

**Bureau of Land Management Virgin River Streams
Outstandingly Remarkable Values (ORV)**

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Beartrap Canyon

Beartrap Canyon is largely rugged and steeply sloped and contains the headwater area for many tributaries that flow through the Kolob Terrace. The terrain consists of a sandstone finger of a mesa at the upper reach of Beartrap Canyon. At a top elevation of 7,500 feet, both the mesa top and canyon bottom sustain Utah juniper and ponderosa and pinyon pine trees. The canyon is also a designated wilderness of 40 acres and directly adjacent to a larger wilderness area in Zion National Park.

Classification/Mileage: Wild – 3.8 miles. The designated section begins on BLM-administered land in Section 3, Township 39 South, Range 11 West for 0.1 mile, then continuing on NPS-administered land for 3.7 miles to its junction with LaVerkin Creek.

Geologic

The Virgin River and its tributaries are uniquely situated along the western margin of the Colorado Plateau, where the recent history of tectonic activity and erosional downcutting has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits.

Beartrap Canyon features high cliffs of Navajo sandstone, known to be the world's highest sandstone cliffs and slot canyons, which are deep and exceptionally narrow vertical walled canyons. Springs that discharge from the Navajo sandstone aquifer in these canyons support a large number of rare and endemic species.

Wildlife

Despite its small size, a wide variety of wildlife lives here because of its proximity to adjacent wilderness and other relatively undisturbed lands. Hawks, falcons and eagles soar above the canyons, while ringtailed cats, mountain lions and black bears hunt in the uplands and along the canyon bottoms. The dissected remote canyons also offer suitable nesting habitat for the Mexican spotted owl, a threatened species.

Deep Creek

Deep Creek is aptly named for the deeply incised stream channel that it has carved through the Deep Creek Wilderness of northeastern Washington County. It begins on BLM-administered lands at the north boundary of S23 T39S R10W and continues south through Zion National Park to its confluence with North Creek, one of the major tributaries to the Virgin River.

Classification/Mileage: Wild – 5.7 miles. Of this, 0.86 miles are administered by the NPS and 4.83 by the BLM.

Fisheries

The Virgin River and its tributaries provide a unique and intact habitat for four native species, including the Virgin spinedace, flannelmouth sucker, desert sucker and speckled dace. The Virgin spinedace is nationally significant and only exists in the Virgin River system. Both the Virgin River spinedace and the flannelmouth sucker are managed under conservation agreements. The North and East Forks of the Virgin River provide the most productive habitat for these fish in the Virgin River Basin. The geologic setting and flow regime provide high flows and large sediment loads, unique water quality and frequent disturbance, which are effective deterrents to exotic species. Other factors contributing to the productivity for native fish are connectivity to tributary systems and habitat diversity for spawning, rearing and supporting adult fish. Additionally, the Zion stonefly (*Isogenoides zionensis*), an important component of the food web, is found along the Virgin River and its tributaries. The type specimen for this species was identified in Zion in 1949.

Geologic

The spectacular geologic formations through which Deep Creek flows are one of its ORVs. Flowing unimpeded over the millennia, this narrow perennial stream has down cut through 2,000 feet of Jurassic-age Navajo sandstone, sculpting narrow canyons, chutes and waterfalls and exposing brilliantly colored sedimentary deposits. Lush riparian vegetation is sustained along the stream channel by surface flows and discharge from the aquifer created by the Navajo sandstone.

Recreational

Exceptional recreational opportunities exist along the Virgin River and its tributaries, providing visitors from around the world a chance to develop personal and lasting connections with the river within some of the most unique water-carved desert canyons in the region.

Scenic

The Virgin River and its tributaries create diverse opportunities for views of the river's unparalleled scenery, which can be both dramatic and subtle. The river creates a landscape of cross-bedded sandstone cliffs, towering thousands of feet above the canyon floor.

River and tributary canyons offer a pleasing contrast in soil, rock, vegetation and water—views that are greatly enhanced by the still or cascading water dominating the landscape. Light changes in the canyon depending on the time of day and the season. Rocks can appear fiery red, golden, bright white, grey, or black. Even the absence of water in some “phantom channels” creates drama and visual interest.

Wildlife

The extensive cover, availability of water and a contiguous landscape of wildlands, creates habitat for a wide variety of animals. Mule deer, elk, mountain lions and bobcats are the larger animals that

make a home here. Just a few of the smaller mammals include badgers, marmots and ringtails. Numerous bird species can be observed in the wilderness, with some of the more interesting being golden eagles, screech owls, chukars and wild turkeys. The remote canyons of the wilderness provide suitable nesting habitat for the Mexican spotted owl, a threatened species.

