

# Right First Time The City of Edinburgh Council Road Services



Presentation to APSE roads, highways and  
street lighting advisory group

November 2010

by  
Alison Angus & Alan Simpson

the guardian  
**Public Services  
Awards 2009**

in partnership with **HAYS**

**Winner**



# In the beginning...

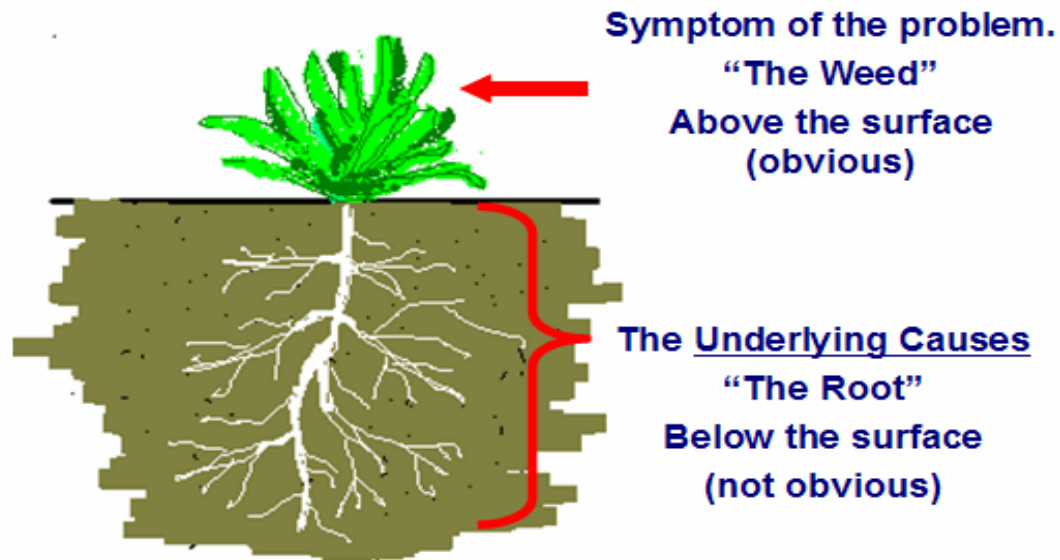


**Duplication  
Confusion  
Delay  
Chasing  
Quality suffered**

# Looking at Whole Systems



## Root Cause Analysis Basics

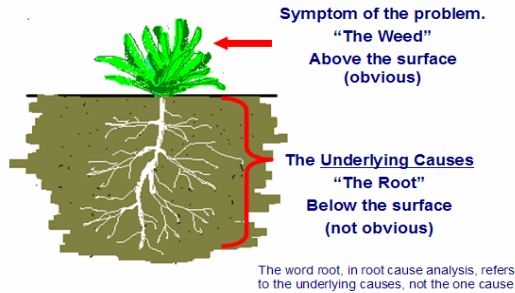


The word root, in root cause analysis, refers to the underlying causes, not the one cause.

# Looking at Whole Systems



## Root Cause Analysis Basics

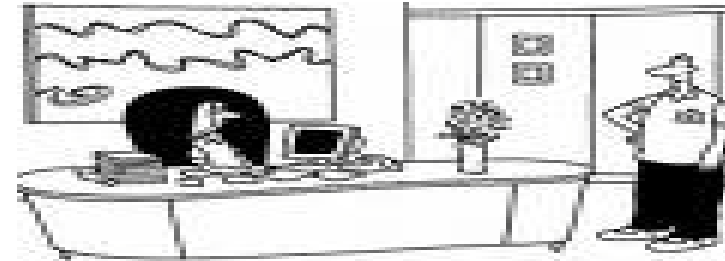
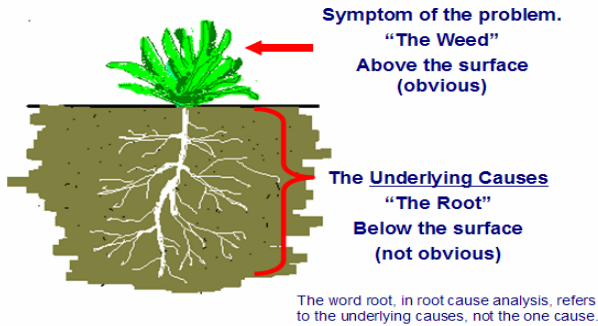


"Someone calling themselves a customer says they want something called service."

