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Building in Resilience in the face of Climate Change Threats

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INFRASTRUCTURE

Indaha





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ISSUES

Protecting the resource or developing new technologies to augment the resource is important BUT

Are we designing resilience into the infrastructure that distributes our precious resources such as electricity and water?







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Blocked culverts cause overtopping and damage to the road and services























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Blocked Culverts lead to overtopping roads and damage

















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Damaged sewers pollute the water resource









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What about your WWTW?





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Canal damage exposes cables













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Mondi-Sapref Supply







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Flooded Switching Station















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Damage to Umgeni Water Nagle Aqueducts







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Solutions – Best Practices

- Evaluate the Risks flooding, erosion, landslides etc
- Managed Urban Rivers Transformative Riverine Management Program – cheaper to manage rivers than replace infrastructure.
- Debris walls to reduce blockage risk
- Design roads to withstand overtopping
- Regular inspections and maintenance of infrastructure





Conclusions - Way forward

- Properly evaluate all the risks when designing the infrastructure.
- Learn from every disaster.
- Understand the impact of climate change have on the asset that you are designing to last 50 to 100 years.
- Engage the roads and stormwater engineers.