More Information: www.americansouthwest.net/slot_canyons/kolob_creek/canyon.html

Goose Creek

Goose Creek flows through wilderness at the start of the steep and deep Goose Creek Canyon to its junction with the North Fork of the Virgin River. The landscape is typical of high elevation desert—dense tree stands on the slopes and thick riparian vegetation thriving in the canyon’s steep walled shade. A mix of ponderosa and pinyon pine and Utah juniper grow on top of the sandstone cliffs.

Mileage/Classification: Wild – 3.87 miles. The designation begins at the head of Goose Creek through BLM lands (0.42 mile) and NPS lands (3.45 miles) to its junction with the North Fork of the Virgin River.

Geologic

This creek features Navajo sandstone exposures, a remnant of the world’s largest sand dune desert, river-carved canyons forming the world’s tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish. The geology of the Virgin River and its tributaries offer world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails. Birds, such as hawks and golden eagles, ride the air currents above the canyon walls and a variety of mammals use the uplands and the canyon bottoms.

Kolob Creek

Kolob Creek begins atop the Kolob Plateau at 9,200 feet on the slopes of Kanarra Mountain. It flows across open meadowland for several miles through the Kolob Reservoir and basalt plateau before entering a canyon and meeting up with the North Fork of the Virgin River. Kolob Creek Canyon combines with Deep Creek and the Virgin River Canyons to form Zion Canyon. Kolob Creek has the longest stretch of narrows of the three.

Classification/Mileage: Wild – 6.31 miles. It flows from Section 30, Township 39 South, Range 10 West through BLM land (2.04 miles) and Zion National Park (4.27 miles) to the North Fork of the Virgin River.

Geologic

The Virgin River and its tributaries are uniquely situated along the western margin of the Colorado Plateau, where the recent history of tectonic activity and erosional downcutting has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish. The geology offers world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.

LaVerkin Creek

LaVerkin Creek begins in Section 21, Township 38 South, Range 11 West, on BLM land and flows southwest through Zion National Park to the south end of Section 7, Township 40 South, Range 12 West. It is typified by its steep canyon walls.

Classification/Mileage: Wild – 16.2 miles. The NPS administers 8.6 miles and the BLM 7.6 miles.

Geologic

Uniquely situated along the western margin of the Colorado Plateau, the recent history of tectonic activity and erosional downcutting has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish. The geology offers world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Recreational

Exceptional recreational opportunities provide visitors from around the world a chance to develop personal and lasting connections with the river within some of the most unique water-carved desert canyons in the region. The dramatic setting—dominated by scenic grandeur—contribute to a spectrum of river-related experiences, from the self-reliant adventure of canyoneering or hiking and backpacking through narrow river and creek channels to enjoying photography and other artistic pursuits, viewing scenery, or camping along the river.

Wildlife

Similar to Goose Creek and Bear Trap Canyons, the habitat value of the LaVerkin Creek Wilderness is greatly enhanced by its proximity to Zion National Park and the thousands of acres of remote, private, wild lands surrounding it. Dense vegetation of pines, juniper and scrub oak; canyon wall-created shade; access to water; and other factors create habitat suitable for a large selection of plants and animals.

Wildlife is an ORV in the Virgin River and its tributaries due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.

The federally threatened Mexican spotted owl breeds in all of the designated river corridors at the highest density in the state and region. Breeding occurs in the cool microclimates provided by the narrow canyons along the designated stream courses. As primary nesting habitat, the river corridors provide the core of the designated critical habitat identified in the recovery plan for this species. Occupied habitat with successful breeding occurs in each of the designated river segments and tributaries, including LaVerkin Creek. Due to the critical habitat, sustainable population and long-term research studies for Mexican spotted owls, an ORV for wildlife was found for all major segments of the Virgin River.

Oak Creek

Oak Creek begins in Section 19, Township 39 South, Range 10 West, and continues to its junction with Kolob Creek. Oak Creek is a classic wet slot canyon, typifying the erosion and downcutting of the sandstone.

Classification/Mileage: Wild – 1.0 miles.

Geologic

Uniquely situated along the western margin of the Colorado Plateau, the recent history of tectonic activity has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo

sandstone exposures, a remnant of the world's largest sand dune desert and river-carved canyons. The geology offers world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Wildlife

Wildlife is an ORV in the Virgin River and its tributaries due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.

