## Sediment / Erosion

The Rye Park turbine site is to be situated on the watershed for the tributaries of the Pudman Creek including the Flakney Creek. The Pudman Creek is one of a handful of waterways in NSW without carp or redfin infestations which decimate the native fish population. Endangered Southern Pygmy Perch have been introduced into the Pudman Creek in an effort to save them from extinction.

The pictures below show what happened in March 2018 following a downpour of 100mm plus on the hills and ridges where the turbines will be built. All of this debris came down in the Flakney Creek and was deposited in the Pudman Creek at the junction of Flakney and Pudman Creek where the Southern Pygmy Perch live. At this point the Pudman Creek is over 10m wide but it was completely blocked and required a 20 tonne excavator to remove it all.

The rock type that this hill range is comprised of is a type of shale (category of sedimentary rocks known as "mudstones"). It is friable and easily eroded when disturbed. If this happens without the ground being disturbed, then the effects of stripping an increased volume of vegetation, excavating even wider 30m wide tracks and digging more than twice as big 800m³ holes and then dumping the shale from the holes on the hillsides will be devastating for the creeks and the fish. A local Earthmoving Contractor with many years of experience working in this area has stated that 'no amount of silt fencing will stop it 'washing' in the type of downpours that we get'. This will be worse on the ridges because the ground cover will never regenerate as there is minimal topsoil.

Pudman Creek is our main water supply for our stock as it is for all other properties along the valley. The village itself is also dependent on it. Desecration of the waterholes by silt and debris deposits from this project would be a catastrophe for all concerned.