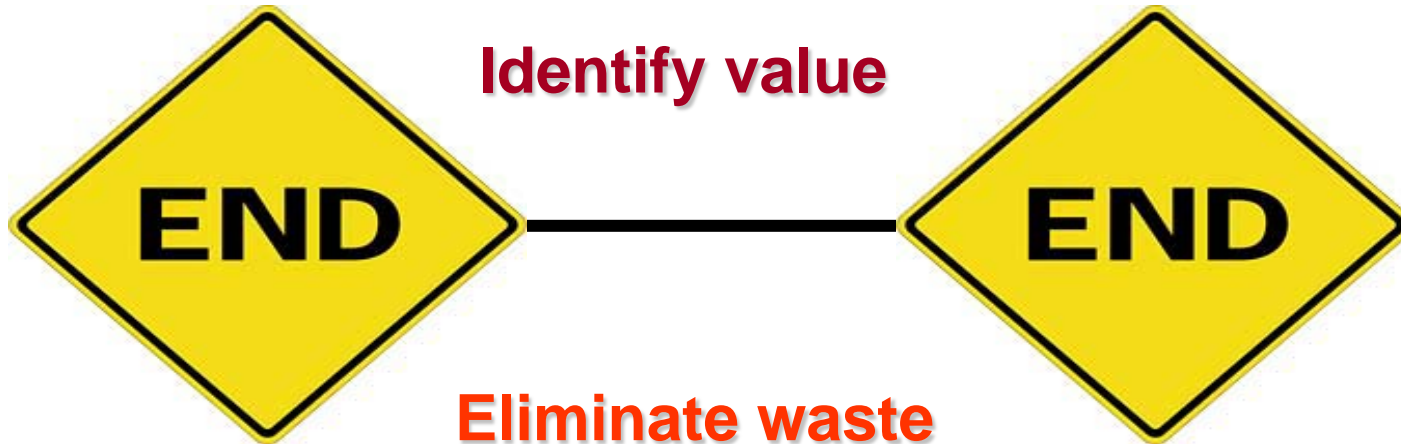
# Looking at Whole Systems



## Root Cause Analysis Basics



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



# Some of what was wrong with previous measurement methods?

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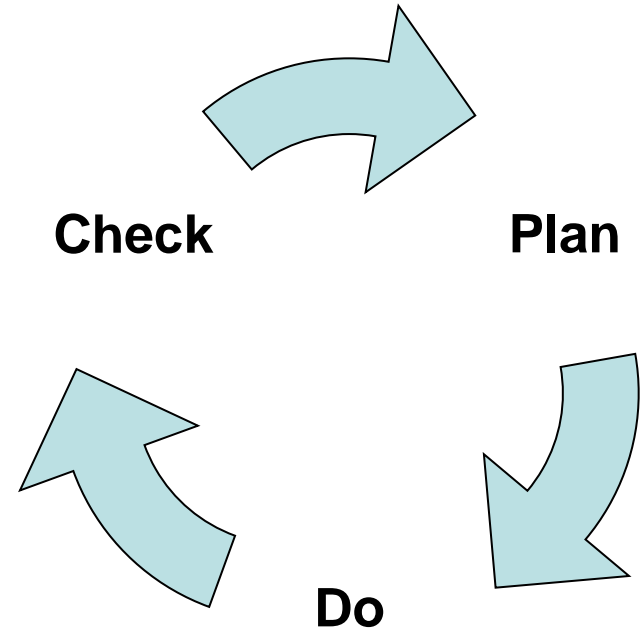


- We measure from an internal perspective
  - VIP MAIL (10 working days)
  - Temporary Pothole repairs (3 working days)
- We only measure parts of the process
  - Gully's
- The use of targets and standards cause "cheating" – drives the wrong behaviour
- Targets and standards cause Parkinson's law