More Information: climb-utah.com/Zion/oc-sf1.htm

Shunes Creek

Shunes Creek travels from a dry waterfall on land administered by the BLM through Zion National Park to the western boundary of the park, where it joins the East Fork of the Virgin River.

Classification/Mileage: Wild – 3 miles. The NPS administers 2.22 miles, and 0.78 mile is administered by the BLM.

Ecological Processes

Ecological processes supporting vegetation are ORVs in some of the Virgin River designated segments due to the presence of exemplary riparian corridors and rare plant communities.

The cottonwood gallery forests along Shunes Creek provide rare examples of relatively intact, properly functioning riparian corridors. Natural river processes proceed unimpeded, allowing for seasonal flooding and meander migration, vegetative recruitment and plant succession. Riparian vegetation is abundant and diverse. Thick grasses and sedges along the banks form stable undercuts for fish habitat, and woody species provide habitat for numerous species of wildlife.

Steep-walled canyons, carved over time by the rivers, create cool, moist microclimates that support hanging gardens that are rare and exemplary in the region. These gardens, occurring in seeps on vertical sandstone walls, support a complex biotic community, including several plant and animal species found only in the Virgin River system.

Fish

The Virgin River and its tributaries provide a unique and intact habitat for four native species, including the Virgin spinedace, flannelmouth sucker, desert sucker and speckled dace. The Virgin spinedace is nationally significant, for it exists only in the Virgin River system. The geologic setting and flow regime provide high flows and large sediment loads, unique water quality and frequent disturbance, which are effective deterrents to exotic species. Other factors contributing to the

productivity of native fish are connectivity to tributary systems and habitat diversity for spawning, rearing and supporting adult fish. Additionally, the Zion stonefly (*Isogenoides zionensis*), an important component of the food web, is found along the Virgin River and its tributaries.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.

Desert bighorn sheep are listed as a sensitive species across the multi-state region. On Shunes Creek, the convergence of river-carved cliffs, near-stream vegetation for forage and proximity of year round water provides one of the few known locations for bighorn sheep lambing in the region. Lambing grounds are concentrated along this river segment and are exceptionally productive. The productivity of these lambing grounds are critical for the long-term reproductive success of the species, since Virgin River sheep disperse throughout the area and are the source for bighorn populations in much of the region. Research opportunities due to this population's success are regionally significant.

Smith Creek

Smith Creek flows west to its junction with LaVerkin Creek.

Classification/Mileage: Wild – 1.28 miles. While Smith Creek does not flow through National Park Service-administered lands, the agency does administer the designated segment.

Geologic

Situated along the western margin of the Colorado Plateau, the recent history of tectonic activity and erosional downcutting has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps, and accelerated erosion processes. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish. The geology of Virgin River and its tributaries offer world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.

Taylor Creek, Middle Fork

The Middle Fork of Taylor Creek begins on a portion of an isolated public land parcel managed by the BLM and flows through NPS-administered land to meet Taylor Creek. The very upper reaches of the Middle Fork of Taylor Creek lie with the Wilderness. The stream channel is narrow and steep-sided, with dense stands of scrub oak, pinyon pine and Utah juniper on the mesa top.

Classification/Mileage: Wild – 3.4 miles. The NPS administers 3.26 miles, and 0.1 mile is administered by the BLM.

Geologic

The recent history of tectonic activity and erosional downcutting along the western margin of the Colorado Plateau has resulted in a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps, and accelerated erosion processes.

Scenic

The Virgin River and its tributaries, such as Taylor Creek, create diverse opportunities for views of the river's unparalleled scenery, which can be both dramatic and subtle. The river creates a landscape of cross-bedded sandstone cliffs, towering thousands of feet above the canyon floor.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails. The region of comparison for this ORV was generally southwestern Utah, northwestern Arizona and southeastern Nevada.

The wilderness provides habitat for a diverse range of wildlife—mule deer, wild turkeys, raptors, jackrabbits, squirrels, coyotes, bobcats, mountain lions, numerous reptiles and small mammals.

More Information: www.citrusmilo.com/zionguide/taylorcreek.cfm

Virgin River, North Fork

The North Fork of the Virgin River begins on BLM-administered lands at the eastern border of S35 T395 R10W and continues through NPS-administered land to the Temple of Sinawava. The Virgin River and its tributaries create diverse opportunities for views of the river's unparalleled scenery,

which can be both dramatic and subtle. The river creates a landscape of cross-bedded sandstone cliffs, towering thousands of feet above the floor.

