## Greetings!

This is your Maintenance of Way Team update for February 14, 2016. This week, the MOW Team lit-up the night in an impressive display of restoring order out on the line. So, before we descend into darkness here, let's get this update started!

The Mighty Weed Team was quite impressive, itself, on Tuesday. It, too, was restoring order to the SSRR Tracks by further implementing its anti-weed policy. Mike Taylor and Heather Kearns welcomed Steve Wilson to the ranks of the Weed Team as the newest Weedie! They took the 65-gallon spay-rig out for its first operation following the complete rebuild. Using their magical concoctions, they turned all the green things popping up around the rails in Old Sacramento blue. In short order, the blue will turn brown and be gone. Then they headed to the Sutterville Line and sprayed from the Zoo to the I-5 Bridge. Indeed, it was quite a notable day in the annals of Weed Team lore.

Rewind to an incident last Sunday where a "bond-wire" within the south signal-system approach to Capitol Mall by the Embassy Suites Hotel broke loose of the track. This caused the crossing gates at Capitol Mall to deploy leading to a rather unfortunate traffic mess. "Bondwires" are welded to the track at each joint connecting the rails within signal system circuit. A slight electrical current is applied to each rail which completes the circuit when no train is present. When a train is present, its axles "shunt" the rails together and interrupt the circuit which activates the signal system. When a bond wire breaks, the circuit is interrupted and the crossing gates activate. Once reported, Signal Department manager, Dale Parker, and his trusty sidekick, Dave Megeath, were "Johnny-on-the-spot," shutting-down the Capitol Mall system and locating the joint with the missing bond wire. Then, they called-in the MOW Team for help in welding-up a new bond-wire.

Fast forward to Tuesday evening where Cliff Hayes, Mike Harris, Heather, Frederick Carr, Frank Werry, and Dale convened in the Shops to effect repairs. Frank loaded the MOW Team's powerful light-plant in one truck while Cliff's welding gear was packed in the other. Once on site, Frank fired up the light-plant which turned the night into day. Fred and Mike H. removed dirt and debris from around the joint. They then chiseled-off the old welds and used a grinder to remove the final remnants. Our master of the metallurgic arts, Cliff, positioned his welding equipment and bonded the new bond-wire to the two rails. Dale then re-activated the system and immediately, the circuit energized. Success! Dale told us that, if a Signal Crew had set up "cadweld molds" to weld a new bond wire to the track, it would have taken two or three hours. The MOW Team – or Cliff – did it in just a little over an hour! Once again, the MOW Team saves the day (and night)!

Thursday, Frank, Mike H. and Heather headed over to the Boiler Shop to stage for the continuation of the rail replacement project at Front Street. They loaded our trusty Chevy Truck with the necessary joint-bars, rail-saw, rail-drill, and necessary tools. Frank climbed on the yellow forklift to pull the tire-mounted air-compressor into a position where it could be quickly hitched to the truck on Saturday. Mike H. started it up to run for a bit since it hadn't been used in a while. Heather opened a 55-gallon drum of hydraulic fluid to top-off the front-end loader. Meanwhile, over in the Erecting Shop, Cliff and Fred built a cord-rack so that we have a place to hang extension cords rather than stacking them on the floor. Of course, anytime Cliff fires up his welder, it's impressive. And with that, we were ready to roll.

Doughnuts arrived in abundance on Saturday morning thanks to Tom Freeburger and Chris Carlson. There and ready to gobble them down were Alan Hardy, a quorum of Mikes - Florentine, Harris, Miller, and Willis - Harry Voss, Josh Bailey, Al Utzig, Heather, Frank, Jose Gomez, and Chris Machado. The Team returned to Front Street to continue the rail-replacement and upsizing project. So much got done that it will be hard to describe it all. Harry hopped on the back-hoe, Mike H. in the front-end loader, and Al on the Big Green Machine. Heather handled the scarifier-inserter, with Mike F. in the Kalamazoo tug pulling tie-laden flatcars. At the job-site, the Team began by plating the east rail and gauging it off of the existing west-rail. Josh and Mike M. placed plates at each tie. The comp-joints on the west rail were removed at each end. Then the new east rail was "gauged" off the west rail by measuring with both a gauger and tape ("measure twice" rule). Lining bars and track-jacks were used to adjust the position of the rail before it was spiked-down. Next, spikes were pulled on the west rail and the joints taken apart. Al, Harry, and Mike H. on their trusty charges grabbed the west rail and scooted it out of the way. A few additional ties at the north were pulled. Al, Harry, and Mike H. lifted the new west rail and, with everyone working together, got it into position. Then, the Team gauged it off the east-rail and spiked it down. A final length of rail was needed to close the discontinuity in the track. But first, it had to be cut to fit. Again, the "measure twice" rule was followed. Chris M. and Jose had the honor of firing up the rail-saw and cutting it to size. Once the rail was cut, the rail-drill was hooked up which drilled new bolt-holes. The newly-cut rail was joined with the west-rail. Finally, at the south end, the comp-joints were fitted. Thus, the rail replacing and upsizing was complete. But, the job's not done. There are still about 30 ties at both the north and south ends to install, where the road bed needed to be lowered. So, next week, the Team will finish up principle construction by inserting in all those ties, plating, spiking, and tamping them. At which point, Train Order 103 can be annulled and the line placed back in service. It had been a very good day of great accomplishment that resulted in one tuckered-out crew.

