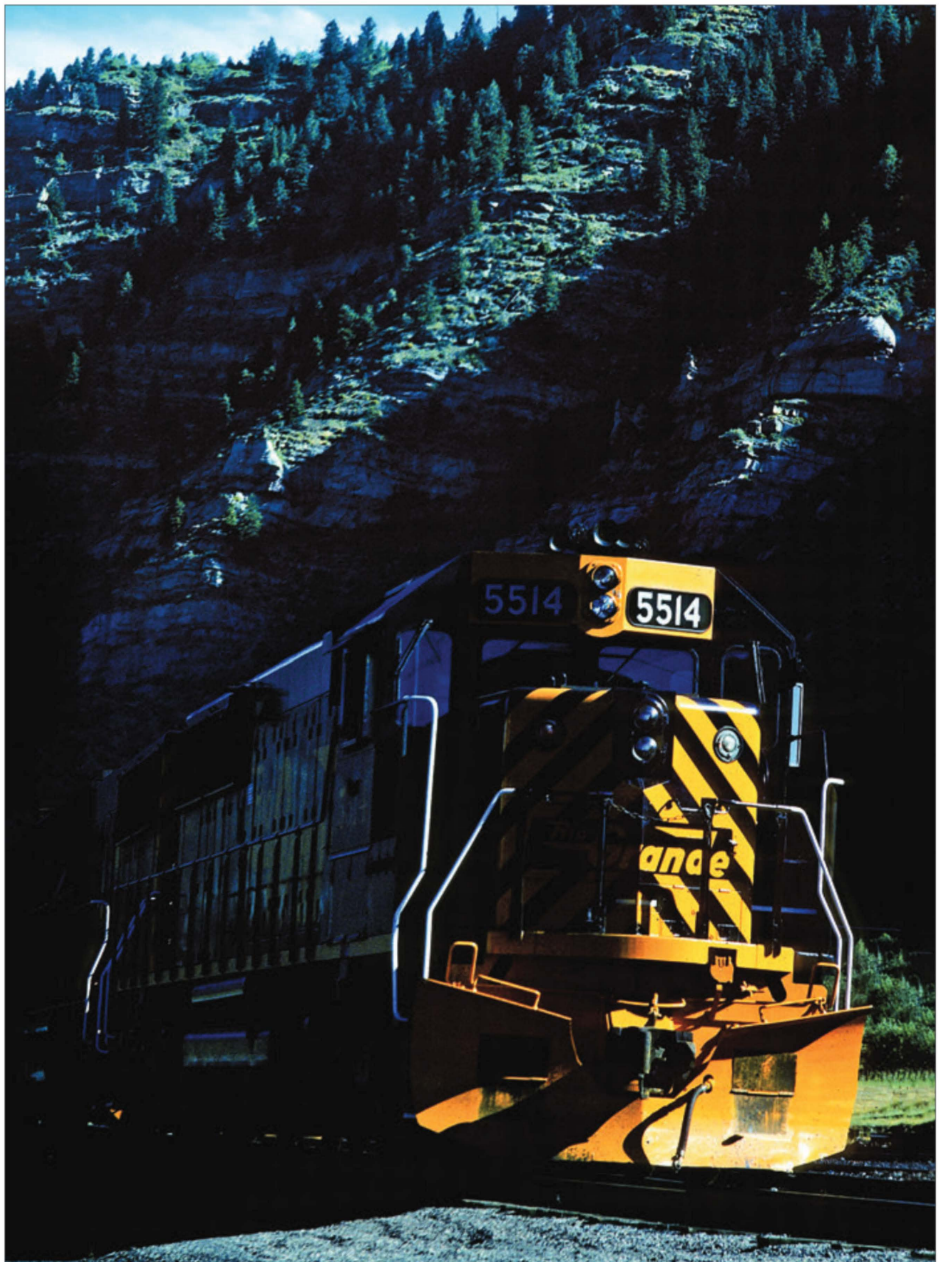

LAST STAND OF THE Rio Grande

ASPEN GOLD AND BLACK UNDER SOUTHERN PACIFIC

CARL GRAVES/PHOTOS BY THE AUTHOR

I FIRST SAW AND PHOTOGRAPHED Denver & Rio Grande Western trains during brief camping trips to Colorado in 1972 and 1974. I also spent time there on dedicated summer railfan expeditions in 1983 and 1984. Rio Grande became my favorite railroad and the Centennial State was my favorite place to capture it. Aspen Gold and black diesels and impressive scenery kept calling me back. Return trips in 1994, 1995, and 1996, however, took on a different tone after Rio Grande purchased Southern Pacific in 1988. The region became the realm of Espee gray and red locomotives, and the 1996 merger with Union Pacific led to the end of through operations on the colorful Tennessee Pass line I loved.

