

MOTION NO. 8825

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2 A MOTION authorizing the County Executive to implement  
3 a neighborhood drainage assistance program in the  
4 surface water management service area.

5 WHEREAS, the mission of the King County surface water management  
6 division as stated in K.C.C. 9.08.040 is to "promote public health, safety,  
7 and welfare by establishing and operating a comprehensive approach to  
8 surface and storm water problems...", and

9 WHEREAS, stormwater conveyance problems originating from private  
10 property runoff, damage both public and private property and affect public  
11 health, safety, and welfare, and

12 WHEREAS, stormwater conveyance problems located on private property,  
13 caused by runoff primarily from other private property were beyond the  
14 scope of the King County surface water management program prior to the  
15 passage of the 1992-1996 surface water management Strategic Plan, and

16 WHEREAS, on December 2, 1991 the King County council adopted  
17 Ordinance 10187, establishing the surface water management rates and  
18 charges, and

19 WHEREAS, Ordinance 10187 allows for the development of a new program  
20 to address neighborhood drainage problems, and

21 WHEREAS, the definition of a neighborhood drainage problem is a  
22 stormwater conveyance problem located on private property and within the  
23 King County surface water management service area, which is caused by  
24 runoff primarily from other private property and is currently outside King  
25 County's or other public agency's scope of responsibility, and

26 WHEREAS, the definition of an off-road system is any natural or  
27 constructed conveyance system outside of King County-maintained  
28 right-of-way;

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NOW THEREFORE, BE IT MOVED by the Council of King County:

The county executive is hereby authorized to implement a neighborhood drainage assistance program in the surface water management service area in the same format as outlined in Attachment A.

PASSED this 2nd day of November, 1972.

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

Audrey Granger  
Chair

ATTEST:

Gerald W. Peterson  
Clerk of the Council

ATTACHMENT A

King County Council Review Packet for the  
King County Surface Water Management Proposed Neighborhood  
Drainage Assistance Program

ATTACHMENT A  
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**SURFACE WATER MANAGEMENT  
NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM  
DEFINITIONS**

**NEIGHBORHOOD DRAINAGE PROBLEM DEFINITION**

A stormwater conveyance problem located on private property and within King County Surface Water Management's service area, which is caused by runoff primarily from other private property and is currently outside King County's or other public agency's scope of responsibility.

**OFF ROAD SYSTEM DEFINITION**

Any natural or constructed conveyance systems outside of King County maintained right of way.

**SURFACE WATER MANAGEMENT  
NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM  
GOAL & OBJECTIVES**

**GOAL**

TO PROVIDE CUSTOMER SERVICE WITHIN THE SURFACE WATER MANAGEMENT SERVICE AREA BY ADDRESSING LOCALIZED FLOODING, EROSION AND SEDIMENTATION PROBLEMS THAT PRIMARILY AFFECT PRIVATE PROPERTY, AND ARE CAUSED BY NONEXISTENT, INADEQUATE OR MALFUNCTIONING STORMWATER CONVEYANCE SYSTEMS.

**OBJECTIVES**

1. To improve customer service by addressing neighborhood drainage problems (e.g. localized flooding, erosion, and sedimentation problems) that primarily affect private property.
2. To benefit the most people and provide the most benefit to property and natural resources by addressing the greatest number and the most urgent neighborhood drainage problems possible given limited resources.

**SURFACE WATER MANAGEMENT  
NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM  
POLICY STATEMENTS**

- 1) King County Surface Water Management's (SWM's) Neighborhood Drainage Assistance Program will address localized flooding, erosion and sedimentation problems (i.e. neighborhood drainage problems) situated within the Off Road drainage system and meeting specified criteria. A prioritized list of neighborhood drainage problems will be developed.
- 2) The Surface Water Management Division will address neighborhood drainage problems through selected enforcement action, maintenance procedures, the construction of capital improvement projects (CIPs), and through the provision of technical assistance for privately funded solutions.
- 3) The Surface Water Management Division may choose to accept maintenance responsibility for off-road systems when capital improvement projects or maintenance procedures are used to address neighborhood drainage problems.
- 4) The Surface Water Management Division will take enforcement action when there is a clear violation of the county drainage code and there is evidence that the drainage system in question did not meet county standards at the time of its installation. If the system violates current standards but was acceptable at the time of its installation, the project may be eligible for NDAP funding.
- 5) SWM's Neighborhood Drainage Assistance Program (NDAP) will address problems on both residential and commercial properties.
- 6) If a Neighborhood Drainage Problem affects only one property and seventy-five percent or more of the runoff is contributed by the property being affected, the Neighborhood Drainage Assistance Program will not address the problem.
- 7) The SWM's Drainage Investigation and Regulation Unit will receive, investigate, compile, refer and track neighborhood drainage problems.
- 8) When large, costly CIP solutions for NDAP problems are necessary and have benefits beyond protection of private property, the Neighborhood Drainage Assistance Program may draw on other funding sources for contributions.
- 9) If flooding of a living space or established commercial structure occurs in a twenty five year storm event or less, and is not caused by major river flooding, the problem will be prioritized above other neighborhood drainage problems. Living areas in this category will receive higher priority than commercial structures.

