

Right First Time The City of Edinburgh Council Road Services



**Presentation to APSE Roads and Street
Lighting Advisory Group**

4 March 2011

**by
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In the beginning...

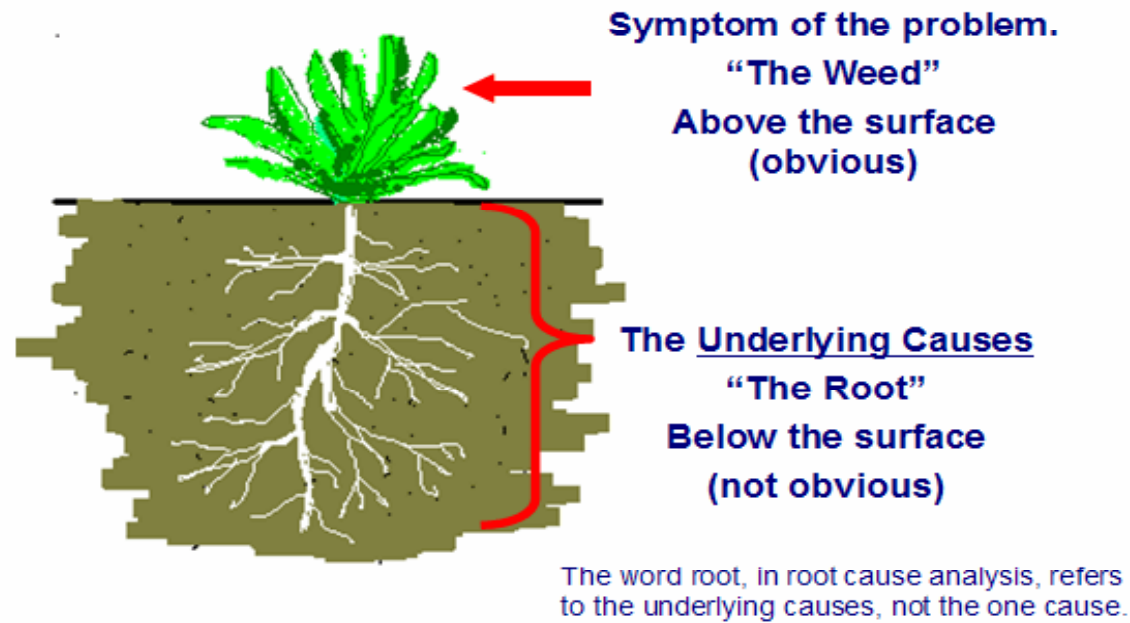


**Duplication
Confusion
Delay
Chasing
Quality suffered**

Looking at Whole Systems



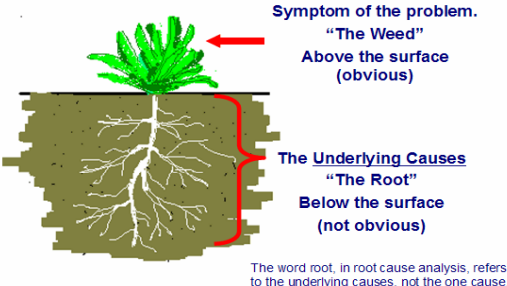
Root Cause Analysis Basics



Looking at Whole Systems



Root Cause Analysis Basics

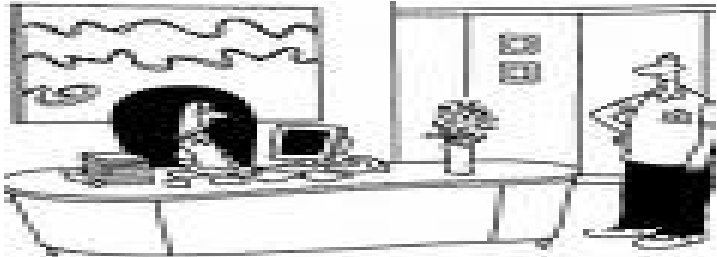
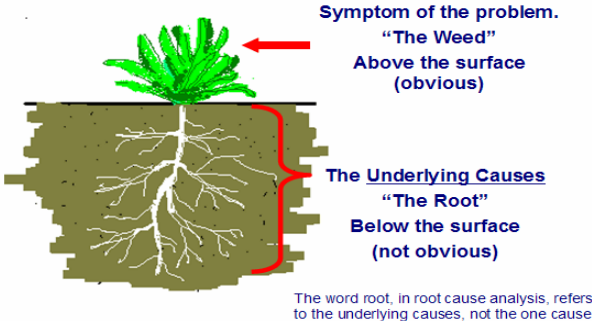


"Someone calling themselves a customer says they want something called service."

