BEFORE THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT

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FOR THE PURPOSE OF RELEASING INTERIM DEVELOPMENT GUIDELINES FOR THE JOHNSON CREEK BASIN TO LOCAL JURISDICTIONS FOR ADOPTION Resolution No. 79-57 Introduced by The Council Solid Waste and Public Facilities Committee

WHEREAS, The MSD Council has declared the Johnson Creek Basin an area of metropolitan significance and has formed the Johnson Creek Task Force to coordinate the planning and implementation of measures for flood control and pollution abatement in the basin; and

WHEREAS, The Johnson Creek Task Force has formulated interim development guidelines to control the growth of flooding and pollution problems in the basin; and

WHEREAS, The Council Committee on Solid Waste and Public Facilities has endorsed said interim development guidelines; now, therefore,

BE IT RESOLVED,

(1) That the Council endorses the "Interim Guidelines for Stormwater Runoff Management in the Johnson Creek Basin," Exhibit "A" attached, for release to the cities and counties in the basin for their adoption.

(2) That the Council shall adopt said guidelines at such time as the majority of the local jurisdictions have adopted them by action of their respective governing bodies.

(3) That the Council encourages the local jurisdictions to adopt these guidelines as expeditiously as possible, and not later than August 1, 1979. (4) That the guidelines shall remain in effect until a drainage management plan for the basin has been agreed upon by a majority of the local jurisdictions, or until two years after the MSD Council's adoption of the guidelines, whichever occurs first.

(5) That in taking this action, the Council recognizes that the guidelines do not address the pollution problems in the Creek to the extent necessary to eventually solve such problems.

ADOPTED By the Council of the Metropolitan Service District this 28th day of June, 1979.

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INTERIM GUIDELINES FOR STORM WATER RUN-OFF MANAGEMENT

IN THE JOHNSON CREEK BASIN

6/14/79

JOHNSON CREEK TASK FORCE

METROPOLITAN SERVICE DISTRICT

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INTERIM GUIDELINES FOR STORM WATER RUN-OFF MANAGEMENT

IN THE JOHNSON CREEK BASIN

6/14/79

1 The following policies and standards shall apply <u>basin-wide</u> to 2 any subdivision of four or more lots, PUD's or building permits 3 for multi-family (4 or more units), commercial, industrial and 4 public buildings.

5 A. FLOODPLAIN AND FLOODWAY POLICIES

6 Policy: To manage 100 year flood plains and floodways in order 7 to protect their natural function, as well as to protect the 8 property of those individuals currently living within and along 9 the floodplain boundary.

10 The Federal Insurance Administration of the Department of Housing and Urban Development has adopted guidelines concerning the 11 12 development of lands within the 100 year floodplain. Almost 13 all jurisdictions within the Basin have qualified for the National Flood Insurance Program, and must follow these guidelines. 14 15 In addition to federal guidelines, the following standards are recommended for the lands within the 100 year floodplain of 16 17 Johnson Creek.

- 18 Standards: (Within 100 year floodplain)
- All jurisdictions within the Basin must adopt rules and
 regulations to qualify for the National Flood Insurance
 Program if they have not done so already.
- 22 2. Construction and development shall be in such a manner that23 flow of flood waters will not be restricted.

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Materials which may be inundated shall be of such strength 1 3. and quality that they will not deteriorate, and they must 2 be able to withstand water pressure or the high velocity of 3 flowing water. 4 The finished floor elevations of buildings shall be a min-4. 5 imum of two feet above the 100 year flood elevation. 6 Whenever possible, the floodplain shall be retained as open 7 5. space and used for recreation or special storage. 8 The dedication of lands within the floodplain is encouraged 6. 9 if consistent with the future River Loop Park System Plan 10 and responsibility for management of the lands is established 12 beforehand. 13 Standards: (Within Floodway Only) 14 No new building structures or land fills shall be allowed 1. 15 in the floodway. 16 The floodway should be retained as open space and used for 2. 17 18 recreation purposes. 19 **B. DRAINAGE POLICIES** 20 Findings: 21 Analysis of the hydrologic characteristics of the Johnson 22 Creek Basin suggest that: 23 Johnson Creek experiences flash flooding during storms, 24 causing considerable flood damage. This flooding is 25 exacerbated due to increased storm water run-off from 26 urban development within the drainage basin of Johnson 27 Creek. 28

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- With the limited information we have about the Basin, it
 appears that large amounts of storm water now enter
 Johnson Creek through the groundwater from the north and
 by surface run-off from the south.
- 5 . An effective means of controlling urban stormwater run-6 off is by minimizing impervious surfaces and providing 7 for natural water percolation where soil conditions 8 permit.