## NEIGHBORHOOD DRAINAGE ASSISTANCE MATRIX

The following matrix is meant to illustrate who will take the lead, (based on the source of runoff contribution and the location of the problem), in addressing neighborhood drainage problems.

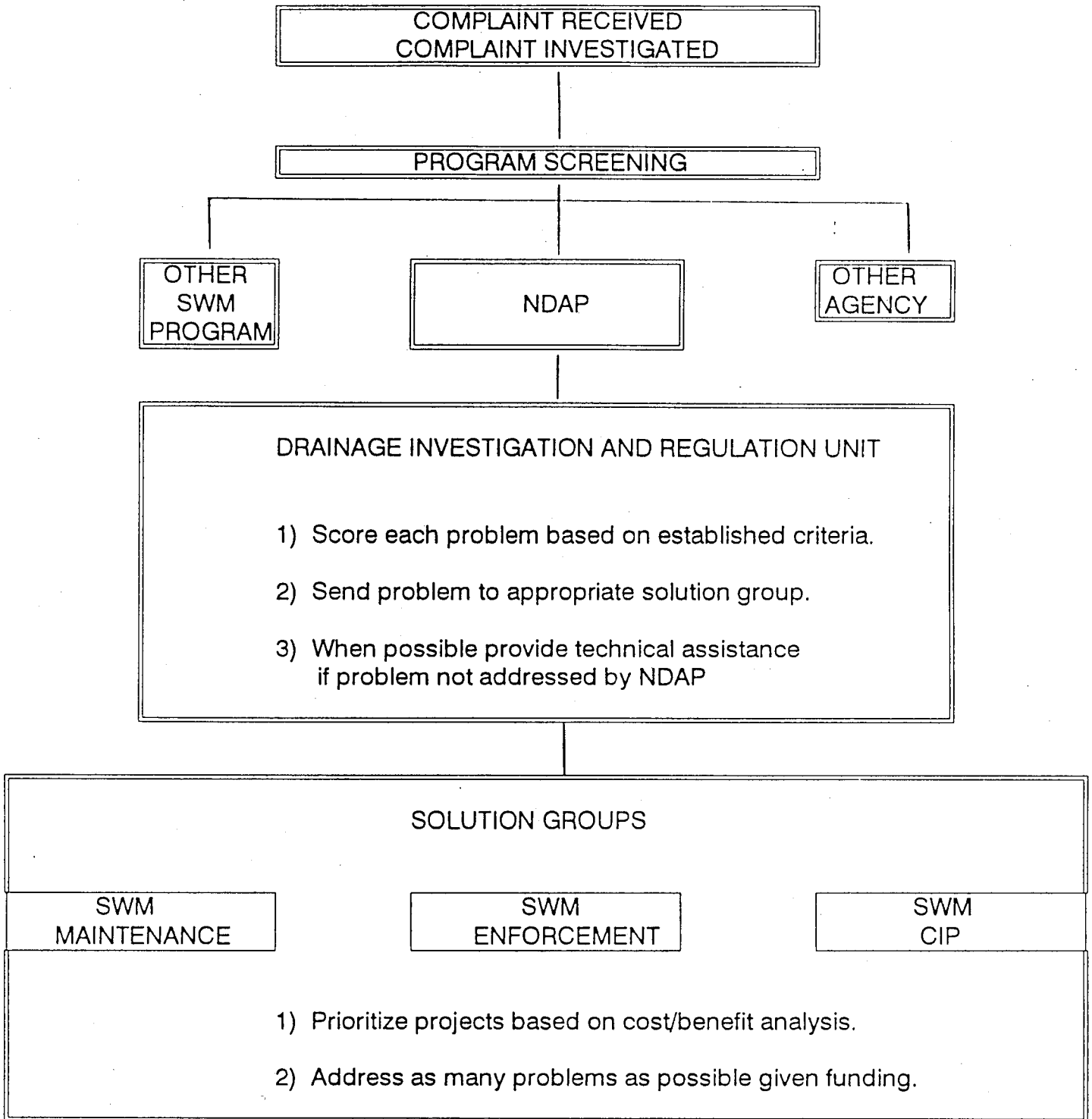
This matrix will be used to determine which problems fall into SWM's Neighborhood Drainage Assistance Program and which ones will be addressed by other King County Programs and public agencies.