Southern Pacific's big General Electric AC4400CWs were fun to photograph (see "When They Were New" in the December 2018 RAILFAN & RAILROAD), but I kept shooting the dwindling number of Rio Grande engines clean enough to see the gold nose. I consider the seven years between 1988 and 1994 the last hurrah of Aspen Gold and black, the last stand of the Rio Grande.

ABOVE: Rio Grande and Southern Pacific locomotives, which were used in pairs as rear pushers on Craig Branch eastbound coal loads, idle at the Phippsburg, Colo., yard and crew change point in June 1993. The 5407, an SD45T-2, was relatively clean with still-bright paint. Later that day, the photographer caught that engine pushing on the rear of an eastbound coal load.

OPPOSITE: Unusually clean 5514, a Rio Grande SD50, sits at the Minturn, Colo., yard along with three other attached engines, waiting for its next mid-train helper assignment for eastbounds going over nearby Tennessee Pass. It's an August morning in 1988. The author noted that this unit was still in helper service at Minturn in 1993, but its Aspen Gold paint was coated with oily grime.

Geographic and Corporate Background

Almost everywhere Rio Grande tracks went, the geography was awe-inspiring. In addition to the 3 percent climb over Tennessee Pass, near several of the state's 14,000-foot mountain peaks, its trains went through scenic places like Byers and Coal Creek canyons, the Royal Gorge, Big Ten Loop, and the Moffat Tunnel region. Craig Branch coal trains passed through such geological wonders

ABOVE: Pushers on the rear of an eastbound coal load are at Winter Park, Colo., in August 1994, site of the Moffat Tunnel west portal. The 5407, an SD40T-2, is cleaner than its fellow helper engine.

RIGHT: A Rio Grande SD40T-2 leads four Southern Pacific locomotives on an eastbound freight near Balltown, south of Leadville, Colo., in August 1990.

OPPOSITE TOP: A westbound freight is near Granite, Colo., in August 1990, with the Arkansas River in the foreground. The leader is an SD40T-2, as is the second unit.

as Finger Rock, Two Bears, Crater Loops, and Oak Creek Canyon. Elsewhere in Colorado there were Ruby Canyon and Gore Pass. I was not alone in my opinions. In 1990, author and rail historian Mark Hemphill called the Moffat route from Denver to Craig "the most spectacular railroad in North America in 1990." The magnificent Colorado terrain through which D&RGW ran stayed the same during my visits.

In contrast, the corporate landscape was changing during the 1980s. Rio Grande's competitive situation was complicated by the 1980 disappearance of the Rock Island, a major source of carload traffic at Denver, and by Union Pacific's 1982 acquisition of D&RGW's main connections Missouri Pacific and Western Pacific. In 1983, Santa Fe and Southern Pacific began preliminary merger talks. While it appeared the Main Line Through the Rockies was backed into a corner, wealthy Colorado oilman Philip Anschutz purchased Rio Grande in 1984. After the Interstate Commerce Commission rejected the Southern Pacific-Santa Fe merger in 1985, Anschutz purchased SP a year later. He then combined his two railroads under the Southern Pacific name because it was more well known, especially in the Southwest. SP also outranked Rio Grande by size, 11,467 route miles to 2,248.

Anschutz's acquisition of D&RGW and SP did not alter the beautiful scenery, but did change the operations. The Grande's previous chief executive had considered pulling the plug on the Tennessee Pass line due to the company losing its Rock Island and WP connections, plus decreased revenues from the Colorado Fuel & Iron steel mill in Pueblo. In summer 1987, all but one train a day each way was rerouted to the Moffat Tunnel route through Denver.

Anschutz, however, had other ideas. His combined system created a single-line western route across the Central Corridor from Kansas City, Mo., and St. Louis to San Francisco. He ordered tunnels on Tennessee Pass be undercut to allow double-stack container trains and brought back other traffic recently diverted to the Denver line.

Train Volumes, Symbols, and Cargo

An increased number of cars and trains traveled over D&RGW lines following the 1988 merger, although some traffic had increased prior to that time. The Pueblo-Royal Gorge-Tennessee Pass line often saw two to four trains each way in the early 1980s. Additional SP lumber loads came to the route following the UP-MP-WP merger. By autumn 1988, according to firsthand observations published in *CTC Board* magazine, traffic had picked up, with as many as six trains per day each way running over Tennessee Pass. In his book *Rio Grande: Crest of the Continent* (White River Productions, 2011), author Chuck Conway said as many as 10 to 12 trains per day each way passed through the Royal Gorge. In addition to manifests, more coal traversed this route, including westbound coking coal trains heading to the Geneva Steel mill in Provo, Utah.

