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ATTACHMENT G

EXTREME VELOCITIES IN THE UPPER ACUSHNET RIVER ESTIMATED BY INLET-BASIN MODEL

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EXTREME VELOCITIES IN THE UPPER ACUSHNET RIVER ESTIMATED BY AN INLET-BASIN MODEL

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1. INTRODUCTION

The Acushnet River estuary north of Coggeshall Street is the most highly PCB contaminated region of New Bedford Harbor. Sediment PCB concentrations in excess of 30,000 ppm have been measured. One alternative which has been proposed to isolate the highly PCB-laden sediments in the upper estuary from the rest of the environment involves capping the most contaminated area with clean materials.

The proposed cap would be approximately 45 cm (1.5 ft) thick and would be placed on top of the existing sediments. However, because the sediments are very poorly consolidated in the upper estuary, the weight of the cap will cause consolidation of the bottom sediments as excess water is squeezed out. Therefore the net elevation increase of the channel bottom will be approximately 22-26 cm instead of the entire 45 cm of the cap (Balsam, pers. comm.). Primary consolidation is expected to be essentially complete within a period of one year. Accordingly, the analyses done for this study assume the post-consolidation channel geometry after cap placement.

The capping material may be subject to erosion due to high current velocities which could result from either storm surge or increased river flow due to rainfall-induced runoff. This study was undertaken to determine the probable current velocities to be expected from either of these mechanisms.

The hurricane barrier at the entrance to the harbor protects the upper estuary from surges generated by offshore storms (e.g., hurricanes, winter storms, etc.). The U.S. Army Corps operational guidelines indicate that the barrier is to be closed if the sea surface elevation is greater than 1.5 m (5 ft) (U.S. Army Corps of Engineers, 1982). In routine operation, the barrier is closed typically once per month even though the sea elevation is less than 1.5 m (5 ft), hence the estuary receives more than adequate protection from surges. Storm surges hence pose no problem with respect to cap integrity.

The second area of concern is the markedly increased runoff and flooding associated with extreme rainfall events, such as occur during the 10, 25, 50 or 100 year storm events. Under these conditions, the substantial increase in runoff associated with these storms causes the Acushnet River to flood, cross sectional area velocities to increase and, if sufficiently high, for capping sediments to resuspend and be transported seaward.

To assess the potential erosion of the cap, an analysis of the impact of flooding conditions on current velocities in the upper Acushnet River was made. Section 2

details the application of an inlet-basin model to determine river velocities due to excess rainfall. Conclusions are presented in Section 3.

2. MAXIMUM VELOCITY IN THE UPPER ESTUARY

The upper estuary of New Bedford Harbor is typically a region of low velocity as evidenced by bottom sediments comprised of organic-rich silts and clays, indicating a depositional environment (Ebasco, 1987). By contrast, sediments in the lower estuary are predominantly coarser sands and gravels, indicative of a faster current regime.

Stronger currents in the upper estuary are possible due to increased river flow resulting from extreme rainfall events. Although the mean freshwater inflow at the head of the estuary is 0.85 m^3/s, Balsam (1989) estimated the peak flow rate in the Acushnet River due to the 50-year storm event to be 39.6 m^3/s. Other researchers have estimated the peak flow resulting from a 100-year storm to be 38.2 m^3/s (Table 2.1). Obviously there is considerable variation in the estimation of peak flow versus storm return period depending on the author and technique employed. The Balsam 50-year flow was used in the analysis to determine current magnitudes. However, the magnitude of the flow is such that it could be considered a 50 to 100-year storm.

Table 2.1. Estimates of peak flow rates for the Acushnet River.

	Peak Flow Rate (m^3/s) (ft^3/sec)			
Storm Return Period	NUS (1984)	US Army Corps (1987)	Balsam (1989) (HEC-1)	FEMA (1982)
100 year	38.2 (1350)	38.2 (1350)	-	17.8 (630)
50 year	22.7 (800)	24.9 (980)	39.6 (1397)	13.5 (475)
25 year	20.5 (723)	20.9 (740)	24.6 (867)	-
10 year	17.0 (600)	13.47 (475)	11.1 (392)	7.9 (280)

Note: The U.S. Army Corps of Engineers (1961) estimate is an average over a 5 hour storm and results in 18.4 m^3/s for the 100 year storm.