# 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 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

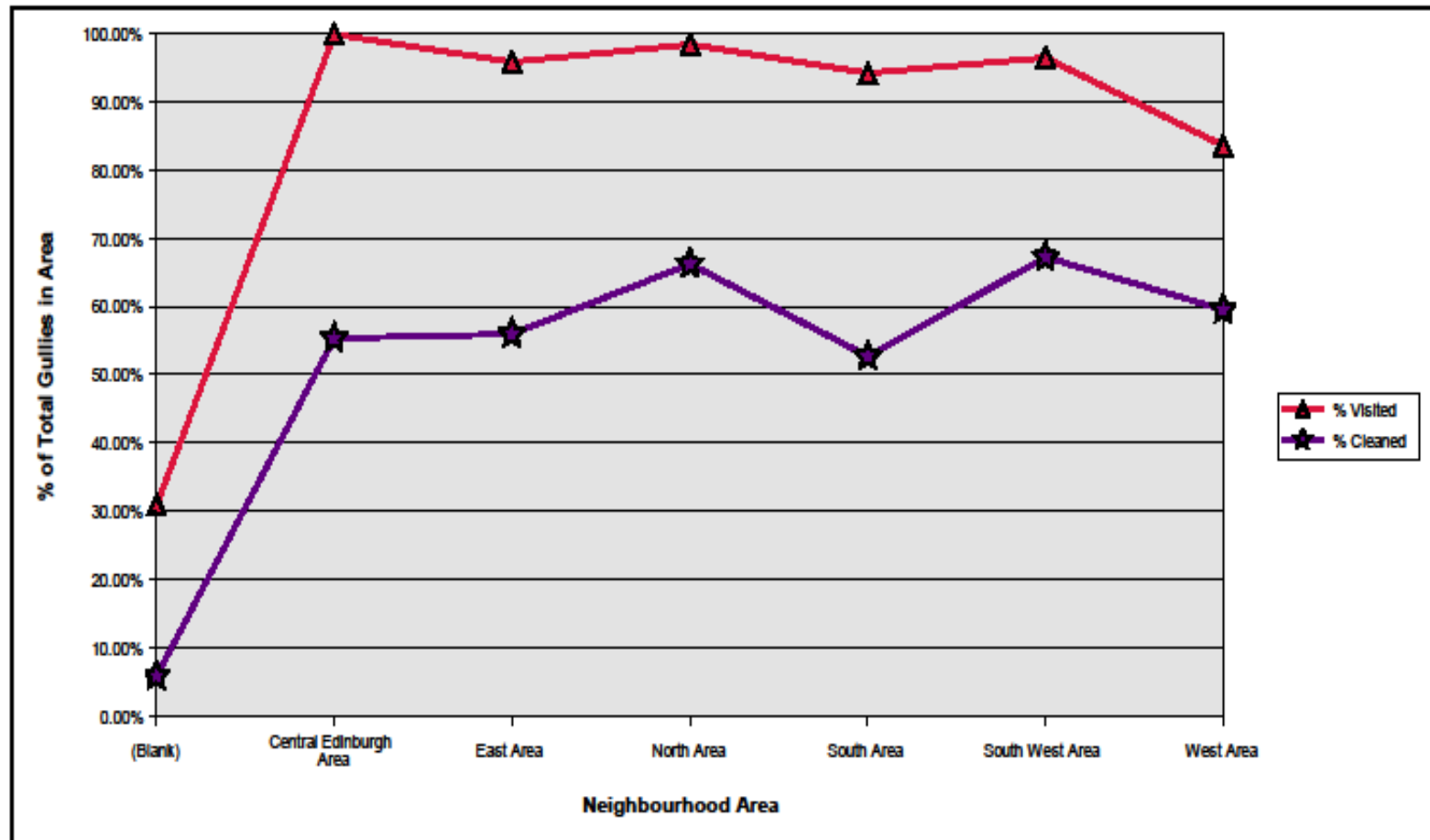
# RFT – Results over last 6 months



- 93% of gullies visited on a routine basis were cleaned, with 87% cleaned RFT
- 86% of reported blocked gullies were cleared, with 84% cleared RFT
- 77% of high pressure jetting work was successful, with 89% of blockages cleared RFT
- In-cab IT system has produced annual savings of:
  - admin time by 80%
  - printing 20,000 sheets of paper