Volumes also grew on the Moffat Route from Denver to its junction with the Tennessee Pass line at Dotsero. In 1991, a writer in *Pacific Rail News* noted seeing "a plethora of unit coal trains spliced by a smattering of merchandise traffic." Feeding this line was the Craig Branch, home to various coal mines. According to the trainmaster of the branch's Phippsburg

yard, this spur in 1988 was handling 14 to 16 trains per week, while by 1994, that total had swelled to 21 to 28.

Train symbols gave a perspective on traffic. Rio Grande movements used numbers. A 1984 *CTC Board* article listed Trains 100, 101, 134, 181, 183, and 195, noting that coal train numbers were all in the 700s. A trackside observer recalled that Train 179, the *Ford Fast*, was a hot westbound auto train which periodically traveled over D&RGW for a few years. Another speedster was *The Railblazer*, a short, hot piggyback intermodal train that operated between Denver and Salt Lake City's Roper Yard from February 2, 1986, to April 26, 1990, as Train 102/103. Operating with a reduced two-man crew, it averaged 40 mph on its 570-mile schedule, which matched the *Rio Grande Zephyr* of 1975.

After the merger, train symbols changed over to the SP alpha system, which was handy in that it identified origin and destination points, as well as hints about cargo. Slightly less speedy successors to *The Railblazer* were westbound DVROT (Denver–Roper, Utah, trailers) and its eastbound counterpart RODVT. Published reports of ex-D&RGW Colorado trains provided examples of the far-flung connections stemming in part from the merger. For example, OACHF was the Oakland, Calif.–Chicago forwarder (i.e., fast manifest). Westbound PBGJM was the Pine Bluff, Ark.–Grand Junction, Colo., manifest. GJNSM was the Grand Junction, Colo.–Norfolk Southern/East St. Louis manifest. One westbound loaded coking coal train was the CRGVC (Conrail–Geneva, Utah, coal). EUCHQ was a priority manifest from Eugene, Ore., to Chicago.

Motive Power

Grande Aspen Gold and black engines looked good when new, but they seldom stayed clean for very long. My trip notebooks from the early 1990s contain entries about trains I did not photograph due to dirty power. I came to agree with some railfans who quipped that "Rio Grande" stood for "Real Grime," and that D&RGW stood for "Dirty & Rapidly Growing Worse."

Sad-looking Rio Grande motive power sprang mainly from numerous tunnels, which coated engines with dirt and oil. The Craig Branch had six tunnels in Egeria Canyon alone, and four more in Rock Creek Canyon. On the entire stretch from Craig to Denver via the Moffat Route, coal trains passed through more than 30 tunnels, totaling 10.7 miles in combined length. There were also four tunnels in the Tennessee Pass area. In addition to tunnel crud, the heat from hardworking locomotives would damage the Aspen Gold paint.

To their credit D&RGW engines, all EMDs, worked hard, even as they lost their initial attractiveness. Up stiff mountain grades and around endless sharp curves, old grimy Grande locomotives still proudly served. The most common Grande engine was the SD40T-2, the so-called "Tunnel Motor." Appropriate for the railroad's Colorado mountain operations, these locomotives were designed to combat overheating inside long tunnels at higher elevations. According to DRGW.net, "The engines feature large cooling intakes near walkway level at the back of the unit. This allowed large amounts of cool air to be pulled from low in the tunnel, rather than running superheated air and exhaust gases from the upper part of the tunnel through the radiator." The Grande rostered 73 Tunnel Motors. Although SP had 247 on its roster, those had to cover much more territory than D&RGW's.

Also important to the Grande's fleet were 66 GP40s (some inherited as post-merger cast-offs from Conrail), 37 GP40-2s, 28 GP30s, 26 SD45s, 22 GP35s, and 17 SD50 models. Except for three

RIGHT: The westbound *Railblazer* exits Tunnel 1 at Plainview, Colo., in July 1989, powered by a GP40 and a GP40-2. This Denver–Salt Lake City hotshot operated from February 1986 to April 1990.

OPPOSITE BOTTOM: A westbound freight is in a big curve near Princeton, Colo., in August 1990. The first two locomotives are SD40T-2s, while the trailing two units are GP40s.

BELOW: An eastbound is approaching the crew change town of Minturn in August 1991, with the Eagle River in the foreground. The leader, a GP60, is the least dirty of the five engines.

