

MEMORANDUM

To: Public Works Committee

From: Angela M. Podesta, Utilities Superintendent *AMP*

Through: Carl S. Goldsmith, Director of Public Works *g*

Date: April 7, 2010

Subject: Clear Water Disconnect Program

Introduction

In 2000, the Board of Trustees adopted a Clear Water Disconnect Policy (Policy #00-2 attached) to reduce the amount of clear water overloading the Village's sanitary and combined sewer systems. The Policy targeted simple low cost disconnection of downspouts and minor interior piping but did not address full disconnection of foundation drains, etc. The Policy provided for a grant program that reimbursed the resident on a sliding scale depending on how quickly the resident performed the disconnection. A notice of violation was issued if the disconnection did not occur within 12 months of being notified.

A substantial amount of clear water enters the sewer system during wet weather events. Clear water disconnection programs have the following benefits:

1. Reduce sewer backups and downstream surcharging;
2. Protect waterways from polluted water;
3. Reserve sewer capacity for future development;
4. Reduce collection, pumping, and treatment costs;
5. Reduce capital investment in larger, duplicate pipes;
6. Extend service life of existing sewer system and wastewater treatment works;
7. Utilize the single-most cost-effective method of reducing clear water flows.

Some of the issues associated with disconnect programs are as follows:

1. Inconvenience and potential cost;
2. Increased overland flow and depressional storage of clear water;
3. Icing potential during winter months due to more overland flow of water.

Background

In the mid-1990s, Olde Towne reconstruction began by installing a new sanitary lift station to handle sanitary sewer system flows but not wet weather flows. As a result, Public Works was authorized to initiate an Olde Towne pilot clear water disconnect program. Before homes were inspected, it was decided by staff to develop a comprehensive program and developed the policy that was passed by the Board of Trustees in 2000.

In 2001, the Village hired a company to inspect the 234 homes in the Olde Towne area and found out of the 216 inspections, 18 had downspouts connected and 42 had sump pumps connected to the sanitary sewer. The inspection company did not identify homes that had foundation drains directly connected to the sanitary sewer service. In accordance with Policy 00-2, \$3785.00 was paid out for reimbursements to residents for downspout and minor sump pump piping.

After the Olde Towne project, the Clear Water Disconnect Program was not funded for several years. The Program is now funded in the Capital Improvement Program at \$50,000. Staff supports revising the Clear Water Disconnect Program because of the impact wet weather events have on the sanitary lift stations and sanitary sewer overflows. To illustrate the impact wet weather has on the Village's lift stations, I have attached a comparison of wet weather vs. dry weather flow for the Fairview Lift Station. The additional flow results in increased operating and treatment costs, increased wear on the equipment and occasionally sanitary sewer overflows. These overflows must be reported to the IEPA and are subject to fines and penalties

The Old Grove neighborhood is tributary to the Fairview Lift Station. Staff recently did an informal survey of the area and found 91% of the homes visited had their sump pump connected to the sanitary sewer. The 2000 policy would consider the disconnection of the sump pump from the sanitary sewer and routing it outside to be minor interior piping and be eligible for a maximum of a \$500 grant. However, in the homes that were inspected, 68% had the laundry tub connected to the sump pit so the sump pump cannot daylight outside without re-plumbing the laundry tub. Although the inspection did not specifically track floor drains, staff recognizes that most basements have one and the plumbing code does not allow a floor drain to be connected to the sump pump when it discharges outside.

Staff investigated lower cost alternatives to installing a separate ejector pit and pump in the homes that have the laundry tub connected to the sump pit and/or a floor drain. A common practice to separate the laundry tub from the sump pit is to install an above grade sump pump basin (laundry box) that is connected to the sanitary sewer. The Village also received approval from the Illinois Department of Public Health Plumbing Program that will allow existing floor drains that do not collect more than clear water to remain connected to the sump pit and discharged outside.

Staff has contacted several plumbers to get cost estimates for the following modifications: disconnecting the laundry tub from the sump pump, adding the laundry box to pump to sanitary sewer; disconnecting the sump pump from the sanitary sewer and daylight to outside with the floor drain to remain connected to sump pump. Estimates ranged from \$835 to \$1,375.