An inlet-basin hydrodynamic model developed by the U.S. Army Corps of Engineers (Seelig et al., 1977) was selected to estimate velocities in the upper estuary resulting from the 50-year storm flood. The model was developed to describe the

dynamics of a bay-inlet-sea system. It was previously applied to the Acushnet River and New Bedford Harbor to determine the impacts of reducing the cross-sectional area of flow under Coggeshall Street on the circulation, tidal range and salinity in the upper estuary (ASA, 1988). The application assumed the estuary to be a series of basins connected by constricted channels. A constant freshwater inflow was specified at the head of the system and tidal forcing at the mouth.

The present application focuses on the area nearest the head of the estuary. A storm hydrograph, instead of a constant flow, is input at the upstream boundary. Continuity is used to relate the surface elevation in the most upstream bay to the net discharge into and out of the bay. No tidal forcing is included. The model is then used to predict the velocities in the upper estuary resulting from the storm flow. Although the Acushnet River estuary does not strictly adhere to the requirements of a bay-inlet-sea system, the model is valid for making a first-order approximation of velocities.

2.1 Inlet-Basin Model: Theoretical Background

The inlet basin model developed by Seelig et al. (1977) can be used to predict inlet channel velocities and discharge as well as bay surface level oscillations as a function of time. The basis of the model is the conservation of mass and momentum.

The basic assumptions of the model include:

1. Sea level is a specified function of time.
2. The bay water level remains horizontal. This means that the bay water level rises and falls at the same rate throughout the entire bay at each point in time. This occurs when the length of the long wave forcing the system is much longer in the bay than the longest axis of the bay.
3. The bay is connected to the sea by one or more inlets.
4. At least one inlet must continuously connect the bay to the sea. Some areas of inlets may go dry during the water level cycle, and one or more inlets may go dry as long as one inlet contains water.
5. Bay water surface area is a function of bay water level (or a function of time).
6. Inlet cross-sectional area is a function of local depth (or a function of time).
7. The local water level slope in the inlet is assumed to be linearly related to the local friction loss along the inlet between the sea and bay levels.

8. There is a water level drop along the inlet that is proportional to the unrecovered velocity head lost through turbulent eddy diffusion in the bay (flood flow) or sea (ebb flow).
9. Storage of water in the inlet is negligible. This means that the flow into the inlet is equal to the flow exiting the inlet at any time. In addition, the volume of water stored in the inlet between high and low water should be small compared to the tidal prism. This is generally the case if the surface area of the bay is much larger than the surface area of the inlet.
10. Wind stress on the inlet and bay surfaces is negligible.
11. Water has constant properties throughout the inlet and bay.
12. Radiation stress (the interaction with wind waves) is neglected.
13. Coriolis effects are neglected.

The one dimensional momentum equation for the inlet is written

$$\frac{\partial \bar{u}}{\partial t} + \frac{1}{2}\frac{\partial}{\partial x}\bar{u}^2 + g\frac{\partial h}{\partial x} + \frac{1}{A_c}\int_{y_1}^{y_2} (\tau_{zx})_Z \, dy = 0 \qquad (2.1)$$

where

$\bar{u}$	=	cross-sectional mean water velocity in the inlet (positive on flood flow)
t	=	time
x	=	distance along the main axis of the inlet
h	=	water level above some datum
g	=	acceleration due to gravity
A_c	=	inlet cross-sectional flow area at x
$(\tau_{zx})_Z$	=	component of the stress tensor at the bottom of the inlet in the direction of the main axis of the inlet

The first term on the left of Equation (2.1) is the temporal acceleration, the second term is the convective or advective acceleration, the third term is the slope of water surface along the inlet, and the fourth term is the bottom stress. The equation assumes the water level remains constant across each inlet cross-section.