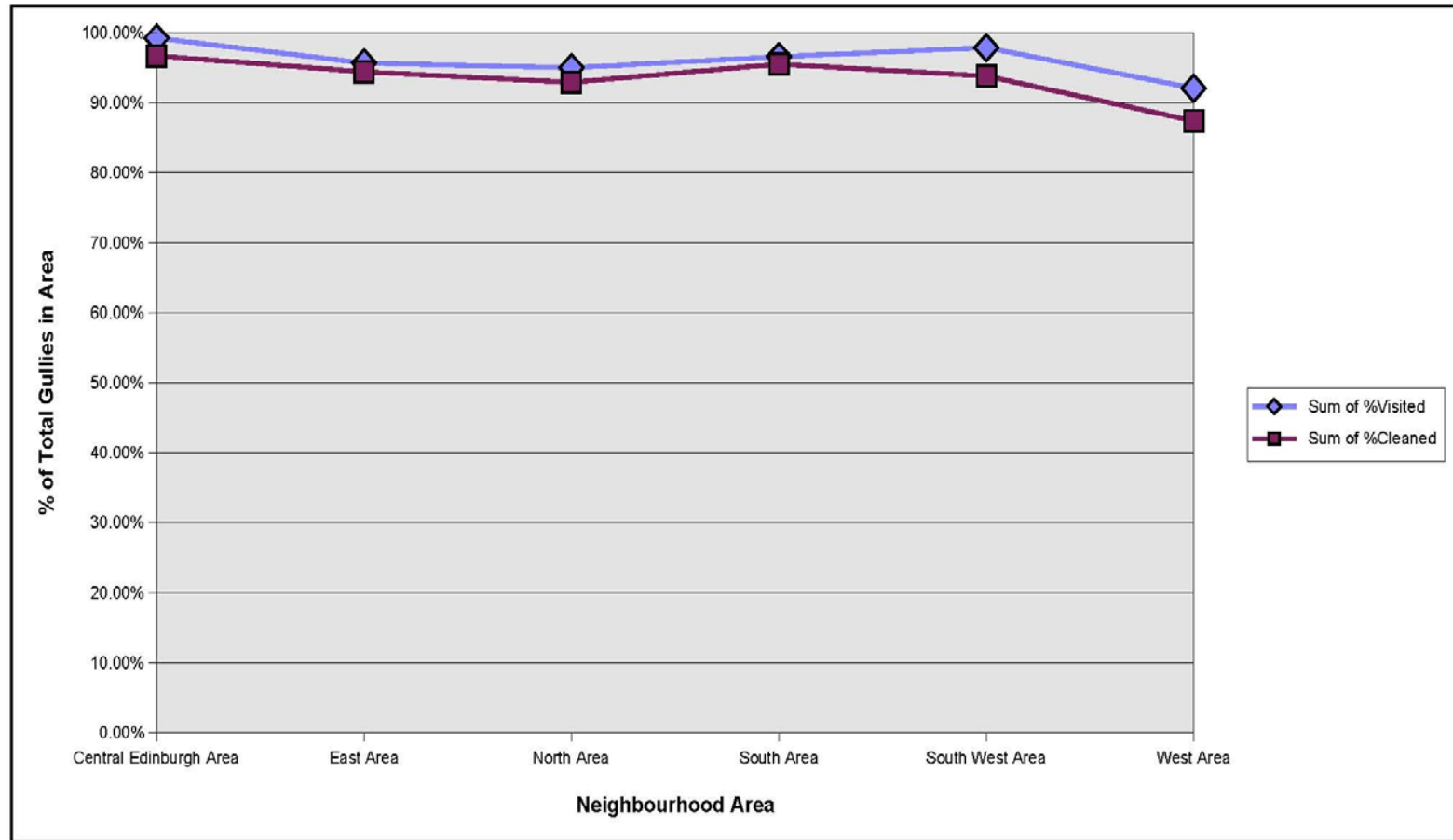
# % Gullies Visited & Cleaned By Area

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



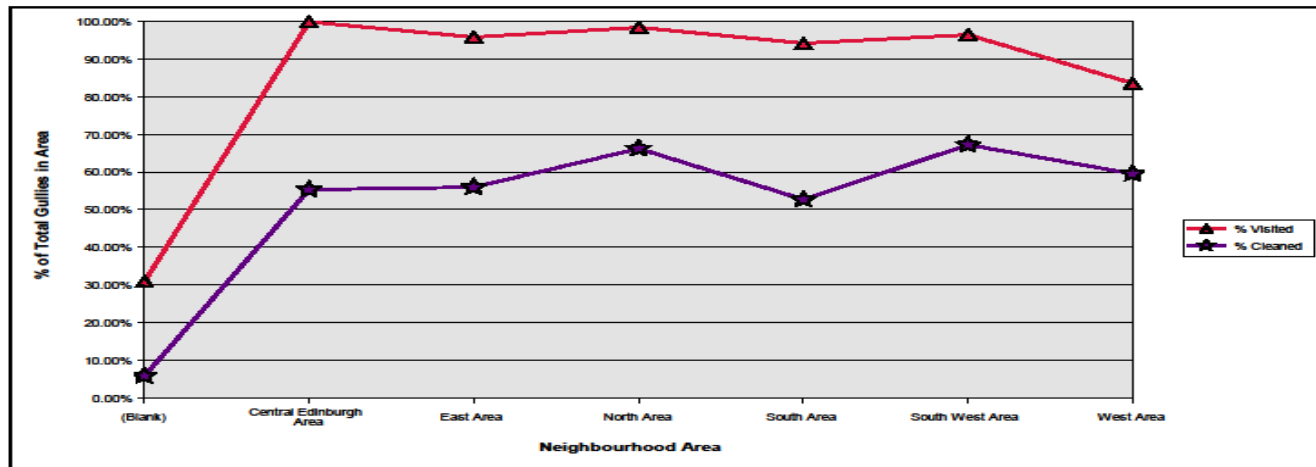
# % Gullies Cleaned by Neighbourhood Area

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