ABOVE: A westbound coal empty is passing through Oak Creek Canyon on the Craig Branch in July 1993. Just one of its units is a Southern Pacific red and gray locomotive.

RIGHT: A crew member of a grimy set of Rio Grande and Southern Pacific power helps the engineer maneuver the engines to their proper spot on the fuel racks (behind the photographer) at the Minturn yard in August 1993. Visible are a Grande SD40T-2 and an SP SD45T-2R.

GP60s delivered in 1990, the SD50s were D&RGW's newest power and the final six-axle diesels it purchased. Numbers 5501–5517 arrived on the property in summer 1984. According to Mark Hemphill in a 1994 *Trains* article, "The Rio Grande's 17 new SD50s were purchased solely for the Moffat." The manufacturer thought that three of the SD50s could do the work of four SD40T-2 tunnel motors, which had ruled the Moffat coal trains. Hemphill noted that time proved the manufacturer was right.

It was inevitable that Rio Grande's smaller locomotive ranks would become diluted by Southern Pacific's massive engine fleet. My estimate, based on three popular locomotive rosters, was that Rio Grande had about 300 road switchers (main line locomotives), while SP had 1,613 (1,277 EMD and 336 GE) — more than five times as many as Rio Grande.

The change, which began before the merger, continued. In my summer 1989 visit to Colorado, I noticed most manifests on the Tennessee Pass line had at least some SP power on the head end. Swing helpers on manifest freights and intermodals were still solidly Rio Grande. During subsequent summertime visits from 1990 through 1994, I saw more SP and leased locomotives, including clean blue Conrail GP40s. Most of the gray and red locomotives were filthy.

Trackside observers as well as popular magazine and book authors also documented the switch. Brian Jennison noted that since the 1988 merger, the Grande was slowly taking on an SP appearance. "By 1992, Rio Grande's small fleet of locomotives was being scattered over the sprawling Southern Pacific system. As a consequence, most trains traversing Tennessee Pass were being handled by SP locomotives." Especially noticeable was in 1994 when new SP Dash 9-44CWs showed up on coal and taconite trains.

Fortunately for my preferences, there were still plenty of Grande engines on Colorado trains, at least until my summer trips in 1994 and 1995. For example, on a 1993 day along the Craig Branch, I got two D&RGW tunnel motors and an SD45 pushing a coal load south of Yampa. That day my pictures had only one SP locomotive, trailing in the head end power. Illustrated books by photographer/writers like Dale Sanders also had many Aspen Gold and black locomotive pictures from this transition period.

Some people complained that newcomer gray and red engines did not measure up to the Rio Grande fleet. A 1990 *CTC Board* article indicated that the influx of SP power and disappearance of D&RGW engines had led to problems for operating and mechanical departments. One official was quoted as saying, "The SP is stealing our power, won't give it back, and is sending us junk in return." One SP official said its engineers preferred D&RGW units because they knew those locomotives would pull. Writing in *Trains,* Hemphill wrote, "Foreign road units are discounted on Rio Grande's ledger, both because they lack PTC and because they often aren't up to the strain of several hours of Run-8, full-amperage operation." (He was referring to Positive Traction Control, not the more recent PTC, Positive Train Control.) After it took over locomotive management for its

LEFT: Seven Rio Grande locomotives take a westbound empty coal train up the grade near Tolland, Colo., a short distance from Moffat Tunnel, in August 1992. South Boulder Creek is in the foreground. The lead engine, an SD40T-2, has the least grime on its side gold lettering.

BELOW: An SD40T-2, an SD45, and a GP40-2 lead an eastbound freight by Crystal Lake, south of Malta and Leadville, in August 1992, with the Sawatch Range behind.

new parent/partner Rio Grande, SP management assumed one six-axle unit was like another. "The Moffat soon disabused SP people of such fantasies."

For me, the Rio Grande era ended between the summers of 1994 and 1995. I noticed in 1994 that an SP unit had joined the Minturn helpers, and in 1995, the trains I saw on Tennessee Pass and the Craig Branch were pulled by new gray and red SP AC4400CWs. Just as I continued to see and photograph yellowbonnets on the Santa Fe after the warbonnet influx began, I willingly shot Rio Grande power in the late 1980s and early 1990s as SP power became more dominant. I willingly put up with grimy Grande locomotives because of the spectacular scenery through which they slowly ran.

