ARTICLE

Water in the Desert: A Grassroots Movement to Protect the Virgin River

Zion National Park

The Virgin River continues to carve and shape Zion National Park; it also provides drinking water and recreation opportunities for communities throughout Utah. National Park Service photo.

By Ember Rensel and Evelyn Moreno

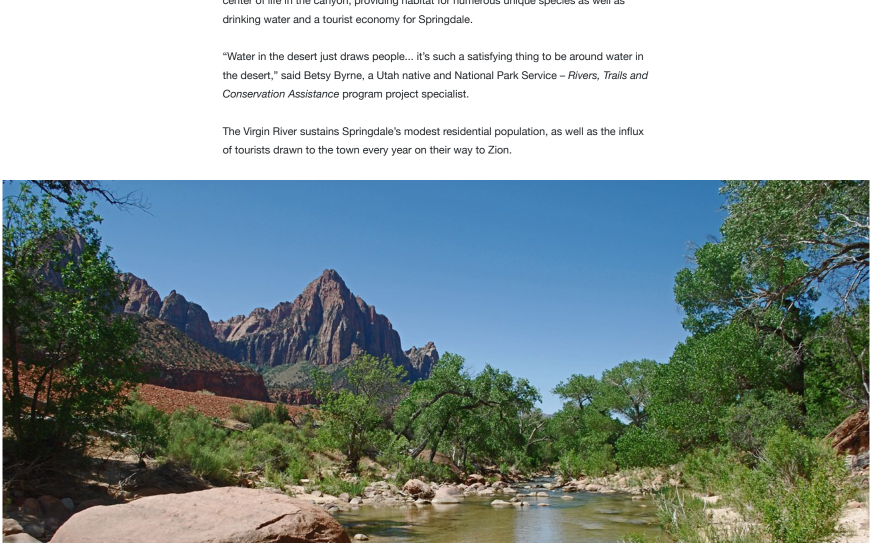
The Virgin River carves its way through the canyons of southwestern Utah. Sheer red cliffs and vibrant green cottonwoods contrast beautifully and mark the water's path through the desert and into the town of Springdale.

Nestled against the border of Zion National Park, Springdale stretches southward along the water and is home to a small community with a history as rich and vital as the river itself.

As one of the few sources of water in the northern Mojave Desert, the Virgin River is the center of life in the canyon, providing habitat for numerous unique species as well as drinking water and a tourist economy for Springdale.

"Water in the desert just draws people... it's such a satisfying thing to be around water in the desert," said Betsy Byrne, a Utah native and National Park Service – *Rivers, Trails and Conservation Assistance* program project specialist.

The Virgin River sustains Springdale's modest residential population, as well as the influx of tourists drawn to the town every year on their way to Zion.



Zion canyon's cliffs surround the Virgin River and stands of cottonwoods line the banks. National Park Service photo.

National parks have become increasingly popular destinations for both American and international tourists. With a residential population of about 650 people, Springdale has been forced to rapidly expand their capacity in order to keep up with the 4.3 million tourists heading to Zion each year.

When Tom Dansie began working as the director of community development in Springdale 15 years ago, there were 600 hotel rooms available in the town. Today, there are more than 1,200.

"Balancing the residential character of Springdale with the need to provide tourism accommodations and tourism services has been the crux of planning – it's the core of everything that we do," Dansie said. "Certainly, 15 years ago, when there was half as much commercial development, that was a much easier task. Now… the feel and the vibe in the community has changed, and there are a lot of long-time residents that are saddened to see that change and miss the old Springdale."

As a lifelong resident of Springdale, Louise Excell has watched her beloved hometown transform from a "sleepy little village" full of those who shared a "pioneer spirit" into the tourist destination it is today. Her memories of this changing town are key to keeping the spirit of Springdale alive.

Excell's experience is a familiar one to many Springdale residents; a few years ago, "the old Springdale" took a major hit. A commercial hotel bought up riverfront land and damaged both a heron rookery and the spring for which Springdale is named, threatening the delicate balance between historic residential life and new development.

With wildlife disappearing and buildings encroaching on the water, residents realized that protecting the Virgin River is a necessity.

