

NON-STOP BNSF ACTION ALONG PUGET SOUND

Point Defiance Line

NATE SHEDD/PHOTOS BY THE AUTHOR

THEN RAILFANS VISIT BNSF Railway's Seattle Subdivision between Portland, Ore., and Seattle, the section between Nisqually and Tacoma, Wash., seems to be the scenic highlight that draws their attention. With a variety of trains from both BNSF and Union Pacific, the former Northern Pacific main line along the coast of Puget Sound provides railfans with great opportunities for taking stellar pictures. Whether you choose to visit the Ruston Waterfront, Titlow Beach, Steilacoom, or Chambers Bay, you are guaranteed a front row seat to seaside main line railroading in the Pacific Northwest.

History

When Northern Pacific reached its western terminus of Tacoma in 1873, the original main line ran through Tacoma's Nalley Valley and down into Commencement Bay. This line through the Nalley Valley, better known as the Prairie Line, proved to be problematic for NP. The Prairie Line hosted a 2.2 percent grade, which was not ideal for a main line, descending into what is now Downtown Tacoma. Northern Pacific's solution to this problem was to create a water level route under Point Defiance and along the coast of Puget Sound. Built in the 1910s, the line under Point Defiance provided NP line under Point Defiance provided NP

with its much-needed water level route, eliminating the need for the steep grade of the Prairie Line.

One of the challenges faced when constructing the route under Point Defiance was the need for two tunnels, which were built to curve the main line in a southward direction. These included the Nelson Bennett Tunnel (4,391 feet in length) and a short tunnel under Ruston's ASARCO smelter (321 feet). Northern Pacific built both tunnels as double-track, which changed in the late 1980s when successor Burlington Northern eliminated one of the mains so it could accommodate taller double-stack

container trains. After turning south via Nelson Bennett, the tracks follow the coastline toward Titlow Beach, passing under the Tacoma Narrows Bridge in the process

Hugging the coast, the main snakes into Steilacoom, the first incorporated town in Washington State (1854). The passenger station was built to serve the community in 1914, closed in 1971 following the advent of Amtrak, and still

stands today. Following the coast of Puget Sound for another five to 10 miles, the main line leaves the Puget Sound behind at Nisqually where a connection to the branch line from Lakewood is made—currently Sound Transit's Point Defiance Bypass used by commuter trains as well as Amtrak. The newly constructed route connected back with the Prairie Line at Tenino where it branched off toward Tacoma.



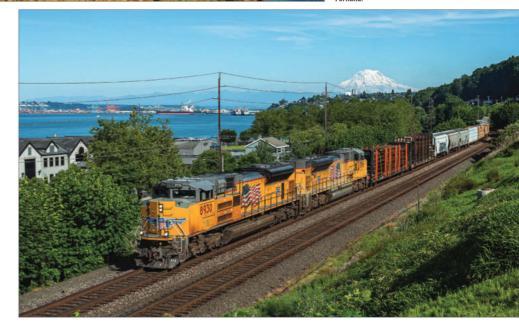
BNSF owns the Point Defiance route, with Union Pacific trackage rights trains running between Reservation in Tacoma and Portland. It typically hosts upward of 30–40 trains per day, although the count varies. Amtrak ran its Coast Starlight and Cascades Service passenger trains on the route up until November 2021 when they were diverted to the Point Defiance Bypass, shaving



OPPOSITE: Under the watch of Mount Rainier, BNSF SD75 277 leads the southbound Everent to Roosevelt trash train onto the single-track in Ruston on August 2, 2023. The section from Ruston and Nelson Bennett is the only part of the BNSF Seattle Subdivision that is single-tracked, creating a bottleneck for trains coming in and out of Tacoma.

LEFT: BNSF ES44C4 6801 leads a northbound Alliance, Texos-Portland, Ore., Q train along the coast of Puget Sound near Day Island on June 30, 2023. Normally, Train Q-ALTPTL would run southbound on this line, but due to a blockage on Montana Rail Link it was running northbound.

BELOW: UP SD90MAC-H 8930 and the Seattle to Portland manifest is headed southbound along the Ruston waterfront on June 18, 2021. Mount Rainier and the Port of Tacoma can be seen in the distance as the train heads for Portland



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ABOVE: Amtrak cab car 90252 leads Train 507 through Ruston on July 25, 2021, with Mount Rainier looming in the background. In a few months, Amtrak trains would be diverted off this route to the Point Defiance Bypass.

RIGHT TOP: A trio of BNSF SD75Ms leads the Everett-Longview, Wash., manifest south through Steilacoom and past the former Northern Pacific depot.

