

Rocky Mountain Express

Where preserving railroading in the Rocky Mountain States begins and will never end...

February 2015

Rocky Mountain Railroad Heritage Society

Volume 2015, Issue 2

Water Towers - the Life Blood of Steam Locomotive Operations

During the very early days of steam locomotives, large quantities of water were needed to create the steam that powered the running gear. Water stops were necessary every seven to ten miles, spaced along the track to meet the demand for water, which in turn was determined by the grade (light or heavy), as well as the location of available water.

Towns sprang up along railroad routes to provide the water and fuel (wood, coal). The introduction of tenders, containing both water and fuel, enabled trains to run 100 to 150 miles without a refill, leaving behind many railroad ghost towns. Large, trackside filling stations were located where convenient, such as at a crossing of a stream or in a town/city where a train would stop to pick up freight and passengers. This was the origin of the term "tank town." Water sources included natural springs, uphill lakes or rivers, small creeks which had been dammed, or a nearby well. To accumulate the water, water tanks, water towers, or tank ponds were constructed. The water was initially pumped by windmills, watermills, or by hand pumps, often by the train crew themselves. Later, small steam and gasoline engines were used. Elevated storage tanks gravity-fed water to the locomotive tender via a large spout and used an automatic refill mechanism for refilling the tanks. Many water towers had sandstone foundations; suitable timbers were used where sandstone was not readily available.

Except as noted, all photos below are taken from various websites not requiring publication permission



Pagosa Junction in operational times



Pagosa Junction in 2007

The D&RG pumphouse can be seen at left; the water tower at the far right, collapsed in on itself. Mike Walker photo



A water tank along the Cumbres and Toltec Scenic Railroad in Chama, New Mexico, on April 26, 2006



Frisco Wooden Water Tower, Beaumont, KS Built in 1885 for Frisco Railroad steam engines, the water tower provided water for the railroad roundhouse and cattle shipping operation. The last known wooden water tower to service steam engines holds 25,000 gal. of water; it is the oldest wooden water tower still operating in America. The tower is listed on both the Kansas State and National Historic Registers as a Historic Site.



A Denver & Rio Grande Western freight making an early morning run from Alamosa to Chama charges through the loop at Lava Tank as the sun peeks over the hills to the east. (2012)



Water tower along the Durango and Silverton route up Animas Canyon



Replica water tower at the Colorado Railroad Museum in Golden, CO. The pumphouse is pictured as well. It is called the No Agua water stop. The name comes from a water stop on the D&RG's Chili Line to Santa Fe, New Mexico, located near a settlement called No Agua.

Rocky Mountain Railroad Heritage Society
PO Box 969, Englewood CO 80151-0969
303-269-9768

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PRESIDENT'S LETTER TO THE MEMBERSHIP:

William F. Howes, Jr., retired CSX executive and rail historian, wrote the following email on Jan. 28, 2015, in response to the recent snowstorms pummeling the East Coast of the US:

As I listened to the Weather Channel this morning . . . it was exactly 48 years ago - January 26-27, 1967 - that I was snowbound aboard a train during a record-breaking blizzard in Chicago, northwest Indiana and western Michigan that dropped 23 inches of snow in 29 hours. C&O Train #7, the overnight Mail & Express to Chicago left Grand Rapids as scheduled shortly before midnight EST on the 26th. Normally, the single coach in the consist was lightly patronized on this nocturnal run due in Chicago at 4:15 AM CST. But the deteriorating weather had shut down airports in the region, and C&O #7 was filled to near capacity. The storm was raging and the train was already an hour late when it made a special stop about 3:00 AM EST in New Buffalo, Michigan, to pick me up. We made reasonably good progress until reaching the Rock Island trackage used by C&O and B&O through South Chicago. Drifting snow, frozen switches and signal outages forced C&O #7 to a halt. As night turned to morning, prospects for moving the train anytime soon looked dim. Hunger set in among the increasingly anxious passengers. Fortunately, B&O Train #9, the *Washington-Chicago Express*, running way behind its early morning scheduled arrival in Chicago, pulled up close behind C&O #7. It was a welcome sight. For while there was no food service on the C&O M&E train, B&O #9 had a well-stocked food-bar coach. Arrangements were made for the food and beverages to be shared. In addition, as the storm eased, one family living near the tracks cooked chickens for the stranded passengers. By early afternoon a path had been cleared for the two trains, and they made their way to B&O's Grand Central Station. For the weary folks aboard C&O 7, arrival was ten hours late. My intention had been to take that evening's *Capitol Limited* back home to Baltimore. Although its departure was delayed, I finally settled into a comfortably warm roomette, and B&O #6 - with fully-stocked bar car and diner - struggled eastward through deep snow in the Midwest and snowy Alleghenies more than six hours late.