"It's more than just drinking water," Excell said. "It's the heart and soul of the community. It defines the character of Springdale."

While the Virgin River quite literally makes life in Springdale possible, it also represents the locals' concept of home. This river is the reason their ancestors settled in the canyon —it's the reason the canyon exists at all—but Springdale had no comprehensive plan for preserving the quality of the river or the habitat along its corridor.

When it came time for the town to update their resource management plan in 2019, Sophie Frankenburg, a Springdale town planner, led the charge to prioritize protections for the river, and the community rallied around her efforts.

"There's pretty clear, unanimous community consensus that the Virgin River is an important natural resource that needs to be preserved and protected, so there was broad community support for the Springdale Virgin River Management Plan," Dansie said. "The only negative feedback we got was that we may be doing this 20 years too late."

Wanting to develop firm, lasting protections and involve the community, they reached out to the National Park Service – *Rivers, Trails and Conservation Assistance* program for guidance in developing the new Springdale Virgin River Management Plan.

National Park Service project specialist Betsy Byrne took on the plan.

"Preserving the [river] corridor is a big piece of trying to maintain that feel of their community, a piece that, to them, is so integral to their sense of place," Byrne said. "When they see the river, they really connect that with why the town was established and how it sustained the people who lived there. Protecting it was as much a part of maintaining their history as their quality of life and the scenic beauty."

The management plan addresses factors impacting the river, such as commercial development and environmental uncertainties.

The flow of the Virgin River is dependent on precipitation and steady temperatures. With those temperatures rising, residents' source of drinking water may be plunged into uncertainty. The flow of the river also directly affects the ecosystem and tourist economy that keep Springdale afloat.

The bank of the river is heavily impacted by commercial businesses that were developed without consideration of appropriate stormwater and irrigation drainage plans. Compounded with the changing climate and heavy rains, this development led property owners to fortify the riverbank with hard mechanical armoring that alters natural flood patterns and furthers the river's deteriorating health, damaging or destroying its riparian habitat.

Development on the river's banks threatens the riparian habitat. National Park Service photo.

Unsure of what strategies to implement to preserve and protect the quality of the river corridor, the town of Springdale worked with Byrne to create the Springdale Virgin River Management Plan and define best management practices related to land use, the environment and recreation.

Along with Frankenburg, Byrne organized and facilitated community meetings and made sure volunteers and town officials were staying on task and meeting deadlines, becoming a self-proclaimed "cheerleader" for the project. Residents and town council employees rose to the occasion, gaining public engagement and pairing up to write sections of the plan. Byrne shared best practices for river restoration as well as resources and tools to inspire the content of the plan, and eventually compiled writing and images to format the final document.

Byrne connected with park staff from Zion National Park to align their goals with the Wild and Scenic River protections in place within the park. "It was great to have that support and know that they really understood the value of it and wanted to assist," Byrne said.

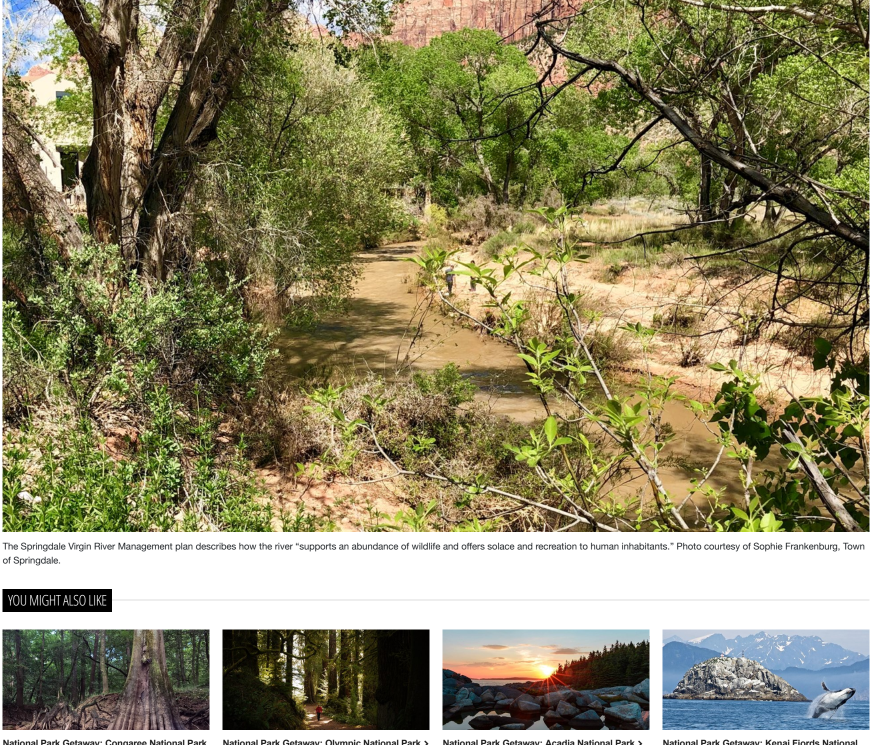
The Springdale Virgin River Management Plan debuted in 2019, identifying new standards for strategic care of natural resources in the canyon.