The bottom stress is evaluated by using Manning's equation:

$$(\tau_{zx})_Z = \frac{gn^2}{kD^{1/3}} |u|u \tag{2.2}$$

where u is the water velocity in the inlet, D is the water depth at that point, and k is a conversion factor to adapt Manning's equation to the system of units used. The absolute value function on u accounts for the alternating direction of bottom stress.

A time-marching method is used to simultaneously solve the area averaged momentum equation for the inlet or breachway and the continuity equation for the bay or basin. A fourth-order Runge-Kutta-Gill technique is used to solve the simultaneous differential equations. At each time step the geometric and hydraulic factors describing the inlet-bay system are calculated by evaluating flow conditions throughout the inlet and by spatially integrating this information to determine coefficients of the first-order differential equations. A weighting function and a flow net are used to systematically distribute flow throughout the inlet. This technique can handle any number of interconnected basins and channels. Each channel may further be divided into subchannels to better describe the cross-stream geometry within channels.

It is normally assumed in this approach that the bay or basin surface elevations remain horizontal and that the level simply rises or falls. This assumption is approximately appropriate for most of the Acushnet River estuary and New Bedford Harbor because of the standing wave nature of the tide in the system and the natural division of the area into basins connected by constricted channels.

The inlet basin model has many advantages. It requires a minimal amount of input data, and is easy and inexpensive to use. It includes all potentially important terms developed from the three-dimensional momentum equations and can be adapted to many applications. Of particular importance to the present application is that the cross-sectional area of the inlet can be taken as a function of the local water depth. The model can be used to predict hydraulics for tidal or nontidal inlet systems.

More detailed presentations of the inlet hydraulics model including its governing equations, assumptions and limitations, and comparison to field data for selected inlets are contained in Seelig et al. (1977) and Bruun (1978). A user's manual for the computer code used in this study is given in Seelig et al. (1977).

2.2 Inlet Basin Model: Application

To determine current velocities in the upper estuary in response to the increased freshwater inflow rate predicted by Balsam (1989) for the 50-year storm, the inlet basin

model was applied to the upper estuary. It was assumed that the existing channel geometry was modified by the presence of a 45 cm thick cap over the reach from the estuary's head to Coggeshall Street. However, due to consolidation of the bottom sediments by the weight of the cap, the net effect of the cap is to raise the channel bottom by 22-26 cm instead of by the entire 45 cm of the cap. The cap reduces the channel's cross-sectional area and thus increases flow velocity. For comparison the model was also used to predict channel velocities without the cap.

The model was applied to the Acushnet River estuary and New Bedford Harbor. The study area was represented by five basins (head of the estuary, the 1400 m of the estuary north of Coggeshall Street, between Coggeshall Street and I-195 causeways, mid estuary, and lower estuary). Five channels were used to connect the basins and included (1) the northern 1300 m of the estuary, (2) the Coggeshall Street channel, (3) the I-195 channel, (4) the passages between Fish and Popes' Islands and the mainland, and (5) the hurricane barrier channel. When multiple channels were present (i.e., Popes and Fish Islands) they were lumped together and treated as one channel. Channels (inlets) were placed at those sections in which the flow is naturally constricted such as under bridges and between islands. The northernmost inlet, which covers the area under study, has markedly shallower depths than the rest of the estuary such that cross-sectional areas remain small. This allows the area to be considered an inlet. The basins (bays) are in regions where the estuary geometry expands into larger areas. A schematic showing the relationship of these basins and channels is presented in Figure 2.1.

The channel grid system in the upper estuary as configured for the northernmost inlet is shown in Figure 2.2. Eight channel sections are modeled to resolve velocity changes in the model domain. Each section has subchannels to allow adequate representation of the variable cross-channel bathymetry. The depths, widths and lengths specified for the model grid in the upper estuary are given in Table 2.2. The interested reader can refer to Appendix A for the input data for the entire estuary.

