in the world.”

When TRPL opens, it will show what we can learn from, not about the 26th president.

TR20: Biophilia And The Benefit Of Being Outdoors

The project team invented the TR20, a new and innovative biophilic approach that connects people to natural features based on research showing the benefits of being outdoors.

TRPL will be a substantial, accessible public park, reachable

by vehicle, foot, bicycle, and horse-back—a destination that promotes engagement and outdoor activity. Visitors will also be able to take a walk on the planted roof, with inspiring 360-degree panoramic views, as well as go to pavilions accessed by about a mile-long walking path that circles the site, providing access to viewsheds Roosevelt experienced.

TRPL is a trailhead for access to 144 miles of the Maah Daah Hey Trail, with outdoor leadership expeditions, nature classrooms, nature walks, conservation corps, and photography safaris.

A restored, healthy prairie landscape educates visitors about the site's unique ecology and provides abundant habitat for pollinators, insects, birds, and mammals small and large. Outdoor education for all cultivates healthy, active citizens who rejoice in the outdoors, appreciate conservation, and enter the civic arena with an evolved sense of community.



Positive Performance

TRPL is designed to make more energy than will be consumed, using 216 deep wells that extract heating and cooling energy from the land, just as Roosevelt obtained his personal energy from the land. Renewable energy systems on-site and elsewhere take energy from nature to provide power, giving the site

Roosevelt-like resilience.

With almost 100 acres of restored prairie, TRPL can be total net carbon-positive, handling its own emissions plus some of those of the neighbors over the life of the project—successfully setting a new standard.

By opening day, about 400,000 native prairie plugs will be grown from seeds hand-collected at the site

Parks and Rec: Your Mobile App is Here!

Vermont Systems WebTrac App offers custom mobile app features specifically for parks and recreation departments. Get the app experience patrons want without the need for developers to make changes or updates – or a custom app price.



Learn more and test drive the app for yourself!
www.vermontsystems.com

 VERMONT SYSTEMS

WEBTRAC APP

Update information and change appearance or promotions in minutes

Simplify ID management and minimize costs



Send push notifications and connect with a 10X better open rate than email

Highlight and promote what you want, when you want



RENDERING BY: PLOMP AND SNOHETTA. USED WITH PERMISSION.



RENDERING BY: PLOMP AND SNOHETTA. USED WITH PERMISSION.

and the local area, replacing invasive weeds. Over the life of the project, the desire is to benefit regional and national prairie health with plantings numbering in the millions.

The walkable, planted roof design will filter rainwater so it returns to local aquifers cleaner than when it falls.

A comprehensive, material conservation plan seeks to stop waste at the source, not just recycle construction debris. Products will emphasize salvaged materials and sustainably sourced wood, with nearly 6,000 Red List chemicals avoided from 90 percent of permanently installed products. Every supplier is asked to meet rigorous standards for environmental and human health, providing embodied carbon performance better than the industry average.

Cash Positive Conservation

Best case estimates show that TRPL can be about \$5-million net

revenue-positive, dispelling the myth that sustainability costs more. Looking at total cost of ownership suggests a different picture.

A “business as usual” project would cost about \$10 million to operate for 30 years. An efficiently designed building would cost about \$6 million. The difference between worst- and best-case scenarios is \$15 million of avoided cost. Clearly, sustainability is a great investment and a compelling business for future parks and recreation projects.

Historic Human Thriving

Inspired by an 1883 North Dakota Badlands buffalo hunt, Roosevelt invested in the Maltese Cross Ranch near Medora. Just a few months later, on Valentine’s Day in 1884, his wife, Alice Hathaway Lee, and his mother, Mittie Roosevelt, died on the same day in the same house. Devastated and in mourning, he fled to the Badlands to hunt for peace and purpose. In North Dakota, he learned the healing value of nature, immersing himself in the strenuous life of ranching and rugged landscape. His experiences eventually inspired a national conservation policy

that shaped and benefited the country.

The Badlands inspired Roosevelt, and the library’s design is inspired by the land. TRPL’s design rises from the bluff, just as he rose in the Badlands. Like his character, the building has an approachable scale, inviting entry and connecting places. The site is the library, and the library is the site.

TRPL will help launch the country into the next century of conservation focused on circularity and carbon. The team isn’t just building a presidential library, it’s building an idea—one with powerful transformative impact to change the way we live, learn, work, and move around the world.

JLG is the architect-of-record for the Theodore Roosevelt Presidential Library alongside the international design architect and design landscape architect Snøhetta, landscape architect-of-record Confluence, and construction manager JE Dunn.

Learn more about the upcoming Theodore Roosevelt Presidential Library at www.trlibrary.com. **PRB**

Patrick Thibaudeau is the Principal Sustainability Officer, LEED Fellow, ILFI, for JLG Architects. To hear the TEDxFargo talk about TRPL, visit <https://youtu.be/edmrxdDePQ?si=j8vwp-P3KfLDFh18n>.