Classification/Mileage: Wild – 9.3 miles. Of this, 0.63 miles are located on BLM-administered lands, and 9.16 miles are administered by the NPS.

Ecological Processes

Ecological processes supporting vegetation is an ORV due to the presence of exemplary riparian corridors and rare plant communities. Natural river processes proceed unimpeded, allowing for seasonal flooding and meander migration, vegetative recruitment and plant succession. Steep-walled canyons, carved over time by the rivers, create cool, moist microclimates that support hanging gardens that are rare and exemplary in the region. These gardens, occurring in seeps on vertical sandstone walls, support a complex biotic community, including several plant and animal species found only in the Virgin River system. The gardens are home to seven species of plants that grow nowhere else in the world. The moist microclimate provided by the river adds to the diversity of plant species in these gardens, which in some cases includes up to 26 species.

Fisheries

The Virgin River and its tributaries provide a unique and intact habitat for four native species, including the Virgin spinedace, flannelmouth sucker, desert sucker and speckled dace. The Virgin spinedace is nationally significant and only exists in the Virgin River system. The North and East Forks of the Virgin River provide the most productive habitat for these fish in the Virgin River Basin. The geologic setting and flow regime provide high flows and large sediment loads, unique water quality and frequent disturbance, which are effective deterrents to exotic species. Additionally, the Zion stonefly (*Isogenoides zionensis*), an important component of the food web, is found along the Virgin River and its tributaries.

Geologic

The geologic tapestry of contrasting colors and textures—red, white and pink cliffs; slivers of blue sky; and lush green ribbons of riparian vegetation and hanging gardens—encompass the sculpted and undulating canyons. Seasonal waterfalls flow over slickrock from hanging canyons over 100 feet above the canyon floor.

Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps, and accelerated erosion processes. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish.

Recreational

Exceptional recreational opportunities exist along the Virgin River and its tributaries, providing visitors from around the world with a chance to develop personal and lasting connections with the river within some of the most unique water-carved desert canyons in the region. The main recreation activity involves trekkers accessing Zion National Park; in the extreme canyon narrows portion, the river itself often becomes the hiking trail. The outstanding scenery and wilderness-like setting make the trek along the river unique and exceptionally satisfying. Day use activities include hiking into portions of the canyon, nature photography, wildlife viewing and occasionally hunting.

Scenic

The scarcity of man-made structures; variety of natural shapes, textures and colors; and the gradual transition from a relatively open valley stream setting to a deeply entrenched, prominent slot canyon make the North Fork Virgin River exceptionally scenic and photogenic. Light changes in the canyon depending on the time of day and the season. Rocks can appear fiery red, golden, bright white, grey, or black. Even the absence of water in some “phantom channels” creates drama and visual interest.

Wildlife

Wildlife is an ORV in the Virgin River due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails. The criteria for the wildlife ORV included river-related and river-dependent species, current populations, habitat needs and scientific importance.

This segment includes possible neotropical migratory bird habitat. It is also Mexican spotted owl designated critical habitat.

More Information:

www.blm.gov/style/medialib/blm/ut/kanab_fo/0.Par.97405.File.dat/WSR%20N.%20Fork%20Virgin.pdf

Willis Creek

Willis Creek begins on BLM land in Section 27, Township 38 South, Range 11 West, to its junction with LaVerkin Creek in Zion National Park. It offers an opportunity to add another unique, dramatic slot canyon hike for visitors to LaVerkin Creek.

Classification/Mileage: Wild – 1.9 miles. Of this, 1.6 miles are administered by the NPS and 0.3 miles by the BLM.

Geologic

The recent history of tectonic activity and erosional downcutting along the western margin of the Colorado Plateau has created a labyrinth of deep sandstone canyons, volcanic phenomena and widespread exposures of brilliantly colored sedimentary deposits. Unique geologic features include Navajo sandstone exposures, a remnant of the world's largest sand dune desert, river-carved canyons forming the world's tallest sandstone cliffs, narrow slot canyons, hanging waterfalls, springs and seeps, and accelerated erosion processes. This dynamic geologic system creates a diverse landscape of channels, canyons and springs that support a variety of species and ecological communities, including hanging gardens and desert fish. The geology of the Virgin River and its tributaries offer world-class opportunities for canyoneering, rock climbing, hiking and wilderness experiences.

Wildlife

Wildlife is an ORV due to the habitat for, and populations of, desert bighorn sheep, Mexican spotted owls and endemic Zion snails.