The 50-year outflow hydrograph prepared by Balsam (1989) (Figure 2.3) was used to specify the upstream inflow conditions. A friction factor of 0.03 was specified for the entire estuary.

Table 2.3 shows model predictions for each channel at the peak flow rate during the 50 year storm event, with and without the 45 cm (1.5 ft) cap. The cross sectional areas of the channels are also given for pre and post cap conditions. The model shows

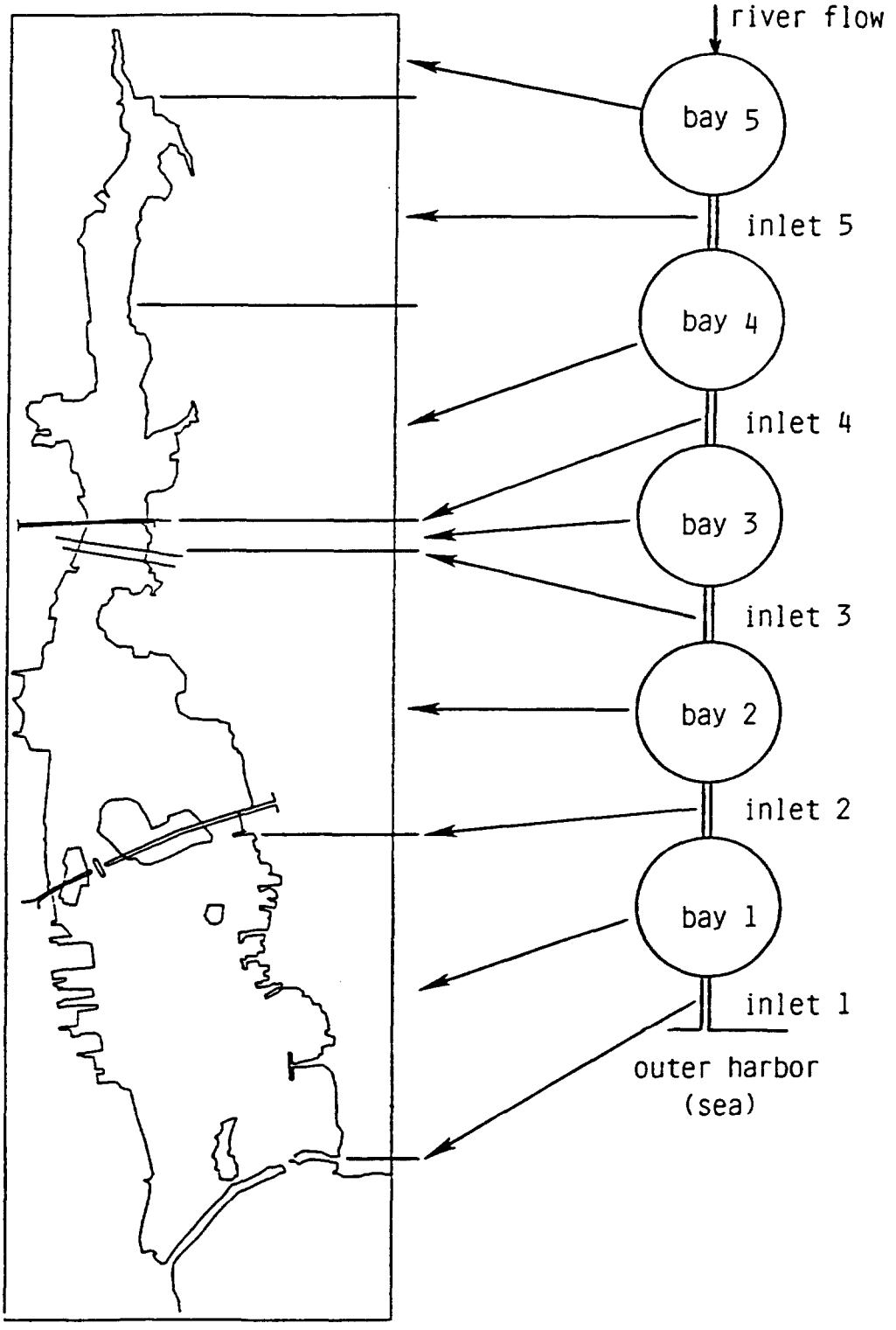

Figure 2.1 Schematic of basins and channels used in the inlet-basin model application to the Acushnet River estuary and New Bedford Harbor.

