

**CITY COUNCIL AGENDA
STAFF REPORT**

Agenda Date: March 21, 2005
Prepared on: March 15, 2005
Reviewed by _____

SUBJECT: Residential Street Sweeping Program Options

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RECOMMENDATION

That the City Council direct staff to pursue a monthly street sweeping program and the accompanying installation of permanent signage regarding the City's residential street sweeping program.

BACKGROUND

The City is required by its National Pollutant Discharge Elimination System Permit (NPDES Permit), which is enforced by the Regional Water Quality Control Board (RWQCB), to conduct street sweeping on a monthly basis, or propose an alternative street sweeping program subject to approval by the RWQCB.

In the past, the City has conducted an alternative street sweeping program consisting of a citywide residential street sweeping three times per year, and commercial street sweeping on a weekly basis (Buchanan Street, Solano Avenue, Posen Street, San Pablo Avenue, Cleveland Avenue, and Masonic Avenue). Public notification for the residential sweeping has been provided by flyers. In addition, cones with "No Parking" signs were placed on the streets to be swept approximately 2-3 days before the scheduled sweeping, and removed following the sweeping by the City's Maintenance Department.

Funds to implement an enhanced program were instituted in 2001, when the City put into effect a 2.58% franchise fee specifically earmarked for street sweeping. However, the enhanced street sweeping was never put into place, largely due to a lack of staff time to plan, develop and administer such a program. Contract sweeping was implemented in 2002 due to the advanced age of the City's sweeper.

At this time, the City's residential street sweeping program has been in fluctuation, and has not been entirely effective. Several issues have led to the inadequacies in this program including staffing constraints, lack of dedicated oversight and lack of a sweeping schedule.

In October, 2004, Council approved a recommendation to move the administration of this program to the Community Development Environmental Resources program in order to facilitate implementation of the originally proposed enhanced street sweeping program. Staff has been working together to develop and cost out several options for Council consideration that are presented below.

ANALYSIS

The issues related to an enhanced street sweeping schedule include the following:

Regularity of Schedule and effectiveness at keeping streets clean: The residential street sweeping schedule has fluctuated annually, with sweeping occurring on various months throughout the year, with an average of three to four sweepings per year. In 2004, street sweeping occurred only during the month of November. This fluctuating schedule makes the residential street sweeping program ineffective. Intuitively, if street sweeping is infrequent, streets are not as clean. Also, a fluctuating schedule does not give residents the opportunity to get accustomed to a set schedule, making street sweeping a less visible community benefit.

Public notification: The City's Maintenance Department has traditionally conducted coning of residential streets with "No Parking – Street Sweeping" laminated signs stuffed into the cones. Preparing the cones and coning the streets are highly labor-intensive activities. In addition, unloading cones from maintenance vehicles is a somewhat unsafe work practice. Also, once placed along the streets, these temporary cones may be difficult for some drivers to see because of their small size, and the cones can easily be relocated or stolen. Staff receives complaints from parkers whenever this system is used, particularly from those who come from out of the area and are unfamiliar with the cone system.

The cost to conduct coning averages approximately 210 crew-person hours or \$12,200 in labor per sweeping, which quickly adds up per number of sweepings conducted annually. Additionally, with this amount of time dedicated to coning the streets, other ongoing responsibilities of the City's Maintenance Department are adversely impacted.

Options for Street Sweeping Program: Three options were developed to address these issues, and are discussed in detail in the accompanying report.

Option 1: Maintain the three times a year street sweeping schedule, with temporary coning.

Option 2: Increase the street sweeping to four to six times a year, including temporary coning.

Option 3: Institute monthly street sweeping and install permanent signage.

RECOMENDATION

Based on the requirements from the Regional Board to have an effective street sweeping program, the relative costs, and the greatest potential benefit to the public, staff recommends a monthly street sweeping program and the accompanying installation of permanent signage.

FINANCIAL IMPACT

The financial impact varies depending on the option(s) selected and the enhancements made to the street sweeping program as discussed within this report. The recommended monthly street sweeping program would cost approximately \$40,000 for the annual operations, plus a onetime cost of about \$160,000 for purchase and installation of signage. Currently operational funds are available from street sweeping franchise fees (\$40,000) and from the Clean Water program of the storm drain fund (\$50,000). In addition, \$150,000 is available from prior street sweeping fees which were placed in an equipment reserve fund. These funds could be used for purchase and installation of signage.