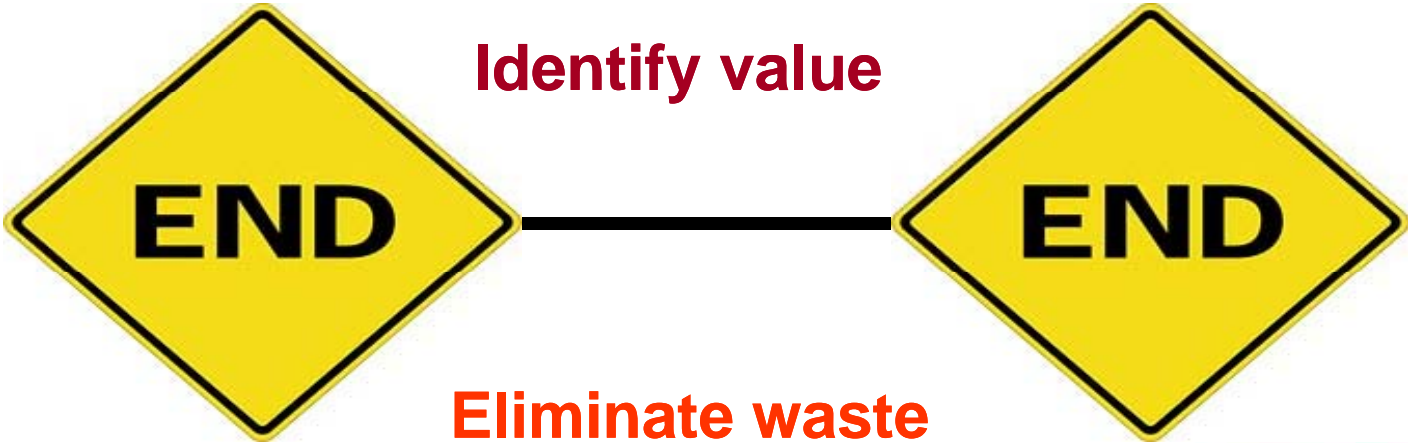
Looking at Whole Systems



Root Cause Analysis Basics



"Someone calling themselves a customer says they want something called service."



Some of what was wrong with previous measurement methods?

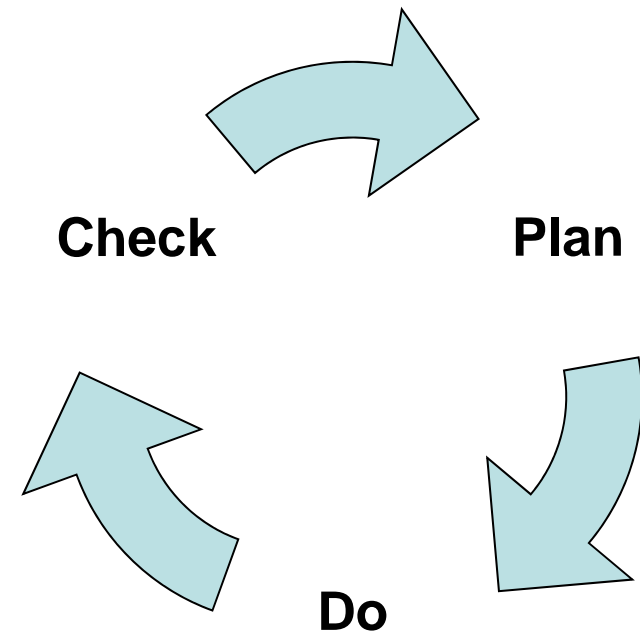


- We measure from an internal perspective
 - VIP MAIL (10 working days)
 - Temporary Pothole repairs (3 working days)
- We only measure parts of the process
 - Gully's
- The use of targets and standards cause "cheating" – drives the wrong behaviour
- Targets and standards cause Parkinson's law

