

Infrastructure Dialogues

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ADM Context

- Serviced by approximately 300 regional and local water supply schemes
- Population served approx 1 million
- Covers 7 local municipalities
- Asset replacement cost: R563 475 246
- Spent on maintenance & refurbishment : R12 382 406 [1.25% of overall budget]



New Infrastructure

- Demand for New infrastructure
 - Large service backlogs
 - High urban growth rates
 - Water scarce area –drought impact
 - High demand for housing
- Demand for new infrastructure is substantial and requires substantial allocation of financial and technical resources



Operations & Maintenance

- O&M of bulk infrastructure managed by Amatola Water
- O&M is an improvement area for ADM
- Currently in reactive mode with resources responding to critical needs
- ADM was challenged to amalgamate own staff with ex-LM staff and ex-DWAF staff



Operations & Maintenance

- People
 - Require more O&M resources to deal with planning and management
 - Require focused training for field operators
- Inherited dilapidated bulk services with no funding reserves to refurbish and/or upgrade



Operations & Maintenance

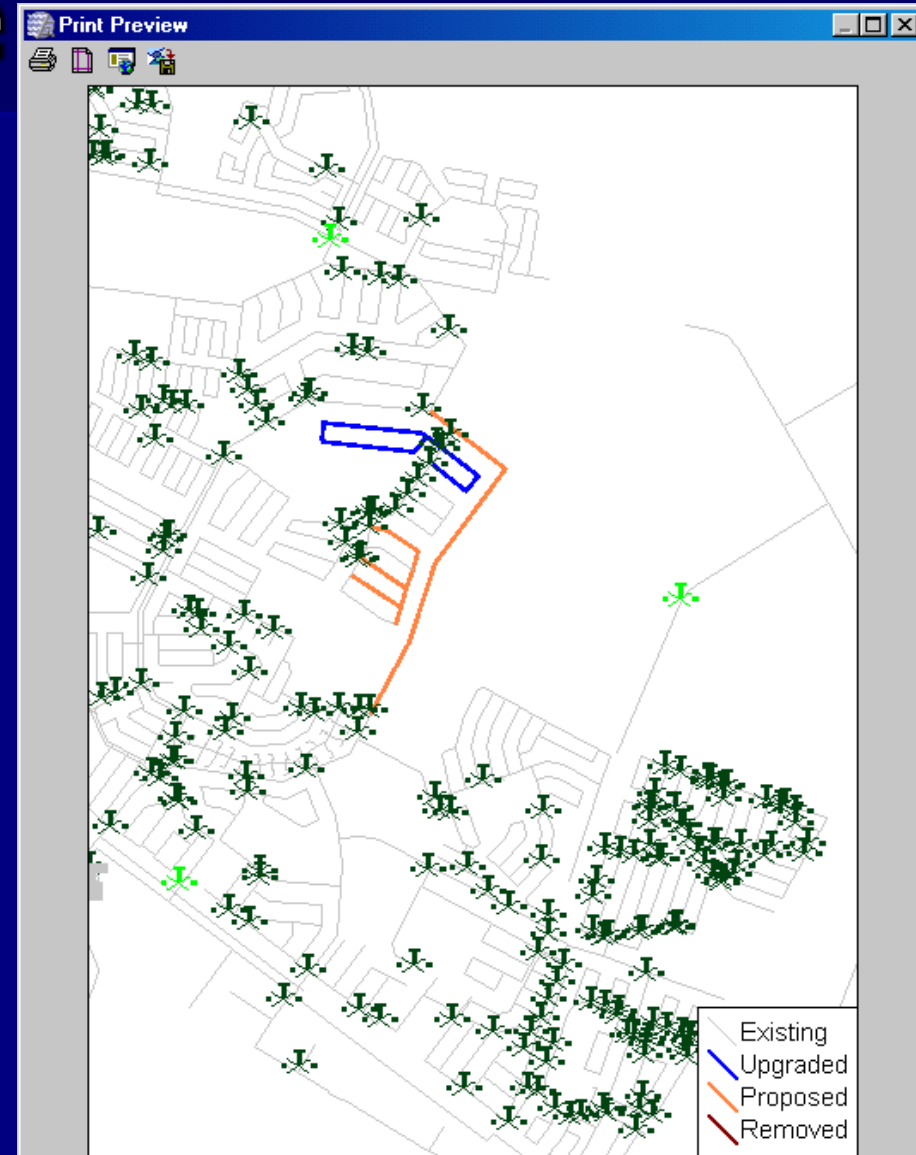
- Software
 - Have sophisticated software that can deal with maintenance, but have to implement more modules to fully utilize features
- Data
 - Are in process of improving data with asset register, GIS capturing, plan organisation
 - Need better condition assessment and data management
- Processes
 - Processes to deal with data, planned maintenance, inspections, customer problems, communication with finance are needed