On **Wednesday, February 17<sup>th</sup> at 6 o'clock p.m.**, the annual, federally required **PART 214 "ROADWAY WORKER SAFETY TRAINING"** will take place in the Museum's East Theater. **Please bring your "Roadway Worker Safety Manual" white-binder** if you have one. If not, a new binder will be provided. If you can't make Wednesday, a second session will be offered on Saturday, February 27<sup>th</sup> at 9 o'clock a.m. in the East Theater. On Tuesday and Thursday evenings, Shops Crews will meet at or before 5 o'clock. Saturday, the final push on the Front Street project commences with doughnuts at 8 o'clock a.m. in the Shops. It will be another great day, no doubt. Thanks to all for a job well done!

See you out on the line,

Alan, Chris C., and Richard.



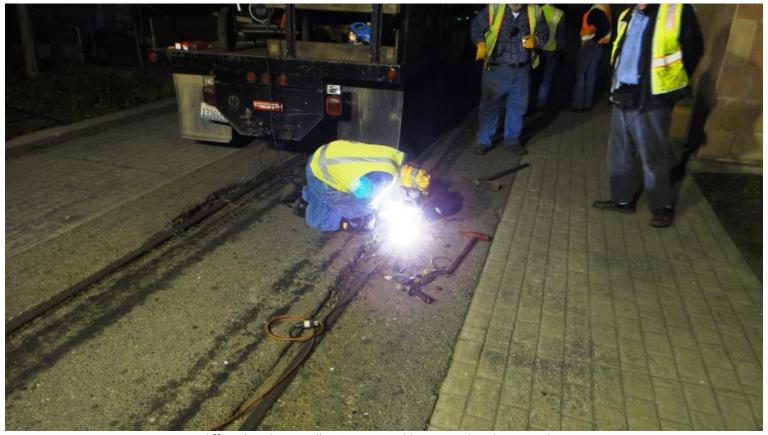
Mike T. and Steve ready the spay-rig for spraying



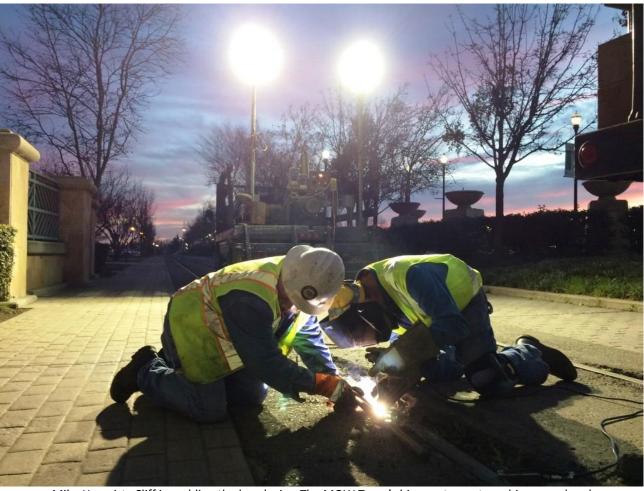
Mike T. turning the green blue



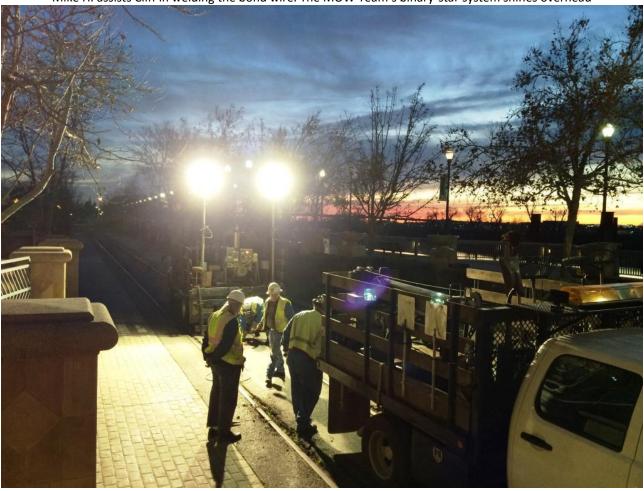
Working under the lights, Fred and Mike H. prep the rail for welding