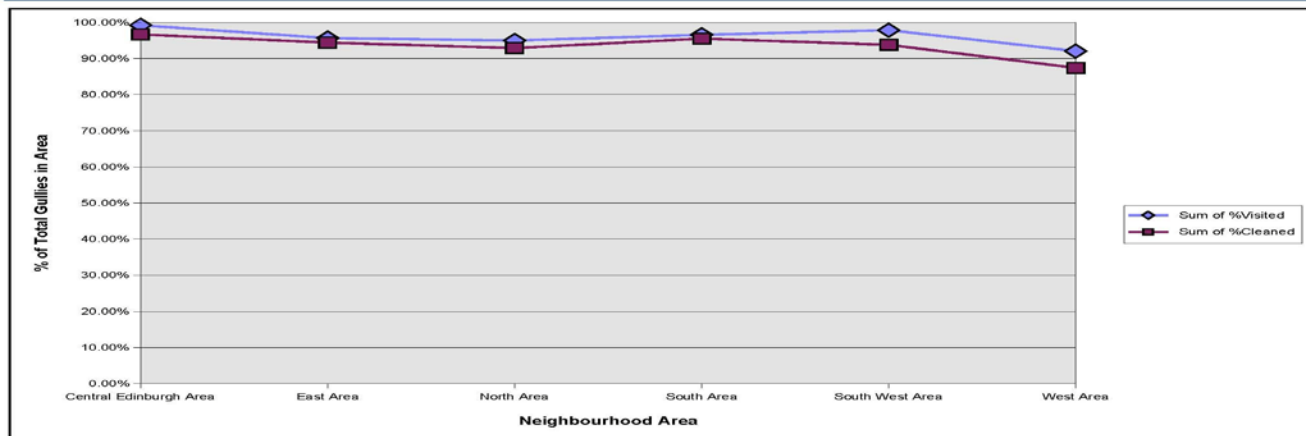
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## % Gullies Cleaned by Neighbourhood Area

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



# Gully Cleaning & Jetting – The Future



- Increase 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**