

CONDITION ASSESSMENT BEFORE REHABILITATION

TRENCHLESS TECHNOLOGY AN INTRODUCTION

This presentation is being done on behalf of Southern African Society of Trenchless Technology (SASTT)

The pipelines are not the assets, it is the lined holes that are the assets.

Relationship between the holes and linings needs to be understood

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

WHY THIS TOPIC ON A STORMWATER COURSE ?

It is just a matter of time before problem of collapsing sewers is going to start occurring more frequently with stormwater drains

As stormwater drains are bigger than sewers – the structural failures and consequences will be more serious.

Lots to be learnt from how problem with sewers is and can be addressed.

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

MAN NEEDS WATER



SA HAS A WATER CRISIS

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

It is not what we are
MIS-LED TO BELIEVE

IT IS THE WASTE

Because many PIPES are OLD
and need REHABILITATION

PIPES SARF ROAD DRAINAGE COURSES 2022


BURST WATER MAINS



At least 25 % of purified water lost

PIPES SARF ROAD DRAINAGE COURSES 2022

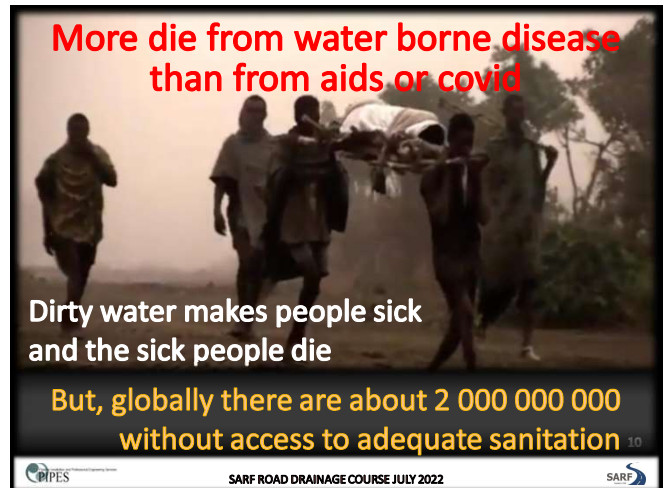
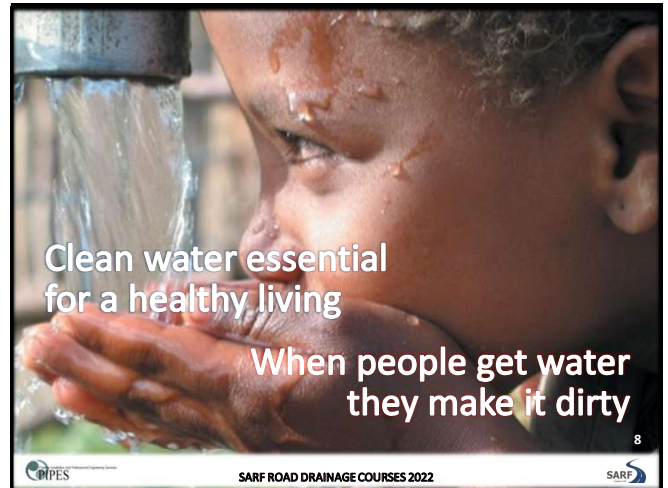
OVER FLOWING SEWERS



At least 40 % overloading of sewers

PIPES SARF ROAD DRAINAGE COURSES 2022

CONDITION ASSESSMENT BEFORE REHABILITATION



CONDITION ASSESSMENT BEFORE REHABILITATION

THE REAL PRIORITIES



The desperate backlog in wastewater disposal

FIRST THINGS FIRST

The existing old sewer systems deteriorating

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

HOLISTIC APPROACH NEEDED

People want *taps* and *toilets*

Taps only work if *water supply* works

Toilets only work if *sanitation* works

Real *BENEFITS* only when *WATER SUPPLY* and *SANITATION* BALANCED

REQUIRES RELIABLE PIPELINES

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

PIPES AND CULVERTS BURIED . . . OUT OF SIGHT



No routine inspections,
Their health unknown
No warning about potential problems

PIPES SARF ROAD DRAINAGE COURSES 2022



And then
Who takes the blame . . .
Who sorts out the problem?
How is problem resolved?

PIPES SARF ROAD DRAINAGE COURSE JULY 2022

DETERIORATED SEWERS

Not just corrosion, but erosion at sides, leaking joints, siltation and loss of bedding

PIPES SARF ROAD DRAINAGE COURSES 2022



Activities leading to cavities forming that eventually day light as sinkholes

PIPES SARF ROAD DRAINAGE COURSES 2022

3