Systems Thinking: Experts at the Front



- Front-line staff have the best data and ideas
- Check – plan – do
- This is ongoing and leads to Continuous Improvement



RFT Projects in Edinburgh



Correspondence



Potholes



Gullies



Roadworks
Support



Street
Lighting



Right First Time

Gully Cleaning & Jetting

Pre-RFT



- 4 Vehicles \Rightarrow City split into 4 quadrants
- Service was managed from 2 depots
- Vehicles diverted to reported blockages
- Operatives paid in line with Output Based Incentive Scheme
- Poor recording of gully cleaning data



2005 – Gully Routes

- List of streets
- No gully locations/numbers
- No way of recording which gullies cleaned



EDINBURGH
THE CITY OF EDINBURGH COUNCIL
EDINBURGH ROADS SERVICES

ROUTINE GULLY CLEANSING ROUTE



2005 to 2008 – Gully Routes



- Each gully recorded in GIS with a unique identification number
- Record of most appropriate method of cleaning
- Gully Cleaning Routes issued as a list of streets with the number of gullies on each street and a location map for each gully



The Journey of a Gully Route (2008)



Gully Team retrieve data from GIS

- ↳ Gully Team Print Route & Maps (30 – 40 pages)
- ↳ Info passed to Supervisor
- ↳ Info passed to Operative
- ↳ Operative cleans gully and records actions/exceptions
- ↳ Info returned to Supervisor
- ↳ Info returned to Gully Team
- ↳ Gully Team input into GIS

Pre-RFT – Exception Reports Process



Details recorded by Operative

- ↪ Information returned to Neighbourhood Team
- ↪ N'hood Team produced HP Jetting Works Instruction
- ↪ Works Instruction passed to Road Services
- ↪ Works Instruction passed to Operative for HP Jetting
- ↪ Information returned to Neighbourhood Team



WASTE



- Supervision – joint management
- Bonus Payments
- Route management
- Report management
- Duplication
- Not closing the loop



RFT Improvements



Centrally managed team:

- 8 Operatives
- 4 Gully Vehicles
- High Pressure Jetting Squad
- Hand-cleaning Squad

Suspension of Incentive Scheme



RFT Improvements



- 52,000 gullies assigned to new Neighbourhood based routes
- 3 Gully Vehicles, Jetting and Hand squads operate in one Neighbourhood until completion
- 1 Gully Vehicle deals with Reports across the City



RFT – Journey of a Gully Route



Supervisor retrieves data from GIS

- Data transferred onto Tablet PC
- Tablet PC passed to Operative to identify gully route and record actions/exceptions
- Tablet PC returned to Supervisor
- Data transferred onto GIS



RFT – Exception Reports Process



Details recorded by operative in tablet PC

- Tablet PC returned to Supervisor
- Data transferred onto GIS
- HP Jetting Route generated within GIS
- HP Jetting Route transferred onto tablet PC
- Tablet PC passed to Jetting Operative to identify jetting route and record actions/exceptions
- Tablet PC returned to Supervisor
- Data transferred onto GIS
- Defective gully details emailed to Neighbourhood Teams