Recommendations

Staff recommends amending the Clear Water Disconnect Policy (see attached Proposed Policy) to use 75% of the budgeted funds (\$37,500) to inspect homes and allocate grants for clear water disconnect in areas that are tributary to the Village's lift stations. The area tributary to each lift station was identified in the 1998 Lift Station/Pump Station Master Plan. Upon notice, the properties shall disconnect the sources of clear water from the sanitary sewer. The first area to be targeted in this program will be the area tributary to the Fairview Lift Station. The second area will be the area tributary to the Prairie & LaLonde Lift Station, etc. Each area will take several years to complete based upon the current funding of \$50,000 per year.

The remaining 25% of the budgeted funds (\$12,500) will be available for residents in any area of the Village that voluntarily want to participate in the program. Staff regularly visits homes that are experiencing sewer backups during wet weather due to their sump pump pumping too much water into the sewer service. They will now be able to offer the grant program to help these residents with the disconnection.

It is recommended that grant reimbursements be increased to a maximum of \$200 for disconnecting downspouts, a maximum of \$1,500 for sump pump disconnections and a maximum of \$5,000 if an ejector/sump pit is required to be installed in order to disconnect clear water source. At this time, the program will issue a disconnection waiver for work exceeding the maximum \$5,000 grant. A proposed grant application is attached.

The current policy includes a sliding scale reimbursement and allows the Director of Public Works to issue a disconnection waiver. Both items remain in the proposed policy. Unlike the existing policy, permit fees will not be waived but will be reimbursable under the grant.

Action Requested

Staff requests the Public Works Committee recommend the Board of Trustees approve the revised Clear Water Disconnect Policy which includes:

- Directing 75% of budgeted funds to disconnecting clear water sources in targeted areas tributary to the Village's lift stations and 25% available for voluntary disconnections;
- A grant program with reimbursements not to exceed: \$200 for disconnecting downspouts, \$1,500 for sump pump disconnections and \$5,000 if an ejector/sump pit is required to be installed in order to disconnect clear water source. Permit fees will be reimbursable under the grant, and;
- The Director of Public Works can issue a Disconnection Waiver in cases where a disconnect will cause a public safety problem such as, but not limited to, damage to adjacent structures or property; or creates a hazard in the public right-of-way; or where the work is not cost-beneficial (exceeds maximum \$5,000 grant). Disconnection waivers can be revoked in the future should the policy change.

AMP

VILLAGE OF LOMBARD
VILLAGE BOARD POLICY MEMORANDUM

Subject: **Clear Water Disconnect Grant Program**

Number: 00-2

Date: May 18, 2000

I. Purpose

The purpose of the Clear Water Disconnect Grant Program is to require owners to comply with Village Ordinance Section 50.026 which prohibits certain types of clear water connections to sanitary and combined sewers (such as downspouts and sump pumps). Grants will be offered to owners who have been notified by the Village to disconnect clear water sources from sanitary and combined sewers.

II. Procedures/Guidelines

A. Sites will be inspected to determine compliance with Section 50.026(B)(C) and non-compliant Owners will be notified to make disconnections within 12 months.

B. Owners may apply to Public Works Department for grants. 100% grants will be offered to owners if disconnection is made within 6 months from date of notice and 50% grants after 6 months but before 9 months. No grants will be awarded for work done after 9 months. After 12 months from date of request, owners must comply or be subject to penalties in accordance with Chapter 50.999.

C. Plumbing and electrical permits shall be obtained from the Bureau of Inspectional Services before work starts. Permit fees will be waived.

D. Grants shall be processed after final inspection and owner's acceptance of work. Grants shall be for actual work completed. Maximum grant for minor exterior (downspout) disconnect will be \$200 and for minor interior (sump pump) disconnect, \$500.

E. The funds available for this program shall be identified in the annual Capital Improvement Program.

F. Disconnection waivers may be granted by the Director of Public Works in cases where a disconnect will cause a public safety problem such as, but not limited to, damage to adjacent structures or property; or creates a hazard in the public right-of-way; or where the work is not cost-beneficial.

