



## **DIRECTOR SHIRE SERVICES REPORT**

14 June 2005

**DSS1                      STREET SWEEPING SERVICE**  
**FILE: G1-X              WJL**

### **SUMMARY:**

Reporting on the environmental implications of reducing the Street Sweeper Program.



Council, at its meeting of 18<sup>th</sup> January 2005 resolved:

"That a report be prepared for Council's consideration in conjunction with the 2005/06 draft budget, in respect to the comparative costs of the cleaning of street gutters within the streets of the Shire compared to the ultimate damage to roads with the over spill of stormwater due to blocked gutters as well as the long term environmental damage to the waterways."

Local governments may sweep streets to prevent contaminants from vehicles from reaching surface waters. While many local governments may sweep the streets to improve community aesthetics or as part of combined sewer or storm water programs, street sweeping is also an effective tool in protecting water resources.

Contaminants typically found on streets include the following:

- Particulates from local soil erosion
- Nitrogen and phosphorus from local plants and soils
- Phenolic compounds from wear of asphalt street surfaces
- Grease, petroleum, n-paraffin, and lead from vehicle leaks and spills
- Lead, zinc and asbestos from tire wear
- Asbestos, lead, chromium, copper and nickel from clutch and break lining wear.

Street sweeping protects surface waters by removing solids such as sand, debris, and litter that would otherwise be transported to the surface water during a rain event. Street sweeping also prevents contaminants that may be absorbed by sand and debris from reaching surface water.

Apart from the aesthetic reasons for sweeping the streets, regular sweeping removes the build up of weed growth along kerbs, reduces expensive road maintenance and minimises drainage gully blockage by removing the build up of sand and leaves.

In addition to the regular sweeping program, attendance is required at fuel and oil spills, broken glass, sand drift and vehicle accidents.

Increasing use of the sweeper is being made by the roadwork crews to clean up after each completed project and frequent use is necessary at road resurfacing works and where road operations are undertaken.

Roads are cleaned on a continuous basis and in addition any shopping centre car parks are swept on a weekly basis. During winter months particular attention is focused on areas where rain washes material on to the roads and at drainage low points where material accumulates. The current sweeping program sees the majority of main streets in Kempsey Shire being swept as per a Works Schedule. [\(Appendix A\)](#)

This schedule incorporates sweeping in Kempsey, South West Rocks and Crescent Head. Additional street areas are done on a request basis, along with Private Works jobs.

The program incorporates the sweeping of main thoroughfare areas and central business districts of the towns, sweeping of carpark areas such as IGA and Big W and daily sweeping of the Kempsey CBD area.

It should be noted that the operator also undertakes duties as part of the Trade Waste Service and also acts a relief staff member during periods of leave.

In 2004 / 05 budget, \$132,750 was allocated for street sweeping activities, \$95,000 of which was allocated for direct collections costs (Labour and Plant)

Since the development of Key Performance Indicators, average service levels have been constant, at about 2000 km per month, with additional private works being sourced as a supplemental income stream. This additional stream of income is generated from works for commercial businesses such as Pioneer, Big W, Boral and for works such as sub-divisions and road patching.

Over the past few years, the number of streets included in the sweeping program has been reduced. While once most residential streets were swept routinely, many have now been removed from the schedule and are only swept on an as-needs basis. These are usually done following a report of broken glass or blocked drains.

The reduction in residential sweeping impacts on the amount of material finding its way into the stormwater system. Rather than removing the material from the road and gutter system, it is left to the installed Gross Pollutant Traps (GPT's) or other screening systems to prevent the material finding its way into the water system.

Recently a number of GPT's at South West Rocks and Crescent Head were inspected and cleaned by the Works crew. The type of material collected in the GPT is evident in the included photo [\(Appendix B\)](#).

Much of this material could have been removed through the implementation of a more regular street sweeping program.

All roads within Kempsey Shire that have kerb and guttering are also sealed. Should these gutters not be cleared regularly and become blocked, stormwater spillage will occur. Prolonged exposure to excess stormwater caused by block drains could lead to a number of problems. These include: the lifting of the seal itself, impregnation of the pavement causing road failure, twisting of the kerb and gutter infrastructure, damage to sub-grade; and flooding of properties due to water runoff.

## **REPORT IMPLICATIONS:**

### ▪ ***Environmental***

***The sweeping of streets is seen as a proactive approach to minimising the amount of litter and debris that ultimately finds its way into the stormwater system and also to prevent blockages in the drainage system during high rainfall events.***

### ▪ ***Social***

***The provision of a sweeping program for the urban areas of the shire reduces the amount of litter and improves the aesthetics of the town. Visitors and residents appreciate that the streets and gutters are cleared of debris on a regular basis and that Council are providing a service that not only improves aesthetics, but assists in the protection of the waterways.***

### ▪ ***Economic (Financial)***

***For the 2005/06 year, \$135,500 has been allocated to the provision of street sweeping activities.***

- *Policy or Statutory*

*There are no Policy or Statutory implications arising from this report.*

- *Director's Review*

*As per the report*

**RECOMMENDATION:**

**That the information be noted.**

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**DIRECTOR SHIRE SERVICES**  
**K J Finnie**