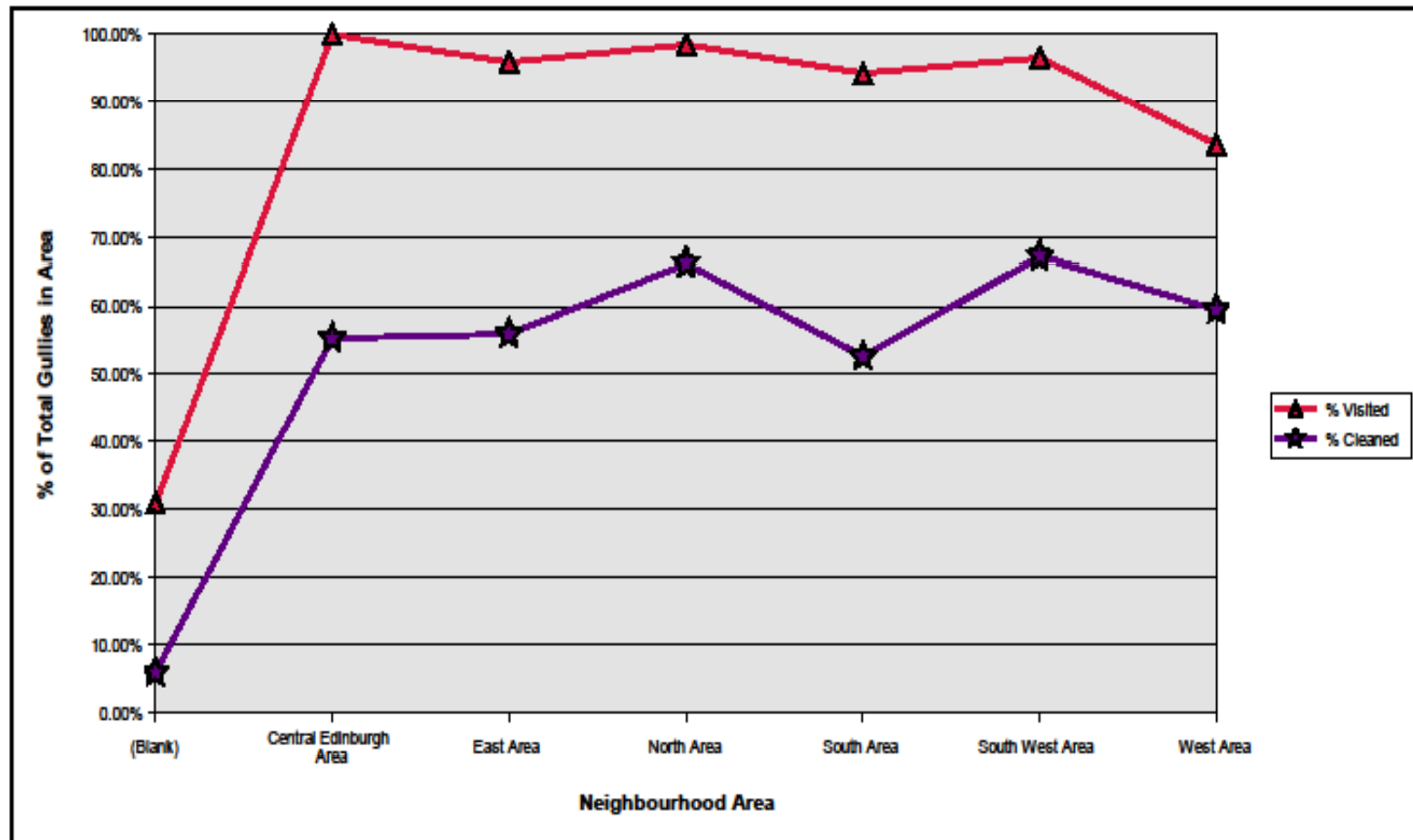
RFT – Results Apr – Nov 2010



- 94% of gullies visited on a routine basis were cleaned, with 87% cleaned RFT
- 87% of reported blocked gullies were cleared, with 82% cleared RFT
- 77% of high pressure jetting work was successful, with 83% of blockages cleared RFT
- In-cab IT system has produced annual savings of:
 - admin time by 80%
 - printing 20,000 sheets of paper