RIRR water tower foundation stones used for holding plaque dedicated to the "Great Rock Island Route" at Pikes Peak Historical Street Railway Museum
Mike Walker photo

Newsletter Volunteer Staff
Editor: Sigi Walker
Photographer: Mike Walker

Note: All submissions may be edited for content, grammar, and space allocation, and become the property of the Rocky Mountain Railroad Heritage Society unless other arrangements have been made. Digital text submissions in .doc or .docx; photos in jpg, please. Submit articles and photos to the following address.

Rocky Mountain Railroad Heritage Society
publishes this newsletter at
PO Box 969
Englewood CO 80151-0969
303-269-9768
rockymountainrailroad@yahoo.com

RMRHS has applied for Federal 501(c)(3) status.



Rock Island Depot in Jennings, KS, 2004
Mike Walker photo

Contributors to this edition:
Jim Jordan
Mike and Sigi Walker

Please ✂

or provide the information requested on a plain sheet of paper and mail with payment.

Rocky Mountain Railroad Heritage Society
PO Box 969, Englewood CO 80151-0969

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Historical Societies Working to Preserve Railroad Structures

This column profiles several historical societies working to preserve historic Colorado railroad structures. The RMRHS applauds their efforts! Future columns will profile additional historical groups.

Denver South Park & Pacific Historical Society

The Denver, South Park & Pacific Historical Society was established to promote the preservation of the history and artifacts of all the predecessor lines that became the narrow gauge portion of the Colorado & Southern Railway. The Society, now numbering 245 members and counting, encourages artifact and equipment acquisitions, as well as dissemination of knowledge about these railroads and their effect on the history of Colorado and the nation.

The society began holding annual conventions in 1999; conventions have been based in Bailey, Buena Vista, Denver, Fairplay, Frisco/Breckenridge, Gunnison, Idaho Springs, and Leadville. The 2015 convention is scheduled for August 21 - 23.

The DSP&PHS is one of the most active in railroad-related projects, the most important of which to date is the restoration of the Como Depot. Other projects to which the society has contributed are the restoration of Denver, Leadville & Gunnison locomotive no. 191 at the Colorado Railroad Museum; Alpine Tunnel Historic Association projects; preservation of work cars at St. Elmo, CO, and restoration of the Buena Vista (CO) Depot.

Kit Carson Historical Society

Preservation of the rare and endangered Kansas Pacific Engine House and Well House is of primary importance to the Kit Carson Historical Society - and to the town of Kit Carson as well. Known as the "Kit Carson pumphouse," it is perhaps the last extant structure of the Kansas Pacific Railway in Colorado and the remaining in-situ component of what was once a fairly large railroad complex. The Union Pacific railroad donated the pumphouse to the society but retained ownership of the land.

The society has experience with preserving and repurposing other historic railroad structures. The Kit Carson Museum was built by the UP as a "combination" railroad depot in 1904; it opened as a museum in 1971 displaying artifacts representing the heritage of the Colorado prairie. The museum complex includes a UP signal maintainer's house and a UP caboos.

Mill Creek Valley Historical Society

Established in 1981 in a small community of 200 people by a few dedicated residents of Dumont, the society's original project was to obtain and preserve the 1909 one-room Dumont Schoolhouse. It is now restored to its former glory and is often used by other community groups.