SOURCE OF RUNOFF CONTRIBUTION				
LOCATION OF PROBLEM		PRIMARILY FROM ROADS R/W & EASEMENTS (75-100% contribution)	COMBINATION OF ROADS & PRIVATE PROPERTY	PRIVATE PROPERTY (75-100% contribution)
	COUNTY MAINTAINED ROADS R/W & EASEMENTS	Existing Roads Program	Existing Roads Program	Existing Roads or SWM programs
	COUNTY R/W & DRAINAGE EASEMENT NOT CURRENTLY MAINTAINED	Existing Roads Program	SWM * NDA Program	SWM NDA Program
	COUNTY MAINTAINED PUBLIC DRAINAGE EASEMENT	Roads new Off Road Program	SWM * NDA Program	SWM NDA Program
	PRIVATE PROPERTY	Roads new Off Road Program	SWM * NDA Program	SWM NDA Program or Private Problem
	PUBLIC AGENCY PROPERTY	Impacted Public Agency or Roads Division	Impacted Public Agency	Impacted Public Agency

\* With possible contribution from Roads



NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM  
FLOW CHART



## NDAP FLOW CHART EXPLANATION

### COMPLAINT RECEIVED AND INVESTIGATED

Neighborhood Drainage Assistance Program (NDAP) problems will be received, recorded, and investigated along with all other complaints by SWM's Drainage Investigation and Regulation (DIR) Unit.

### PROGRAM SCREENING

DIR engineers will screen each problem using the matrix on page four to determine if the problem belongs in the NDA program, another SWM program, or if it should be referred to another agency.

### SWM DRAINAGE INVESTIGATION AND REGULATION UNIT

For each NDAP problem SWM DIR will:

- a) Score the problem based on established criteria;
- b) Send the problem to SWM maintenance enforcement, or CIP unit to be prioritized against other NDAP problems or;
- c) Provide technical assistance to the complainant if the problem is so small or simple that it will never be addressed by the NDA program.

### NDAP SOLUTION GROUPS

SWM sections receive a list of problems ranked by DIR. Each section will perform a cost/benefit analysis on all NDAP problems and rank them based on this analysis. SWM will solve as many problems as possible given NDAP funding for the year.

**SURFACE WATER MANAGEMENT  
NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM  
CRITERIA**

**HEALTH AND SAFETY**

**IMPACT CRITERIA**

- 1) ITEM IMPACTED AND SEVERITY
- 2) NUMBER OF PROPERTIES AFFECTED
- 3) STORM EVENT SIZE
- 4) POTENTIAL FOR FUTURE IMPACT
- 5) LOCATION OF THE PROBLEM

**COST/BENEFIT ANALYSIS**

<b>CRITERIA FOR RANKING NEIGHBORHOOD DRAINAGE ASSISTANCE PROGRAM PROBLEMS</b>
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The following is draft criteria which will be used by Surface Water Management to score NDAP problems.

### HEALTH AND SAFETY

Problems will be ranked under this category based on affects to health and safety. The greater the impact on health and safety the more points the problem will receive in this category. If flooding of a living space or established commercial structure occurs in a twenty-five year storm event or less, the problem will be prioritized above other neighborhood drainage problems. All living areas in this category will receive higher priority than commercial structures.

### IMPACT CRITERIA

(1) *Item Impacted and Severity*

With the exception of flooding of a living space or established commercial structure which occurs in a twenty-five year storm event or less, all NDAP problems will be given points for the item that is impacted and the severity of the impact.

The following impact items are given points in the NDAP priority scoring system: living structure with finished floor, established commercial structure, access, septic/well, other structure or crawlspace, landscaping/yard/parking, other property/drainage system, natural resource.

The impact to these items is assessed and additional points are given if moderate or high damage to the item occurs.

(2) *Number of Properties Affected*

The number of properties impacted is calculated, and used as a multiplier to capture the number of people the problem is affecting. In the case of a blocked access, the number of living units in a multi-family building is used instead of the number of properties affected.

(3) *Event Frequency*

The probable reoccurrence of the problem is calculated by using an event frequency multiplier. This event frequency multiplier is based on the storm event size when the problem occurs. If a problem occurs in a one year storm event, the probability that it will occur again is very high.

The event frequency multiplier is also used to assess the severity of a problem. For example, if a problem occurs in a one year storm event, and an identical problem occurs in a 25 year storm event: the first problem is more acute and receives a higher multiplier than the second.

(4) *Potential for Future Impact*

Drainage Investigation and Regulation staff will determine whether or not the problem will worsen if unchecked.

(5) *Location of Problem*

If the problem is located in a basin where SWM expenditures are less than revenues, the problem will receive additional points.

#### **COST/BENEFIT ANALYSIS**

Once SWM's Drainage Investigation and Regulation Unit scores a NDAP problem, staff sends the problem to a NDAP solution group where a cost/benefit analysis is done and the problem is prioritized with other NDAP problems. NDAP problems will be addressed as funding allows. NDAP solution groups include the SWM Capital Improvement Program, Enforcement Program and Facilities Maintenance. In most cases the problem is sent to the SWM CIP or Facilities Maintenance Unit for solution.