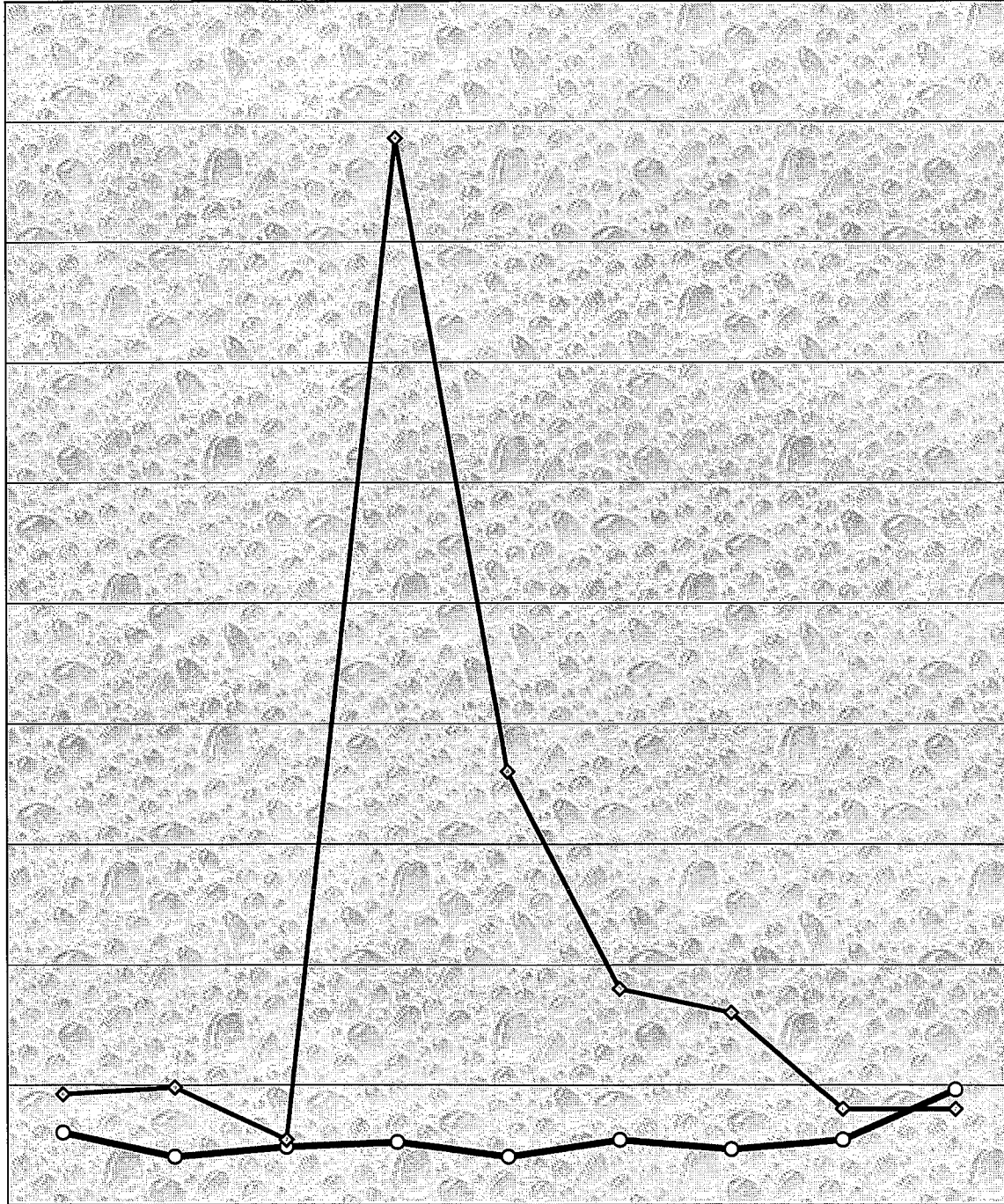
III. Legislation/Documentation

A. Minutes of Public Works Committee for March 14, 2000

B. Minutes of Board of Trustees May 18, 2000

Fairview Lift Station Wet Weather vs Dry Weather

8,380,000 Additional Gallons Pumped due to Wet Weather



—○— 8/15 to 9/05 —◇— 9/05 to 9/26

Clear Water Disconnect Grant Program - Application

(Last Revision April 2010)

General Information

Name: _____ Address: _____

Phone Number: _____ (Where you can be reached between 8:00am - 4:30pm)

DISCONNECTION WORK TO BE DONE (Check those that apply.)

