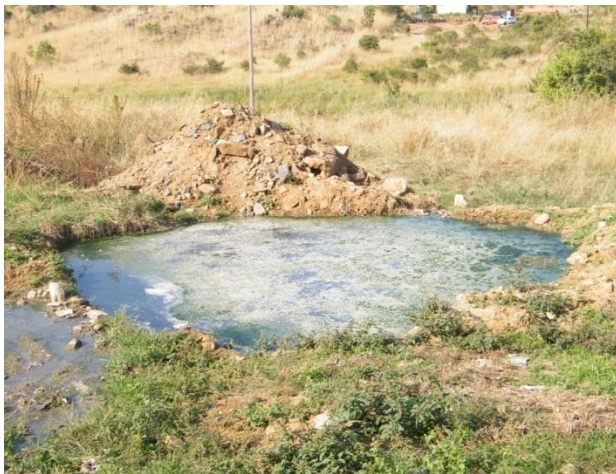


THE INKOMATI CATCHMENT MANAGEMENT AGENCY MOVING MOUNTAINS TO PROTECT WATER RESOURCES

Water is not only a finite resource but the most precious resource and one that is taken mostly for granted. The Inkomati Catchment Management Agency (ICMA) is an agency of the Department of Water Affairs established to manage, control and protect water resources at a local level. Ideally, the management of water resources should be integrated in its approach. In other words, it should take into account the nature and impact of land based activities, the requirements and fitness for use of down-stream users, including neighboring countries as well as consult with stakeholders or interested and affected parties to agree on the level of protection that is required in the various water resources. The broader objective of managing water resources is to manage it for current and future generations, which means that water must be managed in a sustainable manner. The ICMA has been hard at work trying to implement and achieve this objective of sustainable integrated water resource management.

A complaint was received by the ICMA in January 2012 in respect of pollution of water resources taking place, where sewage was allegedly overflowing into the water resource at Elukwatini sewer pump station. The next day an inspection was conducted by the ICMA where it was observed that a 40mm diameter pipe was being used to pump waste water from the pump station to the main sewer line. The pipeline was found to be very small in size resulting in intermittent clogging and overflow of raw sewage into the water resource.



Picture showing a pond that was dug to contain the overflow of raw sewage (raw sewage entering the pond on left of picture). The pond is full and overflows in to the nearby resources (overflow on the far end of the picture).

The municipality dug a pond to contain the overflow in case of pump failure. This was done to prevent raw sewage from reaching the river but the hole filled up and still overflowed into the water resource. Because the hole was not lined, the containment posed potential risk to ground water pollution. This pollution was actually taking place approximately 600m upstream of the municipal abstraction point, where the municipality is drawing raw water for purification and reticulation to the community. This posed a further health risk and possible outbreak of diseases should there be a slight challenge with the treatment and disinfection.

According to locals, the pollution and the unbearable smell of raw sewage has been happening for approximately four (4) years without any remedial action from the municipality. After a number of inspections and engagements between the municipality and the ICMA, the pollution was finally stopped.



Pictures showing the septic tank during construction (left) as well as after construction

By the end of October the municipality had finished with the upgrading and refurbishments including the construction of a septic tank that will now contain the overflow in case of pump failure as well as the replacement of the 40mm pipeline with a bigger pipeline. The process was long and tedious and at the time it seemed like a never ending affair. However the ICMA showed tenacity and commitment in resolving the matter. The municipality also took the ICMA's role and recommendations seriously and acted accordingly. Today, there is no more pollution taking place. Both the risks of polluting the resource and the health and fitness for use of downstream users including the communities of Elukwatini who were being supplied with water abstracted less than one kilometer downstream from impact point have been drastically reduced. It is a win-win situation for all concerned, including the environment.