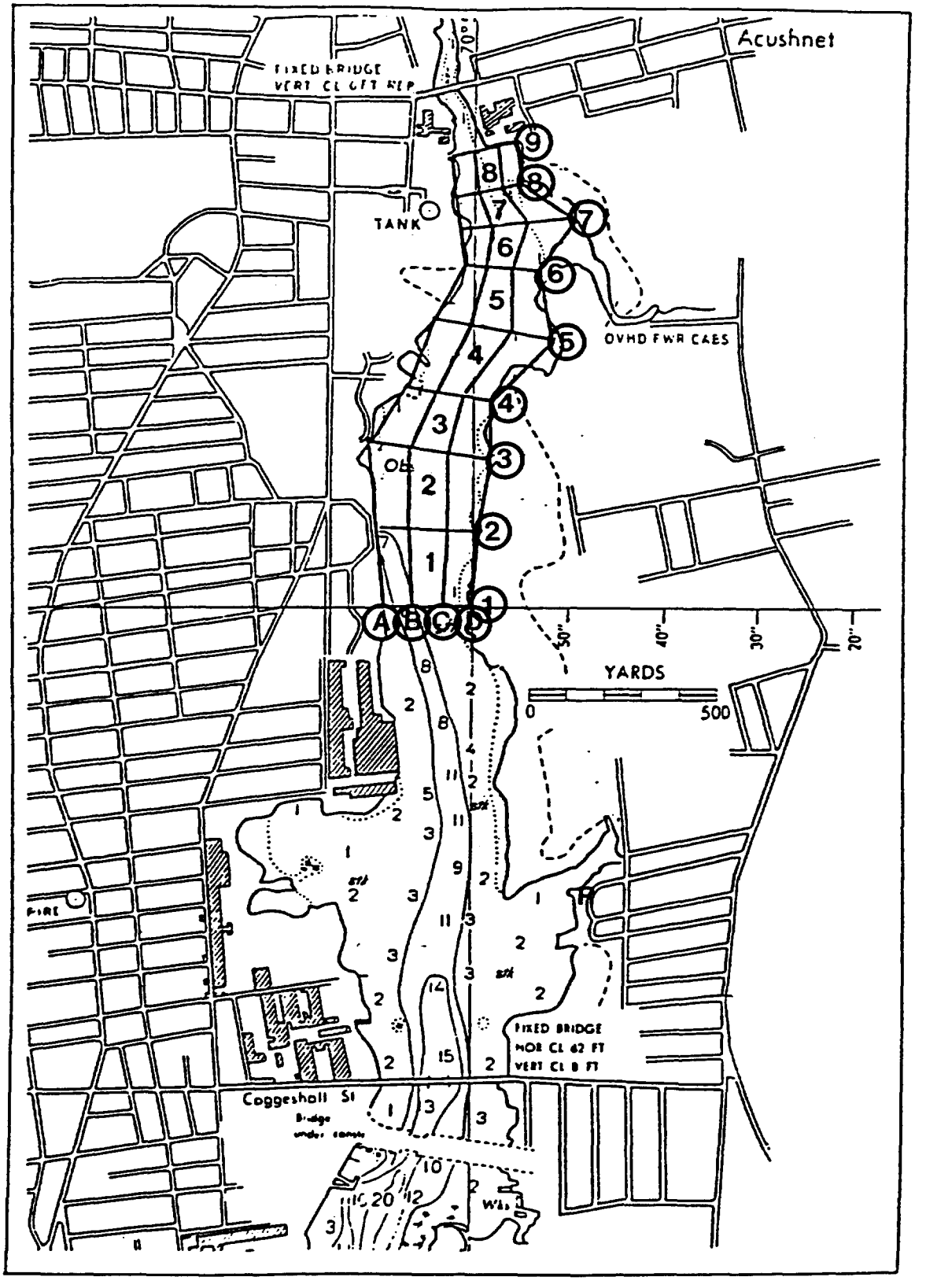

Figure 2.2 Inlet-basin hydrodynamic model channel grid system for the upper estuary. Circled numbers/letters are used to reference cross-section data in Table 2.2.

Table 2.2 Cross-section data for the upper estuary used in the inlet-basin model application. Refer to Figure 2.2 for section locations.

Section	Width (m)			Depth (m) Present conditions			Depth (m) With 45 cm cap after consolidation		
	A-B	B-C	C-D	A-B	B-C	C-D	A-B	B-C	C-D
1	72	72	72	2.89	1.37	0.76	2.66	1.14	0.50
2	84	84	84	2.59	1.37	0.76	2.36	1.14	0.35
3	104	104	104	1.68	1.07	0.61	1.46	0.84	0.35
4	73	73	73	0.76	1.37	0.61	0.54	1.14	0.36
5	101	101	101	0.76	1.22	0.61	0.54	1.00	0.37
6	64	64	64	0.76	0.76	0.61	0.54	0.54	0.37
7	98	98	98	0.76	0.76	0.61	0.53	0.53	0.37
8	58	58	58	0.76	0.61	0.61	0.52	0.38	0.35
9	55	55	55	0.61	0.61	0.61	0.36	0.36	0.35

Section	Length (m) A	B	C	D
1-2	201	196	192	187
2-3	219	205	192	178
3-4	165	163	162	160
4-5	178	190	203	215
5-6	155	164	174	183
6-7	91	116	141	165
7-8	87	113	139	165
8-9	105	103	102	101