Operations & Maintenance

■ Software

- Are working towards a comprehensive software solution
- Many modules covering planning and O&M
- Multi-year implementation needed
 - no quick fix to get systems in place
- Staff have to grow with the system to ensure sustainability
- In process of implementing modules



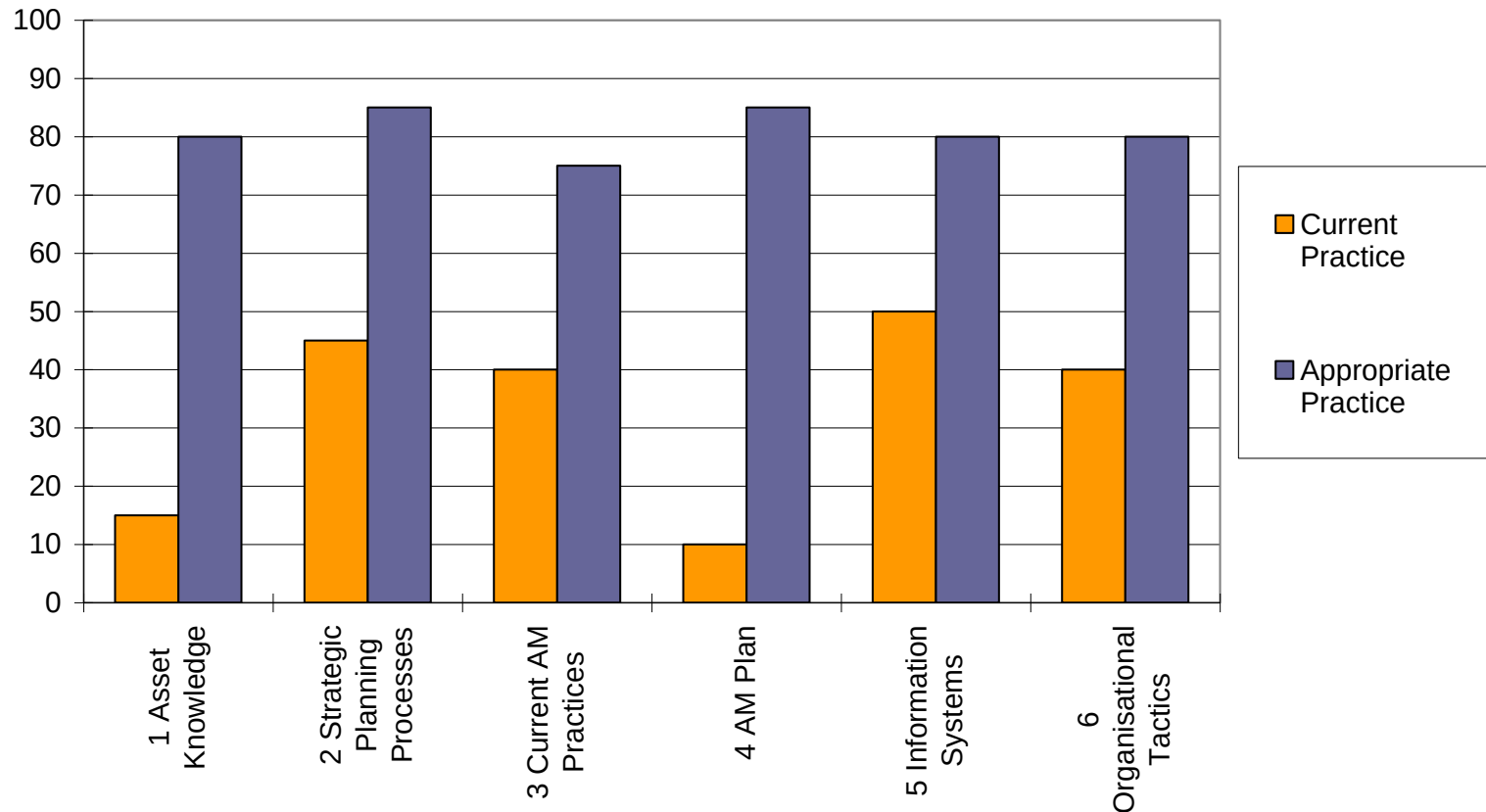
Infrastructure Asset Management

- New technical discipline for ADM
- Have started with a situational assessment of current practices and improvement plan