RIGHT: BNSF 181 (ex-Santa Fe GP60 4022) leads Train H-EVELVJ over Bridge 14 on June 8, 2022. This unit has since been repainted into BNSF colors and is no longer assigned to the realon.

OPPOSITE: BNSF C44-9W 5341 leads an empty coal train that originated out of Centralia on May 3, 2023. By 2025, the power plant in Centralia will be shut down and no longer receive rail service.

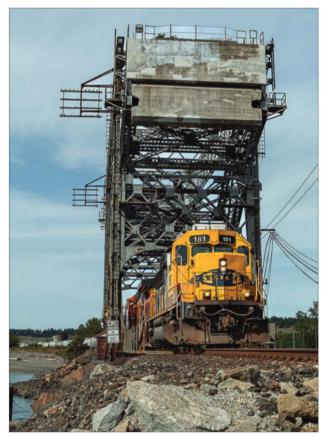
10 minutes off the run between Seattle and Portland. BNSF runs a wide variety of trains along the Sound, including grain, manifest, intermodal, autorack, garbage, coal, and oil trains, with the occasional work train. While UP has trackage rights, it doesn't run nearly as much traffic compared to BNSF. UP traffic includes intermodal, garbage, manifest, and grain trains. Through its trackage rights, UP has access to the markets and ports of Seattle and Tacoma without the need for its own right-of-way between Portland and Tacoma.

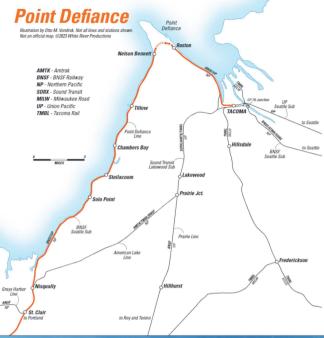
Unlike UP, BNSF uses the Seattle Subdivision to connect with its Stampede Sub, Scenic Sub, and Bellingham Sub, while also enjoying access to the ports of Tacoma and Seattle. Because UP does not have an eastward route out of either Tacoma or Seattle, all its traffic must run south to Portland before turning east via the Columbia River Gorge. Even though the Point Defiance Line still sees plenty of traffic, signs of precision scheduled railroading (PSR) are noticeable as freight traffic has decreased slightly over the last 10 years, along with the absence of Amtrak trains.

Finding the Perfect Spot

From my experience, the weather during the months of July and August is preferable for the Point Defiance Line







because the sun is out almost every day. Sun angles can be tricky though, and for the Point Defiance Line, knowing these angles during the summer is critical if trying to capture perfect nose light. In the evening, southbound trains are the star of the show and what you should hope to see during the golden hour. Point Ruston, Steilacoom, Solo Point Beach, and Chambers Bay are great locations if you want to camp out for southbound trains in the evening.

Photographers often want the grand shot of the Tacoma Narrows Bridge highlighted with a train under it; if you also want that photo to include golden hour light, summer may not be the best time. During golden hour in the summer (between 6:00 and 9:00 pm), the sun moves directly to the side of trains at Titlow Beach, making it almost impossible to get nose light in that area during those hours. Visit Titlow between 1:00 and 4:00 pm in the summer if you don't mind having midday light on the nose, but still want to capture that elusive bridge shot.

A terrific way to capture great shots around the Titlow area is to shoot at Day Island. The overpass connecting Day Island to the mainland is an ideal spot to shoot northbound and southbound traffic at almost any time of the day. This small island community has the Seattle Subdivision right in its backyard, providing unique angles and perspectives for



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photographers.

In the morning, sun angles are quite different, having changed from being in the west in the evening to the east. Between Ruston and 21st Street in downtown Tacoma, morning golden light is best; a northbound would be ideal for nose light. Many want to capture a good shot of the Nelson Bennett Tunnel which. from my experience, is easier at its south portal. At the north portal, trees and bush shadows surround the tunnel, making it very unlikely to get any nose light on a northbound train exiting the tunnel. Access to either end of the tunnel is difficult; both require a little bit of bushwhacking to set up a shot. Personally, the south portal of the Nelson Bennett Tunnel gives a much more rewarding shot as it provides nicely lit southbound trains.

The tunnel under the former site of Ruston's ASARCO smelter is somewhat difficult to photograph. You can view the

RIGHT: Uncommon SD70MACe BNSF 9749 leads a loaded coal train destined for Canada past the former NP Moon Yard in Tacoma on November 19, 2022. The TEMCO grain elevator uses part of this former NP yard for unloading inbound grain trains from both BNSF and Union Pacific.