Attachments

Report on Street Sweeping
Survey of other Bay Area cities

REPORT ON STREET SWEEPING

Dedicated Annual Street Sweeping Schedule

Preparation of a dedicated street sweeping schedule will allow for one comprehensive flyer to be mailed to residents at the beginning of the year, which will list the specific day of street sweeping for their location. This activity requires up-front planning to identify a schedule that can coincide with the City's garbage and recycling services, and allows for an effective means to conduct sweeping without overly displacing residents parking locations. A dedicated street sweeping schedule will also provide a more visible program to the community, and allow all persons who receive notices to be aware of the set schedule. Further, a dedicated street sweeping schedule will allow for a more effective street cleaning to achieve the goals of sweeping to capture litter, debris, sediment, particulate matter, etc. from City streets.

Public Noticing – Use of Permanent “No Parking – Street Sweeping” Signs

Permanent “No Parking – Street Sweeping” signs within the residential areas are an option that would enable the City to avoid the labor-intensive and reoccurring necessity to stuff, place, and collect cones. The main intent of signage is to ensure cars are not parked in the path of the sweeper, since parked cars prevent the sweeper from accessing the curbside, thereby minimizing the effectiveness of the sweeping. Additionally, cars parked in the sweeper's path can increase the amount of sweeping time, and pose a potential safety concern, as the sweeper must maneuver around the cars. Additionally, these signs would be more readily visible to the general public as they are at a higher level (approximately six feet high) than the cones (approximately 3 feet high). Permanent signage would also provide an ongoing form of notification to residents and others who park along the City's residential streets, which is not provided by the temporary cones or the notification mailer. Further, permanent signs would allow for a more efficient means to identify violators of no-parking signs by the City's parking enforcement division.

Costs: Staff collected cost estimates from local sign fabrication and installation companies as shown below:

Signage – City purchases directly from manufacturer:

Cost per sign (includes post, anchor, sleeve, rivets) totals \$108.85

Cost of 1,200 signs X \$108.25/sign totals \$55,870

Installation - Outsourced:

\$100 per sign (1,000 signs): \$100,000

Total: \$155,870

City staff would be responsible for locating the placement of signs and coordinating USA marking, which would involve City Maintenance staff as well as Environmental Resources staff time. The estimated labor costs for locating signs is approximately \$4,000 (65 hours at \$58.15/hour). Funds are available in the Street sweeping reserve account which currently has a balance of \$168,084.

It is recommended that signs be purchased directly by the City and that installation of signs be outsourced. This will allow the City to have a backup supply of signs and associated equipment as opposed to the contractor purchasing the materials. Additionally, outsourcing the installation is recommended as opposed to having the City's Maintenance Department conduct the work since this project would require a significant amount of staff time. The total for this work, including the signs, is \$155,870.

3. Street Sweeping Frequency and Cost Effectiveness

Prior to contracting the services of UBS, the City traditionally conducted its own street sweeping. However, in 2001 the City's existing street sweeper was in need of major repairs, which allowed for decisions regarding how street sweeping is conducted. A 2.58% franchise fee was included on the garbage and recycling franchise to provide a funding mechanism to purchase a new sweeper, and develop a program to sweep residential areas. Revenues of approximately \$55,000 per year were placed into the street sweeping fund, to fund the purchase of a new street sweeper (estimated to cost approximately \$150,000 - \$200,000). However, staff determined that the purchase of a sweeper and the use of the City's limited Maintenance staff to sweep were not as economical as contracting out the street sweeping. Additionally, ongoing repairs and maintenance of the sweeper would add to the costs for a City sweeper, which are not a concern when sweeping is outsourced. Thus, UBS has been conducting sweepings for the City since 2002. Currently, a residential sweeping costs approximately \$3,200 per sweeping for a sweeping schedule of three to four times per year.

Potential Resolution: Increased Frequency of Street Sweeping

The cost associated with sweepings can be reduced even further depending on the frequency of sweepings. Costs decrease based on the increased frequency of sweeping because a more frequent sweeping provides for cleaner streets, which take less labor hours to sweep when swept consistently. For instance, street sweeping costs approximately \$3,200 per sweeping for three to four sweepings per year, while a monthly, scheduled sweeping averages \$2,300 per sweeping. Additionally, if permanent no-parking street sweeping signs are allowed, which is necessary for the monthly sweeping option, there is a greater chance that sweeping routes will be cleared, thereby resulting in better access to the curb area and more efficient overall sweeping. Further, the reduction in debris from the City's streets is the primary goal of street sweeping, and this goal is much more effectively achieved with a monthly sweeping as compared to a random interval of sweepings over a few months. The following further examines the varied options for street sweeping frequency including associated costs and benefits.

Street Sweeping Frequency Options

Three variations of the City’s street sweeping program are detailed below, with varying levels of effectiveness, including both pro and con for each program, mostly in reference to the issues discussed above.