Infrastructure Asset Management

Summary



Infrastructure Asset Management

- Key improvements
 - Human resources
 - Asset Management Co-ordination
 - Data Management Processes
 - Software Implementation
 - Asset condition and performance information
 - AMP's / Future Expenditure Models



		Year 1 09/10	Year 2 10/11	Year 3 11/12	Year 4 12/13	Year 5 13/14
	Human Resource Issues	Skills & HR Planning (R100k)	Level 1 AM Training (R200k)	Level 2 AM Training (R200k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)
	Asset Management Coordination	Develop AM coordination, Policy & Strategy (R300k)	Improve AM Policy & Strategy (R100k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)
	Data Stds, Data Flows, Roles & Responsibilities	Define data structure and data flows (R200k)	Implement data flows (R300k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)
	Asset Management Data	Compile Level 1 Asset Register (R500k)	Collect detailed data on high risk assets (R500k)	Collect improved data on medium risk assets (R500k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)
	Asset Management Systems	Determine Detailed Systems Needs (R100k)	Implement first Improvement (R500k)	Implement second improvement (R500k)	Implement third improvement (R500k)	Part of Normal Business Practice (R 0k)
	Asset Management Plans	Level 1 Asset Mgmt Plans AMP 09/10 (R500k)	Level 2 Asset Mgmt Plans AMP 10/11 (R500k)	Level 3 Asset Mgmt Plans AMP 11/12 (R500k)	Part of Normal Business Practice (R 0k / BU)	Part of Normal Business Practice (R 0k / BU)
	Future Expenditure Models	Future Expenditure Model 09/10 (basic) FEM 1 (R200k)	Future Expenditure Model 10/11 (advanced) FEM 2 (R900k)	Future Expenditure Model 11/12 (refine) FEM 3 (R400k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)
	Asset Mgmt Improvement Plans	Compile Improvement Plan (R50k)	Compile Improvement Plan (R50k)	Compile Improvement Plan (R50k)	Part of Normal Business Practice (R 0k)	Part of Normal Business Practice (R 0k)



Infrastructure Asset Management

■ Summary

- Do not have a consistent understanding of the inputs and outcomes
- Wrt asset mgmt planning - WSDP is very comprehensive, but needs to align with Asset Management thinking
- Currently do not have a good understanding of the condition of all assets and the replacement needs



Infrastructure Asset Management

■ Summarycont

- First step is for awareness to be raised in the organisation
- Next steps are for implementation of asset management practices, but rate of adoption of new practices must be balanced with internal human capacity at all levels of org.
- Data, software, new processes, etc. will have little long term effect if the resources are not in place to manage



Conclusion

- ADM are aware of the relevance of infrastructure asset management
- Some activities are consistent with asset management implementation
- Need to focus implementation in a structured manner



MUNICIPAL WASTEWATER TREATMENT - A REGIONAL AND NATIONAL PERSPECTIVE -

***Raising performance through a regulatory risk-based
approach***

Eastern Cape Water Indaba

28 July 2009



SA recognised of its excellence in wastewater practices, but... increased concerns regarding wastewater services in conforming to 'good practice' principles. Underlying causes:

- planned (preventative) maintenance & operations – growing backlogs
- technical skills gaps
- insufficient funds
- lengthy internal systems and processes
- inadequate monitoring of quality and flows
- forward planning
- etc



Summary of First Order Assessment of Wastewater Treatment Works in the Eastern Cape Province

June 2009 – Work in Progress



water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

Distribution of WWTWs in the Eastern Cape



National Water Service Regulation Strategy

1 of 3 priority areas outlined in the NWSRS (2008)

- concentrate regulatory efforts to address compliance and performance problems in *priority municipalities*
- particularly where *risks* pose serious threats to health and the environment -

**“First Order Assessment of the
Status of Wastewater Treatment Works in South Africa”**



- ✓ status of *municipal owned* WWTW in South Africa / regional basis
 - ✓ develop a prioritized *risk-profile* of each plant / WSA



Questions?