Cliff working his metallurgic magic welding a new bond-wire in place



Mike H. assists Cliff in welding the bond wire. The MOW Team's binary-star system shines overhead

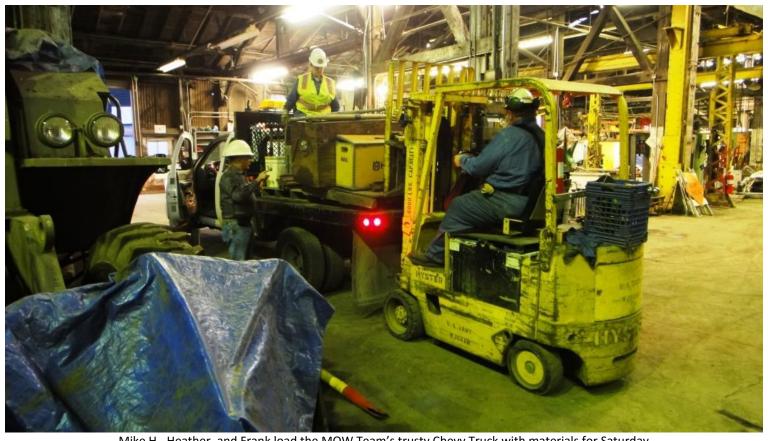


It was a lovely evening and beautiful sunset over the MOW Team work limits





The repaired bond



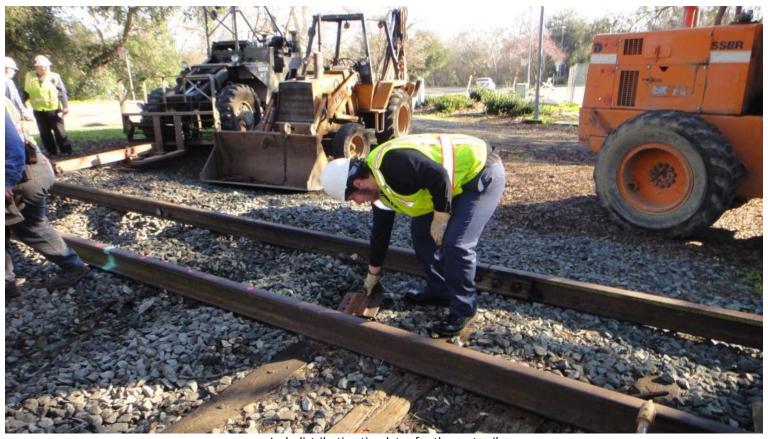
Mike H., Heather, and Frank load the MOW Team's trusty Chevy Truck with materials for Saturday



Mike H. and Frank add hydraulic fluid to the front-end loader



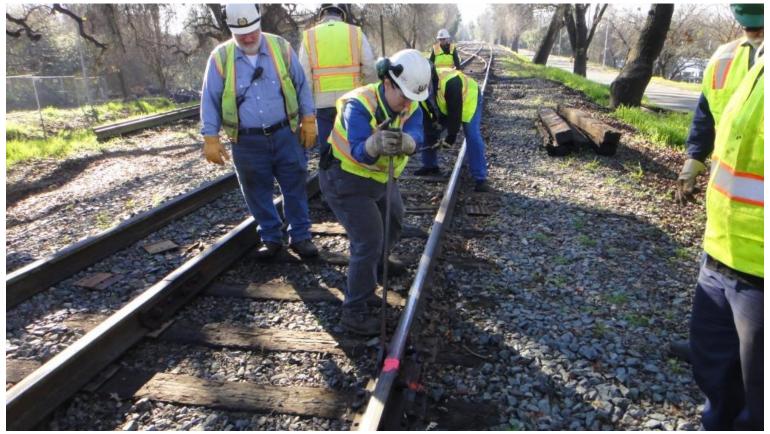
Cliff always puts on an impressive show!