____ Minor exterior disconnect (redirect downspout; \$200 maximum grant)

____ Interior disconnect (redirect sump pump piping, laundry tub; \$1,500 maximum grant)

____ Major disconnect (install ejector/sump pump; \$5,000 maximum grant)

Date of NOTICE to disconnect: ____/____/____ Attach copy of NOTICE from Public Works Dept.

The cost estimate for the proposed work is: \$ _____

The above information is true and correct to the best of my knowledge: _____
Signature of Applicant

The grant must be approved by a Public Works official and any necessary permits must be acquired prior to starting work.

Approved by:

Signature of Public Works Official

Print Name

Date

Request for Reimbursement

The disconnection work is completed to my satisfaction and I am requesting reimbursement. The total project cost is: \$ _____.

Signature of Applicant

Print Name

Date

Village Use Only

Verified by _____ that BIS permits were obtained Plumbing Electrical Final Inspection Passed
initials

Part 8 -- AUTHORIZATION FOR REIMBURSEMENT The applicant is approved for reimbursement for <100%><%50> of costs in the amount of \$ _____ for clear water disconnection work performed in accordance with VILLAGE Board of Trustees POLICY MEMORANDUM 00-2.

Signature of Public Works Official

Print Name

Date

VILLAGE OF LOMBARD
VILLAGE BOARD POLICY MEMORANDUM

Subject: **Clear Water Disconnect Grant Program**

Number: 00-2

Date: April 6, 2010

I. Purpose

The purpose of the Clear Water Disconnect Grant Program is to require owners to comply with Village Ordinance Section 50.026 which prohibits certain types of clear water connections to sanitary and combined sewers (such as downspouts and sump pumps). Grants will be offered to owners who have been notified by the Village to disconnect clear water sources from sanitary and combined sewers.

II. Procedures/Guidelines

A. 75% of available funds will be allocated for the inspection of targeted areas as determined by the Department of Public Works and grants for those areas. 25% of remaining funds will be available for property owners at large. Residential, commercial and multi-family properties are eligible for the grant.

B. Sites within the targeted areas will be inspected to determine compliance with Section 50.026(B)(C) and non-compliant Owners will be notified to make disconnections within 12 months.

C. Owners may apply to Public Works Department for grants. 100% grants will be offered to owners if disconnection is made within 6 months from date of notice and 50% grants after 6 months but before 9 months. No grants will be awarded for work done after 9 months. After 12 months from date of request, owners must comply or be subject to penalties in accordance with Chapter 50.999.

D. Plumbing and electrical permits shall be obtained from the Bureau of Inspectional Services before work starts. Permit fees will be reimbursed up to the maximum grant.

E. Grants shall be processed after final inspection and owner's acceptance of work. Grants shall be for actual work completed. Maximum grant for minor exterior (downspout) disconnect will be \$200, for sump pump disconnect, \$1,500 and for an ejector/sump pit installation, \$5,000.

F. The funds available for this program shall be identified in the annual Capital Improvement Program.

G. Disconnection waivers may be granted by the Director of Public Works in cases where a disconnect will cause a public safety problem such as, but not limited to, damage to adjacent structures or property; or creates a hazard in the public right-of-way; or where the work is not cost-beneficial. Properties with foundation drains tied directly into the sanitary sewer service will be given a disconnection waiver if the disconnection exceeds the maximum grant of \$5,000.

III. Legislation/Documentation

- A. Minutes of Public Works Committee for March 14, 2000
- B. Minutes of Board of Trustees May 18, 2000
- C. Minutes of Public Works Committee for April 13, 2010