The Springdale community and National Park Service staff gathered by the river to celebrate and dive into the details of the new management plan. National Park Service photo.

With the plan completed, the community organized a "river walk" to physically introduce residents to best practices for restoring the river and protecting it for generations to come. As part of educating the community on these practices, the town utilized their local park to demonstrate bank stabilization and river restoration techniques to inspire landowners to combat the armoring and erosion harming the river corridor.

With the plan in hand and momentum growing to protect their river, the community will continue to implement strategies to reinstate native flora and fauna, preserve the scenic character of the town and balance commercial recreational use with local conservation efforts.

The Springdale Virgin River Management Plan represents the true, multi-faceted nature of conservation. Economic development around the outdoor industry keeps the town alive financially, and recreation is key in garnering appreciation for the river, but, unchecked, tourism and recreation can become a threat to the very resources that make them possible. The management plan is the foundation on which Springdale can build a healthy balance of using, protecting and appreciating the river via recreation, preservation and education.



The Springdale Virgin River Management plan describes how the river "supports an abundance of wildlife and offers solace and recreation to human inhabitants." Photo courtesy of Sophie Frankenburg, Town of Springdale.

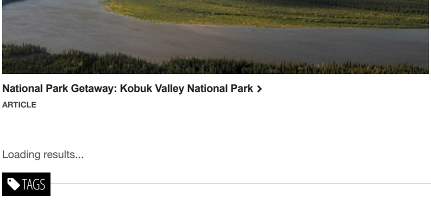
YOU MIGHT ALSO LIKE

National Park Getaway: Congaree National Park >
ARTICLE

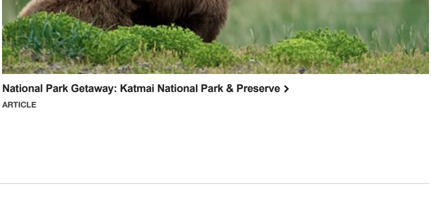
National Park Getaway: Olympic National Park >
ARTICLE

National Park Getaway: Acadia National Park >
ARTICLE

National Park Getaway: Kenai Fjords National Park >
ARTICLE



National Park Getaway: Kobuk Valley National Park >
ARTICLE



National Park Getaway: Katmai National Park & Preserve >
ARTICLE

Loading results...

TAGS

zion national park | rtca | outdoor recreation | river restoration | national parks

Last updated: March 2, 2022

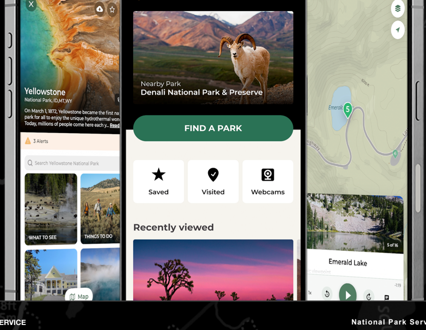
Was this page helpful?

Yes

No

An official form of the United States government. Provided by Touchpoints

Experience Your America.

Download the NPS app to navigate the parks on the go.

Download on the App Store | GET IT ON Google Play