



WATER PROVIDES A SOLUTION

With the large amount of rainfall on the West Coast, a lot of people would wonder why a water system would be such a vital part of a dairy farm in Greymouth. But for the Fayen family this has made a dramatic change to 60ha of their farm after only two weeks of watering.

Craig and Louise Fayen purchased their farm just out of Greymouth 12 years ago. This 180ha block of land is very diverse in its nature and required a range of developments to increase the productivity to support a dairy farm. One area of the farm is terrace country and has a thick clay top soil, which has poor drainage and 80ha has been humped and hollowed. Some of the river flats had been gold mined (dredged) back in the 1940's. The top 28 feet of the land was shifted leaving behind great piles of washed stones which had grown over in scrub and blackberry. The Fayen's developed 40ha of this by first bulldozing the piles of stones level then applying truck loads of soil to give about an inch of soil for grass to grow. This is a great block for the spring however, with gravel so close to the surface the soil holds the heat but not the water. With the recent hot summers it would kill off the pasture and the only thing left growing would be weeds and ragwort. Craig measured the soil temperature last summer and the highest reading was at 35°C. The farm now has a 34 aside herring bone shed and currently milks 320 jersey's and cross breed cows.

This area (the river flats) is situated between two creeks, with a length of approximately two and a half kms and width up to 500m. This is split into two sections with a main road in between so an underpass is used to get from one side to the other. With the endless regrassing Craig decided that watering the area would be a more effective solution and consulted Phil Forest on this. Phil has been working with CRT in the water systems team for four and a half years now and has an extensive knowledge of what is required for an effective irrigation solution.

The decision was made to use an Irripod long line sprinkler irrigation system to cover this area. Because of its unique shape, a lot of other irrigation equipment would not have been suitable for this area and the pods are also extremely robust which is ideal for this rough surface. Craig was extremely impressed with the service Phil provided to assist with this project. Phil spent a number of days on this farm assessing what needed to be done to effectively water it and he then went back to work to design the system in a programme called Irricad which allows each aspect of the irrigation from water pressure to nozzle size to be specified. This programme also alerts the user to possible issues that could occur from a design and helps to minimise any errors.

Phil provided Craig with a comprehensive plan for the water system and ordered all the parts required for this. Craig and his team assembled the system and apart from the heavy rainfall in the middle of it, this was an extremely successful project.

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The ability to irrigate this land has substantial benefits and Craig believes this will pay for itself very quickly. Yearly regrassing will be a thing of the past and intensive grazing is now a possibility. Previously through the summer months the paddock was grazed in a 70 day round which is now down to 22 days. After two weeks of watering, Craig said it was obvious when he misses a spot with the irrigation because the difference in the pasture is substantial. He is also planning to increase the number of cows being milked due to an increase in grazing potential and so more irrigation plans are in the pipeline.

They have just purchased an adjoining property that has been flipped so once again has a layer of gravel close to the surface. With results from the irrigation system on their river flats this summer the new block will benefit greatly from a similar system.

The Irripod system has worked out extremely well. With the Irripod trailer on the back of the motor bike, you don't have get off to attach the line and it is freed with the pull of a rope. The area with Irripod irrigation is 63ha and this only takes Craig an hour and a half to shift. The irrigation water is sourced from a nearby pond, the pump is floated on top of this and the team is pleased they can now make good use of this water.

It is pleasing to hear that after only two weeks of watering they can see the major benefits this will have to their farming operation.



(Left) Examples of Irripod irrigation.