Option 1: Status Quo

Sweeping Frequency	Associated Costs	Total
3 times per year between July & Oct. 31	\$3,420 per sweeping	\$10,260

Notification Process	Associated Costs	Total
Printing/Mailing Flyers	\$2,040	\$2,040
Preparing cones/coning*	15,200	\$45,600

\$57,900

*Preparing cones and coning has also been outsourced for approximately \$7,500 plus City staff time required for contractor oversight.

Option 1 provides the “Status Quo” of what the current street sweeping program consists of, assuming that the three to four sweepings are in fact coordinated.

PRO:

- This option would not require any changes to the program, but has proven to be somewhat time consuming.

CON:

- This option does not provide a very high benefit for the associated costs and labor that will be spent to implement the program. With the low frequency of sweeping three to four times per year, the program is not entirely as effective as it could be and streets will invariably remain fairly dirty throughout the majority of the year.
- This option would rely on the labor-intensive method of coning the streets which tends to limit the number of sweeps to a few months out of the year. In addition, the cost justification to install permanent signage (if signs were to be installed) is lacking given that street sweeping would only occur three to four times annually.
- Public noticing and awareness of the street sweeping program are lacking in this option as the randomness and infrequency of the periodic sweeping is not as visible as a routine monthly sweeping.

Option 2: 6 Month Sweeping Program

Sweeping Frequency	Associated Costs	Total
6 times per year	\$3,420 per sweeping	\$20,520

Notification Process	Associated Costs	Total
Printing/Mailing Flyers	\$2,040	\$2,040
Preparing cones/coning*	\$15,200 per sweeping	\$91,200

\$113,760

*Preparing cones and coning has also been outsourced for approximately \$7,500 plus City staff time required for contractor oversight.

Option 2 provides a minor enhancement to the “Status Quo” and increases the street sweeping schedule to six times per year.

PRO:

- This option would basically double the amount of sweepings conducted on an annual basis, thereby allowing for more debris to be removed from the City’s streets.
- Visibility of street sweeping could be increased given the increase in sweeping frequency.
- Public noticing could be a bit more comprehensive given that the notice would include six months worth of scheduled sweeping

CON:

- Although this option provides for a better cost benefit ratio, overall sweeping costs are still higher.
- This option would still rely on the labor-intensive method of coning the streets, and does not allow for the constant reminder of the sweeping schedule that the permanent “No Parking Street Sweeping” signs provide.
- Public noticing and awareness of the street sweeping program are still lacking in this option in that the randomness and infrequency of the periodic sweeping is not as visible as a routine monthly sweeping. However, the six-month approach for noticing the public would be more effective than in Option 1.

Option 3: 12 Month Sweeping Program

Sweeping Frequency	Associated Costs	Total
12 times per year	\$2,300 per sweeping (prevailing wages)	\$27,600

Notification Process	Associated Costs	Total
Printing/Mailing flyers	\$2,040	\$2,040
No-Parking Street Sweeping Signs - Upkeep	\$5,000	\$5,000
		<u>\$36,640</u>

Initial Capital Improvements		
Fabrication/Installation of No-Parking Street Sweeping Signs	\$160,000	\$160,000

Option 3 provides a major improvement to the “Status Quo” and would increase street sweeping frequency to twelve times per year.

PRO:

- This option would increase the amount of sweepings conducted on an annual basis to a monthly sweeping, allowing for the largest amount of debris to be removed from the City’s streets.
- Visibility of street sweeping could be significantly increased given the monthly sweeping frequency.
- Public noticing would be simplified in that one comprehensive mailing would only be need per year.
- The cost benefit ratio of a monthly sweeping is high, given that the average cost for the sweeping declines due to the minimized amount of debris on the streets and thus the less labor time required for each sweeping.
- Monthly sweeping allows for a regularly scheduled program which justifies placement of dumpsters at the Maintenance Center for ongoing servicing, which avoids the costly dumping fees associated with the more random sweeping intervals of the above options.
- The labor-intensive method of coning the streets would not be needed with a monthly sweeping. Therefore this option requires enhancement of signage via permanent “No Parking Street Sweeping” signs. Based on a review of other cities in Alameda County that have signage, it appears that a good average would allow

signs to be placed approximately 250 feet apart to allow for a minimal number of signs while ensuring signs remain highly visible.

- Following the initial start-up costs, this program is the most feasible and effective of the three options.

CON:

- The start-up costs for this option are much higher than the other options given that permanent signage would be required.
- Some may see the addition of signs to City streets as a form of sign pollution or clutter.

These options provide Council with a variety of approaches for how to develop a structured street sweeping program. After weighing the associated costs, meeting program goals and permit mandates, as well as increasing overall benefits, Option 3 seems to be the most effective option to pursue. Option 3 allows for the highest frequency of sweeping with the greatest amount of debris removal, and provides the most public awareness of this service. Additionally, associated costs of Option 3 are more reasonable than those in Option 1 and 2 given the benefits received.