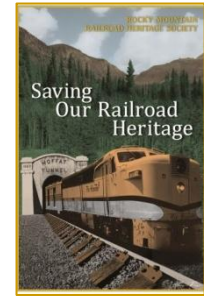
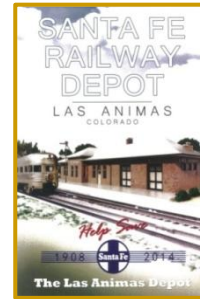
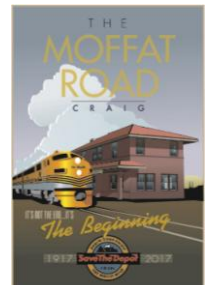
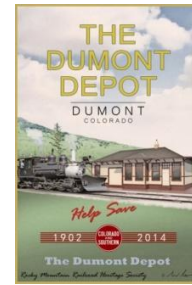
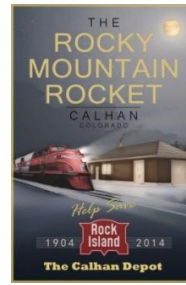
The next project was relocating the Coburn Cabin (originally in Lawson) to the schoolyard, placing it on a permanent foundation, and finally restoring it in accordance with its former use, work that is now ongoing.

In 1989, the society was given the 1858 Mill City House in Dumont. Work is in progress to restore the building, once used as a roadhouse in the 1800s. Other historic sites under the guardianship of the Mill Creek Valley Historical Society are the Dumont Cemetery and the Mill Creek Arastra site.

To raise funds for their many activities, the society holds an annual high tea, hosts yard sales, a yearly melodrama, and auctions of baked goods.

To find out more about these groups, go to: www.dspphs.org; www.ourjourney.info/myjourneydestinations/kitcarsonmuseum.asp; and <http://mcvhs.org>. Your support would be most appreciated.

Historic Railroad Structures RMRHS is working to preserve



Brighton Great Western Rwy scale and freight house: The land on which this building sits will soon have a new owner. The RMRHS may be given the building, along with some rail and switch stands.

Calhan Depot: The Historic Structure Assessment draft is nearly complete and should be submitted to the State Historical Fund for review by the end of the month. The town of Calhan plans to apply for a grant from the State Historical Fund to replace the roof.

Castle Rock Santa Fe Depot: The building has been boarded up to protect it from further deterioration. It may be moved in the future.

Como Depot: Don't forget to mark your calendar for August 22, 2015, the grand opening and dedication of the depot to be held in conjunction with the 20th annual Boreas Pass Railroad Days.

Craig Depot: Union Pacific RR correspondence indicates they will hold off on demolition of the depot for another 12 to 18 months.

Dumont Depot: The Purchase Agreement for the depot building (not land) has been signed. The RMRHS now needs to raise \$10,000, after which the building will be donated to the Mill Creek Valley Historical Society and moved.

Hugo Union Pacific Roundhouse: The restoration of doors and windows is in progress. Future interior plans include a large dining hall, kitchen, visitor's center, and museum. Bay eight will be restored to resemble the original engine facility.

Kit Carson (CO) Pumphouse: Building donated to Kit Carson Historical Society but land is owned by the UPRR. Grant request from the state for an evaluation in progress. Need funding to move the building.

Las Animas Depot: Clean-up of the property by volunteers has been ongoing. Bent County and Las Animas have made numerous offers to purchase the building and the land.

Loveland Great Western Rwy Depot: OmniTrax has put the contract on hold although Granby and Dave Naples have signed it.

Midland Depot at Divide: Grant applications are in progress to fund the next phase of the restoration. The building has been raised and leveled, and a permanent foundation is in place. The annual Midland Days symposium is scheduled for May 16, 2015.

Trinchere Freight House (now a museum): No update to report.

Train Treks with Mike and Sigi Walker: Mid-Continent Railway Museum North Freedom, Wisconsin

MCRM - A Tribute to Branch Lines

Mid-Continent Railway Museum (MCRM) is true to its mission to preserve and operate an authentic small-town Upper Midwest branch line railroad during the Golden Age of Railroad, 1880-1916. It was a time when railroads were the largest employer in the nation.