BELOW: Southbound V-BLUPTS heads south near Salters Point Beach on August 15, 2023, with BNSF ES44C4 6831 leading solo. north portal of the tunnel from Ruston Way, and there is an overpass over the south portal for catching a northbound. If you are adventurous, there is a way to view the south portal of the ASARCO tunnel trackside, as long as you are willing to hike through thick bushes. In short, golden hour in the morning is best for capturing northbound trains, and golden hour in the evening is best for capturing southbound trains along

Puget Sound. While you

While you are near Ruston, or in the Tacoma area in general, Mount Rainier dominates the landscape and is possible to photograph with a train at several locations. Most angles are on Waterview Street along the Ruston waterfront. Driving along this street, you will notice the opportunities to photograph the volcano with trains right under it from a number of angles. The ideal time to be set











ABOVE: On a rainy October afternoon, UP AC4400CWM 6616 leads the IG45E north past TEMCO's Tacoma facility. TEMCO's GP9 is hard at work, handling an inbound grain train from BNSF that was received just a few hours earlier.

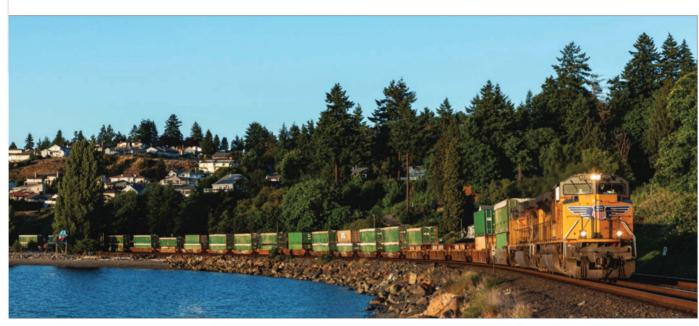
LEFT: UP SD70ACe 8539 leads the southbound Seattle-Gilliam, Ore., trash train in the late afternoon of July 3, 2023, with Mount Rainier dominating the background.

LEFT BOTTOM: A southbound autorack train bound for Portland races under the Tacoma Narrows Bridge in the late evening of August 24, 2023. Originally built as one bridge, another span was constructed in the early 2000s to accommodate increased traffic on Route 16.

up along this street is between 3:00 and 7:00-M in the summer. Once it gets past 7:00-7:30, the sun ducks under the hills leaving no sunlight, just shadows. If you are ambitious, take the ferry from Steilaccoom to Anderson Island for an opportunity to photograph Mount Rainier with the BNSF main line directly under it.

Another highlighted feature of the Point Defiance Line is Bridge 14, which crosses Chambers Creek near Steilacoom. Bridge 14 is an unusual Strauss direct lift bridge, one of only two in North America (the other being in Prince George, B.C.). Its movable truss span raises up like any vertical lift; however, the lifting motion is controlled by two bascule-like counterweighted arms that are linked to the lift span and rotate around trunnions. Bridge 14 can be seen from Chambers Creek Road, Chambers Bay, and Steilacoom. In the morning, southbound and northbound trains are well lit if you are standing on the east side of the bridge; a pullout on Chambers Creek Road makes this easy to do. Another bonus of Bridge 14 is the Olympic Mountains framed in the shot, which can be viewed best in the morning. During the evening, you can view trains crossing the bridge with a sunset in the background (if the sun is out). Bridge 14 has a bridge tender, who raises the span per request of boats needing access into Chambers Creek. When lifted, the dispatcher gets an alert and will stop trains at CP Pioneer (Chambers Bay) and just

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CP River Street, or CP Davis, all located in Tacoma. Of course, main line railroading does not tend to have a schedule. but sometimes there are traffic patterns along the line.

I have observed that BNSF runs southbound trains H-EVELVJ (Everett -Longview, Wash.) and H-EVEROO (Everett-Roosevelt, Wash.) in the evenings, often during the summer. These trains both change crews in Auburn and can be

heard via the scanner. Train H-EVELVJ typically works in Tacoma before its run along Puget Sound while H-EVEROO goes straight through, Union Pacific frequently runs the O-SEGL (Seattle-Gilliam, Ore.) south in the evenings, usually between 6:00 and 9:00pm. Don't count on these running in the evening every time though; it can depend on the amount of traffic in the area.

You can expect to see a variety of



ABOVE: The southbound Union Pacific trash train bound for Gilliam is wasting no time heading through the S-curve at Steilacoom on June 28, 2023. This train often runs along Puget Sound in golden hour during the summer.

RIGHT: BNSF ES44AC 6180 and SD60M 1453 are in charge of southbound Job 360 bound for Centralia in the late afternoon of May 3, 2023. The pond at Day Island gives residents a view of Puget Sound and BNSF's main line, a perfect combination for railfans.