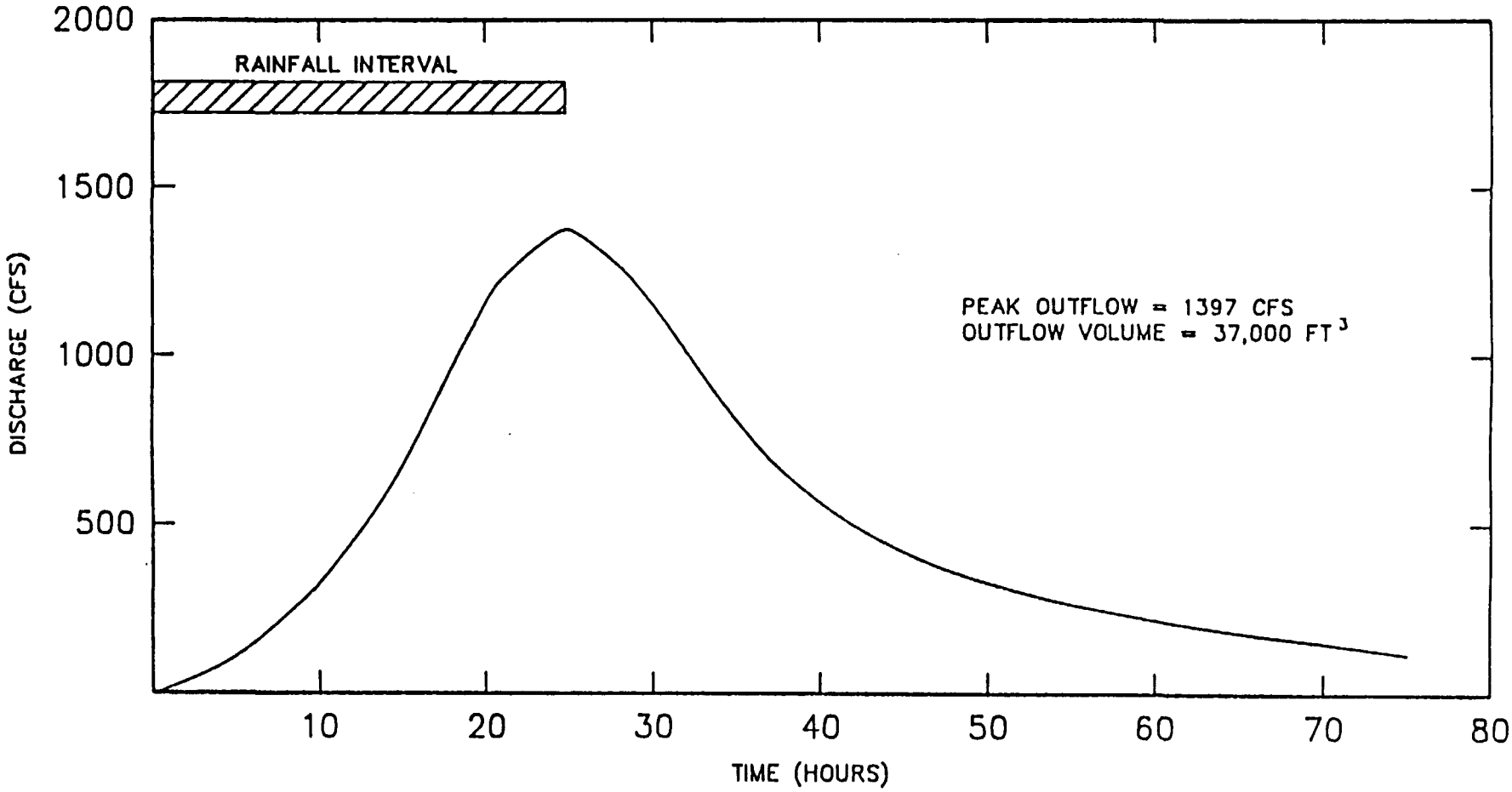

Figure 2.3 Outflow hydrograph at Saw Mill Dam for the 50-year rainfall (from Balsam, 1989).

that with the cap in place, peak flood velocities at the head of the estuary will increase by approximately a factor of 1.5 over existing conditions, to 58.6 cm/sec (2 ft/sec). Peak velocities decrease with increasing distance downstream, corresponding to increasing cross-sectional area. At the southernmost grid (grid 1) peak velocities are 12.7 cm/sec with the cap in place.

Table 2.3 Inlet-basin hydrodynamic model predicted maximum flow velocities and associated cross-sectional areas for the channel grids shown in Figure 2.2. Values are for peak flow rates of the 50-year storm (39.2 m^3/s), with and without a 45 cm cap in the upper estuary.

Grid Number (Figure 2.2)	Average Channel Velocities (cm/sec)		Channel Cross-Section (m^2)	
	Existing	With 45 cm cap	Existing	With 45 cm cap after consolidation
1	10.6	12.7	379.0	311.4
2	10.5	13.1	372.9	301.8
3	14.6	19.1	274.7	206.4
4	17.0	22.9	230.8	171.4
5	20.2	28.3	198.9	138.2
6	22.7	33.4	172.6	116.1
7	24.4	37.1	161.8	104.2
8	36.4	58.6	107.8	65.3

The peak flows with the 45 cm cap in place are shown graphically in Figure 2.4. This figure clearly illustrates the large reduction in peak velocities occurring over the northernmost 250 m of the grid.

The time-variable nature of the storm flow and resulting velocities in the upper estuary are shown in Figures 2.5 and 2.6 for grids 3 and 8 (see Figure 2.2 for their location). Peak velocities occur approximately 27 hours into the storm and last for only a few hours. Flows at all sections have returned to pre-storm values at 72 hours after the start of the storm.