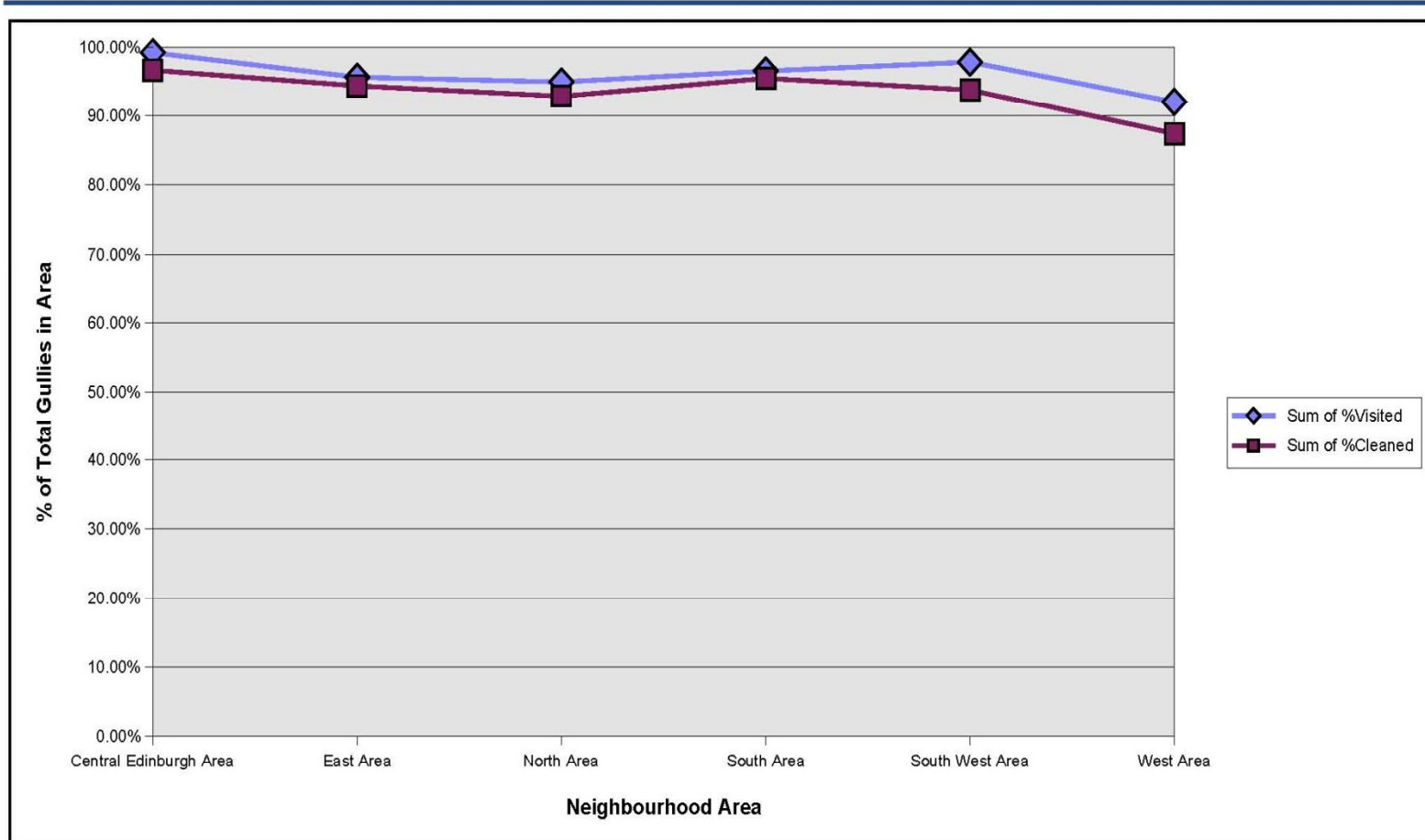
% Gullies Visited & Cleaned By Area

Gullies Cleaned Between 11/11/2007 And 09/11/2008



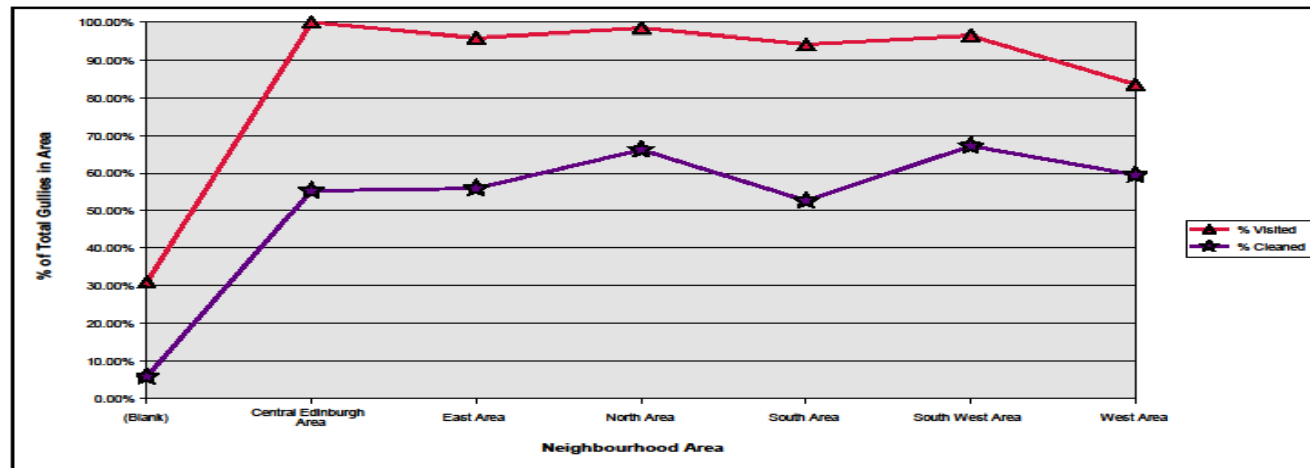
% Gullies Cleaned by Neighbourhood Area

Gullies Cleaned Between 01/04/2009 And 20/05/2010



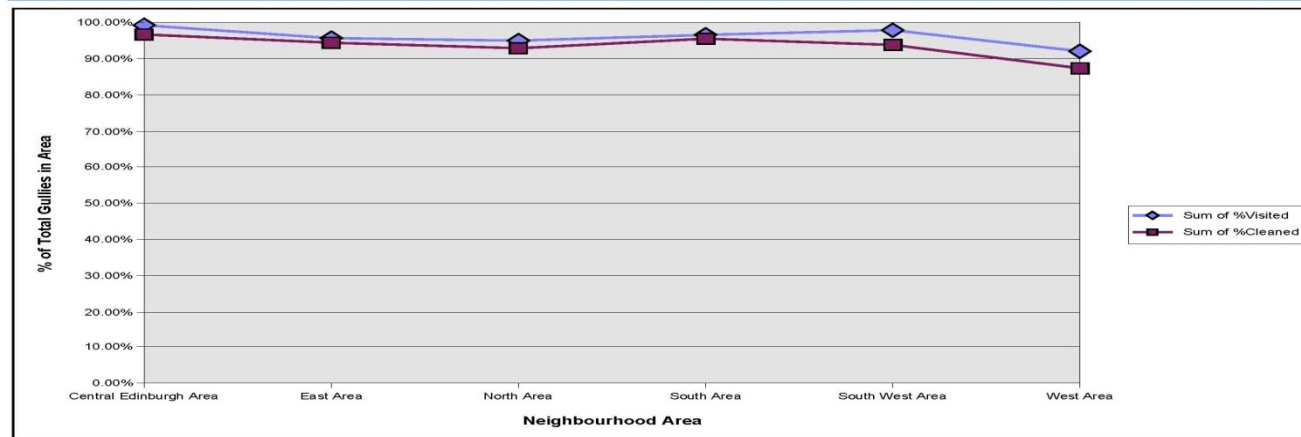
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% Gullies Cleaned by Neighbourhood Area

Gullies Cleaned Between 01/04/2009 And 20/05/2010



Gully Cleaning & Jetting – The Future



- Maintain front-line team to undertake gully repairs
- Recovery of justifiable costs for Public Utility damages
- Relocation of back-office team to Operational Depot
- Production of suite of Reports for Neighbourhood Teams, Elected Members and Community Groups

RFT – Quotes from staff

- *“I can now see the progress we have made over the past year and I hope to continue”*
- *“I like working as part of the gully team and can see the progress made over the last year”*
- *“I have been with the Council for 20 years and this is the first signs of real improvement in gully cleaning system and can now see how the system progresses”*



Expect the Unexpected



APSE – Winner “Best Efficiency” Award - 2010







Thank You