OPPOSITE TOP: The crisp spring afternoon of April 5, 2021, showcases a southbound V-BLUPTS with BNSF ES44DC 7233 leading and Mount Rainier looming above along the Ruston Waterfront.

OPPOSITE BOTTOM: BNSF GP38-2 2081 and several other EMD units lead the Longview-Everett, Wash., mixed freight north through Day Island on October 15, 2023. Trains from Everett to Longview and return can often be seen with a variety of EMD units on any given

before the Steilacoom Ferry Dock until the bridge is lowered.

Catching the Action

Camping out for trains along the line is usually not a challenging task because of frequent train movements. However, it can be challenging to know which direction trains are coming from if you go in



to this problem, as BNSF has two defect detectors along Puget Sound with a third just to the south of Nisqually. These are located at Lacey (milepost 30), Solo Point (mile 18.5), and Titlow (mile 10.1). If you keep the scanner on long enough, you'll most likely hear trains communicating or working in Tacoma; those trains call

blind. A radio scanner is a great solution for routing and clearances. Union Pacific crews contact the dispatcher at CP Reservation (Tacoma) to get clearance onto BNSF from the UP main line out of Fife. Southbound BNSF trains that are leaving Auburn Yard contact dispatch for clearance, along with trains originating with BNSF's Centralia North Dispatcher dispatch for signals out of CP 21st Street,



66 DECEMBER 2023 · RAILFAN.COM RAILFAN & RAILROAD 67 northbound trains such as oil, coal, grain, mixed freight, and intermodal during the evening as well. If traffic is down, visit TEMCO's grain facility in Tacoma, which hosts an eelectic fleet of units. TEMCO's roster consists of an ex-Great Northern GP9 and two former Northern Pacific SW1200s, all still active to unload and switch grain trains for both BNSF and UP. TEMCO's peak operation is during grain season, unloading grain trains nearly 24/7. It can be seen outside of the grain season as BNSF still runs an occasional grain train into the facility during the summer.

One of the highlights of traffic on the Point Defiance Line is BNSF's Job 360, which is a local that runs between Tacoma and Centralia in the evening. On Fridays and Saturdays, Job 360 originates out of BNSF Yard in Tacoma, departing around 6:00-8:00PM; with frequent EMD power, it's a perfect train to shoot in golden hour light. When Job 360 originates

out of Centralia, don't expect to see the train heading northbound in the evening, as it frequently traverses Puget Sound after sunset.

Additionally, a second local, BNSF's Roy Turn, runs along Puget Sound once a week, but doesn't often have interesting power. BNSF runs this local south from

RIGHT: Shortly after sunset on August 12, 2023, a southbound Vancouver, B.C.—Modesto, Calif., grain train heads across Bridge 14.

BELOW: From a vantage point in University Place, UP AC4400CWM 6492 leads southbound intermodal Train I-SELC along Puget Sound in the late evening of September 30, 2023.

OPPOSITE: On the chilly winter afternoon of February 1, 2023, BNSF ES44C4 7994 leads the Interbay-Roosevelt trash train through Hidden Beach with the Tacoma Narrows Bridge dominating the background.







Tacoma, eventually ending up in DuPont to interchange with Tacoma Rail's DuPont Local which serves various industries along the former NP Prairie Line (currently owned by Sound Transit). To avoid a shove movement up Sound Transit's Lakewood Sub, the Roy Turn runs in a 1x1 locomotive configuration (power on both ends of the train), making it easily recognizable to a railfan. While those are the only two locals BNSF runs along the water, you can occasionally see interesting power on garbage trains and mixed freights.

Since Amtrak's departure from the line in late 2021, BNSF began to tie down multiple trains at a time between Nisqually and Tacoma. Without needing to clear the main for Amtrak, trains frequently go dead on hours in Steilacoom, 19th Street near Titlow Beach, and Old Town Tacoma. Many have described the Point Defiance Line as a single-track main now because of the many

dead-on-hours trains that occupy at least one of the mains. Centralia North Dispatch has options, though; the crossovers at CP Titlow, CP Pioneer, CP Harbor, and CP Nisqually enable the dispatcher to route around tied down trains quickly, so don't expect it to affect traffic levels too much along the water.

Parting Thoughts

I spent most of my summer in 2023 along this scenic former NP main line and recommend it to any visiting railfan in the Seattle-Tacoma area. While at times it was difficult getting the shots I had in mind, it was worth the effort. Whether it's the constant traffic, beautiful coastlines, variety of locations, dramatic mountain backdrops, or plenty of summer sunshine, BNSF Railways's Seattle Subdivision along the south Puget Sound is as good as it gets for main line railroading in the beautiful Pacific Northwest.

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