Fifty-two years ago, the Railway Historical Society of Milwaukee, along with several pieces of railroad equipment it owned and operated in Hillsboro, Wisconsin, became the Mid-Continent Railway Historical Society. The new society purchased an abandoned 4-mile branch of the Chicago & Northwestern Railway in North Freedom, Wisconsin; on May 26, 1963, it began offering steam train rides behind the former C&NW #1385.

Train rides begin at the 1894 C&NW depot originally located three miles west in Ablemans, Wisconsin. In 1965 the building was retired, donated to the MCRM, and moved to its current location. It's a classic



Paul Swanson photo

example of vintage rural railroading: a place for the community to gather, for riders to wait for the next train, to share gossip with the station agent, to send a telegram, or to warm up by the coal stove in the waiting room.

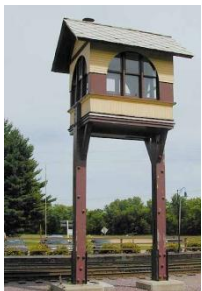
Rural railroads often employed flagmen to stop road traffic when trains approached. A



reminder of those times is the Crossing Shanty, which provided flagmen a place to rest between trains and a place to keep warm in winter. MCRM's

is located at Walnut Street.

More sophisticated crossing protection evolved, mostly in larger communities and in industrial areas, which replaced the flagman. Crossing Towers would drop an arm or gate across the road, activated manually by an employee. MCRM's crossing tower was last used in Neenah, Wisconsin, by the Wisconsin Central; it was donated to the museum and moved on property in 1991.



Water towers dotted tracksides during the steam era, their location dependent on a nearby water source. MCRM's water tower



is typical of an early 20th century wooden tower. Originally constructed by the Milwaukee Road and used at Oconomowoc, Wisconsin, it was moved to North Freedom in 1972. The museum's tower support structure, however, is a steel frame rather than wood base, built from scratch by museum volunteers.

The museum's Section Shed, built and used until 1982 by the Milwaukee Road at Fond du Lac, Wis, provides a glimpse into the life



Paul Swanson photo

of section crews a century ago when track maintenance was done with manual labor. Sections were only several miles in length. The "section" foreman and five or six men maintained the right of way, replaced rails, ties, and fences, tamped and aligned the track, cut weeds, and removed snow. Examples of a section crew's tools and equipment are on exhibit, along with photos of section crews at work.

MCRM's Coach Shed serves as the center of the museum's display of restored railroad



cars, artifacts, and historical displays, which can be viewed from elevated walkways. In addition to the Coach Shed area and Depot

Display area, there are two other equipment display areas: the Train Shed area and the Engine Servicing Facility (pictured below). The museum's iconic steam locomotive, C&NW #1385, is currently undergoing a total rebuild, following a June 2008 flood.



The museum Freighthouse, a replica built in 1972, resembles a typical shortline freighthouse at the turn of the 20th century.



In 1900, railroads carried freight in virtually any quantity, from small parcels and milk cans to heavy equipment. Freight houses, often located on a side track, were built to receive shipments and hold them for pickup or for outbound loading onto a freight car. Freight houses could be found at small and large terminals alike.



Pictured above is MCRM's Locomotive #7, an Alco S-1 built in 1944 and designed as a switch engine. The S-1 was the first switcher Alco built with a lower carbody hood to give crews improved vision toward the front. It was donated to the museum in 1996 by the American Association of Railroads. The coaches are Delaware, Lackawanna & Western steel passenger cars built by the Pullman Company between 1914 and 1917.

Mid-Continent also has a "Colorado connection" - MCRM website's [Colorado & Southern Rolling Stock](#) is a catalog of the passenger cars of the narrow gauge portion of the C&S from just after the Civil War up to WW II.

This "Train Treks" column is a compilation of information excerpted from various MCRM publications and the museum's excellent website: www.midcontinent.org.