Helper Operations

Colorado's mountainous landscape required the railroad to rely on extra engines. Said Dale Sanders, "Thanks to the topography through which the Rio Grande's tracks were laid, there was at least one helper district on every one of their main lines." Those challenging geographic constraints, which led him to write "Defy Gravity: Ship Rio Grande," provided exciting photo opportunities, often slowing a heavy train to a crawl so I could get multiple shots.

Railfan friend Paul Walters, who accompanied me on many of my summer visits, wrote what I thought. "Words cannot adequately describe the roar of a loaded coal train climbing the Tennessee Pass grade, nor the earthquake-like shaking of the ground, nor the arid exhaust of 12 or more combined diesel-electric locomotives producing 30,000 or more horsepower." My own view was that such an environment was, in the words of a John Denver song, "almost heaven."

The Tennessee Pass line was upgrade for westbounds 65 miles from Salida to Tennessee Pass, then another 22 miles downgrade to the Minturn yard/crew change point. From Minturn, eastbounds struggled through the Eagle River Canyon on a 2.3 percent grade. From Pando to the summit tunnel, it was 3 percent. Westbounds faced 1.5 percent from Malta to the Tennessee Pass summit.

Eastbound freights would stop at the Minturn yard, where a swing helper set was added two-thirds of the way back. These added locomotives were usually SD40T-2 or SD50 engines. Most of the time, such a set had four engines, although I occasionally saw a threesome of SD50s. Head end and swing helper locomotives would roar as they began the arduous task of lifting their heavy load out of Minturn. In one magazine article, a helper engineer in 1994 described the eastbound train's slow ascent, at speeds of eight, 11, and 15 mph. The slow pace and convenient parallel highways allowed me to follow the train and get multiple shots. After passing through the Tennessee Pass tunnel (altitude above 10,000 feet), the swing helper would detach itself from the train and return downhill back to the Minturn yard while the eastbound put itself back together and continued on its journey east. In 1991, the practice was to split a 100-car coal load in two, with each part of it going over the pass with the assistance of three engines on the point and four more in mid-train position.

As traffic over this line rose under SP, the single helper set expanded to three and even four sets stationed at the Minturn yard. Virtually all the swing helper sets I photographed were solid Rio Grande until summer 1994, when I saw three SP engines (SD40T-2s) in a four-unit swing helper set assisting a manifest up the grade. By summer 1995, SP AC4400CWs had replaced Grande engines in helper service and most head-end train assignments.

As for the Craig Branch, this 103-mile-long operation had a track profile that in spots resembled a roller coaster, with numerous curves thrown in for good measure. Oak Creek Canyon has a 1.8 percent grade, followed by another 1.8 percent climb from Phippsburg, a crew change point and helper yard, to Toponas Summit, with 1 and 2 percent grades through curves and tunnels to the main line to Denver.

ABOVE: A morning eastbound manifest is struggling up the 3 percent grade at Mitchell, Colo., in August 1992. The Rio Grande leader, an SD40T-2, is in much better shape appearance-wise than the trailing Southern Pacific unit. An all-Rio Grande swing helper set is visible in the distance.

LEFT: A westbound coking coal load for Utah's Geneva Steel is in the Eagle River canyon, heading downgrade toward Minturn in August 1994. It is led by a pair of SD50s. The trailing unit's paint is much more colorful than the leader.

Helper operations on this branch were complicated. Once a train was loaded with coal from a branch mine, a two-unit Grande swing helper at Sidney spliced itself into its hoppers for the 1.8 percent climb through Oak Creek Canyon. After arriving in the Phippsburg yard, this eastbound would get another two- or three-unit helper added to the rear for the 1.8 percent climb to Toponas Summit. At this spot, the rear helper detached and returned to Phippsburg. The load went downhill, joining the main to Denver near Bond.

To assist this heavy train on its climb up the 2 percent grade to the Continental Divide at 6.2-mile-long Moffat Tunnel, the two-engine West Helper attached itself at Tabernash. That rear helper stayed on the train to Denver, not only for the last climb up but also for additional dynamic braking east of the tunnel on the way down 36 miles of 2 percent grade track. Grande helpers were thus essential for the line between Craig and Denver, when, according to Hemphill, a coal train climbed 4,726 feet and descended 5,865 feet.

Last Stand for Rio Grande

Getting multiple photos of a train was harder on the Craig Branch than on the Tennessee Pass line, and almost impossible on the Denver–Dotsero main, making each picture that much more valuable to me. In 1995 and after, I kept shooting SP gray and red AC4400CWs but was thankful I had been in scenic Colorado for dramatic trackside action during the early merger period of 1988–1994, the last hurrah of Aspen Gold and black, the last stand of the Rio Grande.