9 Policy: To minimize the amount and rate of storm water run-off 10 reaching Johnson Creek. The run-off which cannot be returned to 11 the soil should be directed to the Creek so as not to contribute 12 to the peak flood flow or degrade in-stream water quality. 13 Standards:

Storm water drainage systems shall place emphasis on max imizing natural water percolation, and on utilizing natural
 drainageways with adequate capacity for surface flows.

Water from newly constructed roadways shall be prevented from
 flowing from the road right of way in an uncontrolled fashion.
 3. Natural drainageways shall be riprapped or otherwise sta bilized as necessary below drainage and culvert discharge points
 for a distance sufficient to convey the discharge without chan nel erosion.

4. Run-off from impervious surfaces shall be collected and transported only to those local drainageways which have sufficient
capacity to accept the discharge.

5. Sediment retention shall be provided for during the construction phase and shall be installed in such a manner within each

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development to minimize sedimentation in Johnson Creek during the
 entire construction cycle.

6. The overall drainage system shall be completed and made
operational at the earliest possible time during construction.
7. Alterations to major drainageways shall be prohibited except
when approved by local jurisdiction engineers for road crossings
and drainage improvements.

8. The local jurisdictions shall require all of the applicable
9 development categories to submit drainage plans which will
10 accomplish the following;

- a. Outline the methods to be used for minimizing the amount
 and rate of runoff from the development, measures for
 preventing reduction of in-basin storage and measures
 to be used to prevent property damage from uncontrolled
 drainage.
- b. An analysis of detention/storage as an alternative
 method of stormwater run-off control, (e.g. separate
 plans, with subdivision applications, with building
 permit processes as they exist, etc.) The appropriate
 procedures for the submission of these drainage plans
 will be left to local jurisdiction discretion.

9. The rate of runoff from a developed site during a 25 year recurrence interval storm shall not exceed the predevelopment rate of runoff released based on a 10 year recurrence interval storm as defined by each jurisdiction unless the local jurisdiction has provided a detention basin downstream from the site which will receive stormwater from the development and is

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1		designed to fulfill the intent of these guidelines. Approved
2	•	methods to satisfy this requirement in order of preference are:
3		a. groundwater recharge (by drainage swales, ponding areas,
4		drywells, open channels or other means)
5		b. surface storage
6		c. underground storage
[.] 7		10. Installation of storm water management systems will be the
8	•	responsibility of the developer.
9		$M = 1000$ km s $^{-1}$
10	с.	VEGETATION POLICIES
11		Policy: To retain and protect existing vegetation in steeply
12		sloped (20% and above) and landslide prone areas to decrease
13		the potential for erosion, decrease the amount of surface water
14	•	run-off, to preserve areas of natural percolation and help
15		stabilize landslide-prone areas.
16	•.	Standards:
17	1.	Riparian vegetation that protects stream banks from eroding shall
18		be maintained or enhanced along major drainageways for a minimum
19		of 20 feet from the channel bottom centerline plus one additional
20		foot for each one percent of bank slope greater than ten percent;
21		along minor drainageways for a minimum of ten feet from the
22	·	channel bottom centerline plus one additional foot for each one
23		percent of slope greater than ten percent; along seasonal drain-
24		ageways for a minimum of ten feet from the channel bottom center-
25		line. This standard policy should not be construed to mean that
26		clearing of debris from the streambed itself is prohibited;

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normal clearance of the streambed to allow for unimpaired flow
 of water is encouraged.

2. Additional vegetative retention policies are encouraged. Jurisdictions should adopt policies such as the following:

Minimum of tree cutting.

. Slope stabilization and revegetation plans should be included as part of the developer's drainage plans.

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. Minimization of removal of vegetation during the construction period, and replacement/enhancement of vegetation upon completion of construction.

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