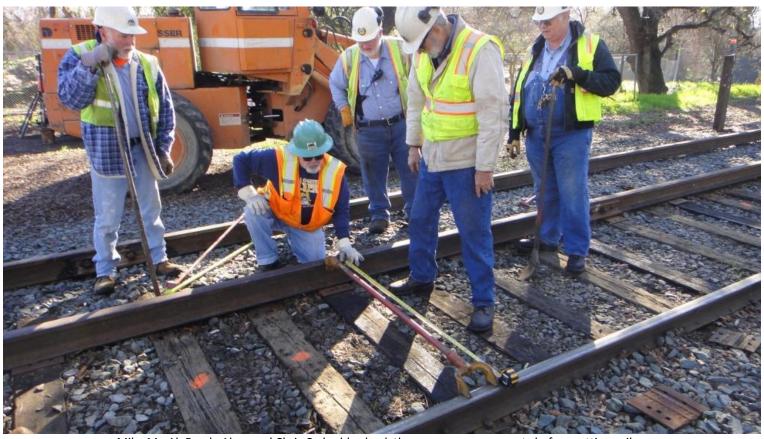
Josh distributing tie-plates for the east-rail



Chris C. nips-up the rail as Mike M. places a tie-plate



Heather loosens a bolt at a joint designated to be taken apart on the west-rail



Mike M., Al, Frank, Alan, and Chris C. double check the gauge measurements before setting spikes



Now gauged, Josh spikes the east-rail as Frank and Chris C. nip-up the ties



Tom and Mike H. pull spikes on the west-rail



And like that, the old west-rail is history



With the old west-rail gone, Mike M and Mike F. collect old 75 lb. rail tie-plates



The Team works to dig-out high-spots in the ballast so that the new, taller west-rail will line up with the track at Front Street





Tom and Chris M. pry-out tie-plates





Mike F. and Josh remove a rotten old tie



Chris M. carries away the remnant of a tie



The new west-rail arrives on site...



Mike F., Tom, Chris M., and Mike M. cut-down high-spots in the ballast in order to lower the new west rail to align with the track



Tom and Mike F. bolt the track together



The sacred pink box makes an appearance at the job site and the world rejoices...



Mike F. deploys a shovel as a spark-shield as Chris M. slices through the rail with the rail-saw



Jose takes his turn at the rail-saw



The rail-drill cuts the first bolt hole as Mike H. cools the drill-bit with a stream of water



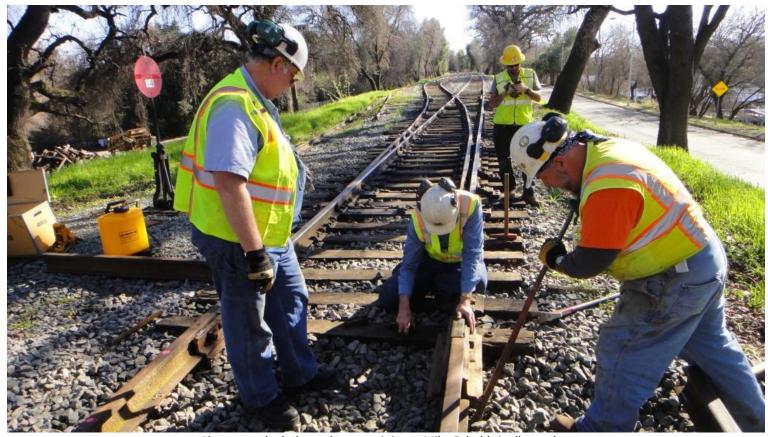
Now it's time to drill the second bolt-hole. Chris M. keeps the drill-bit cool



Jose and Al gauge the west-rail off the east



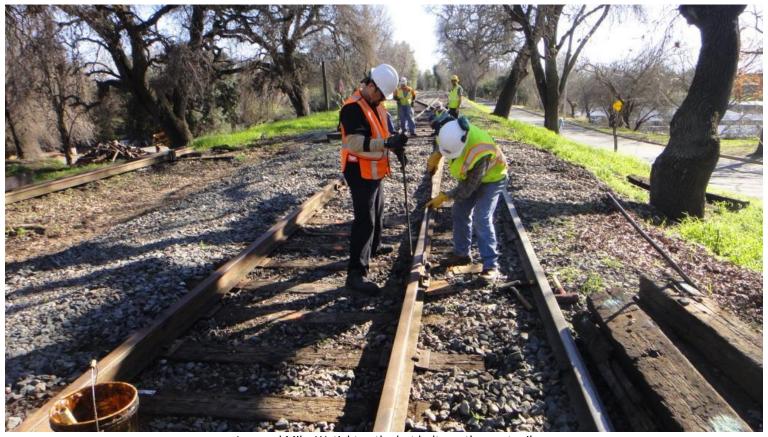
Cut and drilled, the final stick of rail is guided into place



Alan starts the bolts at the comp-joint as Mike F. holds it all together



Then Heather comes in and spikes it in gauge with Mike M. and Al nipping-up the rail and tie



Jose and Mike W. tighten the last bolts on the west rail





But, Train Order 103 remains in effect. Mike M. and Mike F. plant the RED FLAG at Mile Post 1.5