# Water-activated Slippery Surface Sign Trial

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| Waka Kotahi has a skid resistance monitoring protocol that involves measuring skid resistance annually and treating the worst sites. For particularly low ESC sites, there are requirements to advise the public about the potential for skidding in the wet – this can include a reduced speed limit. We have to have these warning signs in place until treatment can be completed, and this can be several months depending on the programme.  When seals have binder rise, this is visually obvious to drivers and the signs have an obvious link to the surface condition. However, when the chip is polished it can be extremely slippery when wet but polishing is not visually obvious to drivers. This means that there is not obvious link between our warning signs and the road surface. Further, although sites can trigger the need for a reduced speed limit in the wet, they don’t necessarily really need it when the road surface is dry. This often leads to people concluding that we’ve just left signs out and there’s nothing really wrong with the road.  WSP at WestLink, with funding assistance from Waka Kotahi, are trialling a water-activated LED Slippery Surface warning sign on a site is not performing well in the wet but doesn’t actually look hazardous. The electronic sign is in addition to required static warning signs.  We have done a speed survey under control conditions, with only the required static warning signs, to get a speed profile for both a wet and a dry surface.  The water-activated sign will be installed in December 2022 in addition to the static signs.  We will then re-survey the speeds to ascertain whether the speed profile is lower in the wet when the electronic sign is activated.  Our next step will be to relocate the sign to SCRIM Exception site in February 2023 and repeat the experiment. We hope to do this on at least one polishing site, and potentially at least one binder rise site.  If the trial data shows a speed reduction in the wet compared to the speed profile without the electronic sign, we intend to use it as part of our warning systems for the public. |