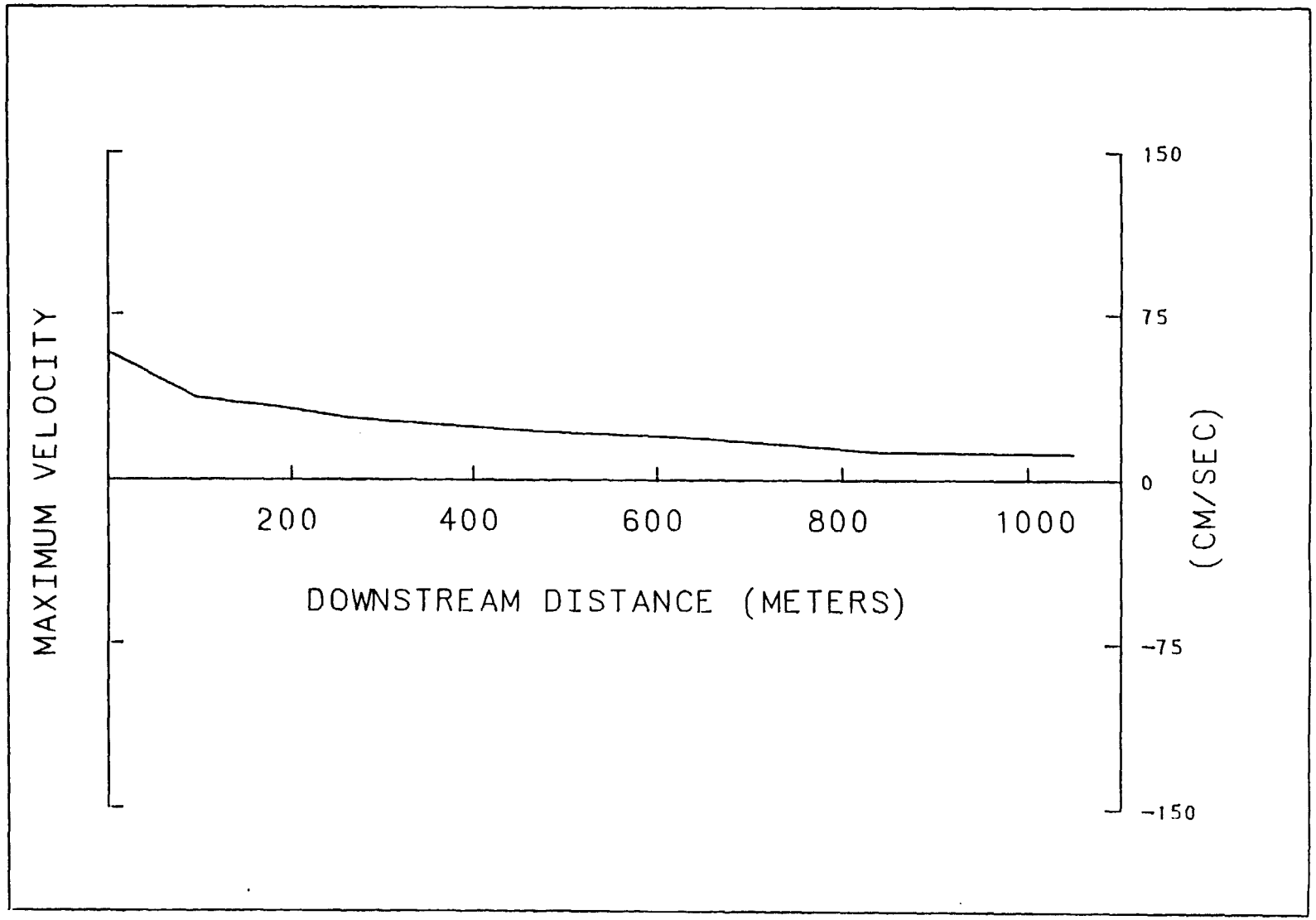

Figure 2.4 Variation of peak flow with distance downstream from the head of the inlet-basin model grid (see Figure 2.2). Results are with the 45 cm cap in place, after consolidation.

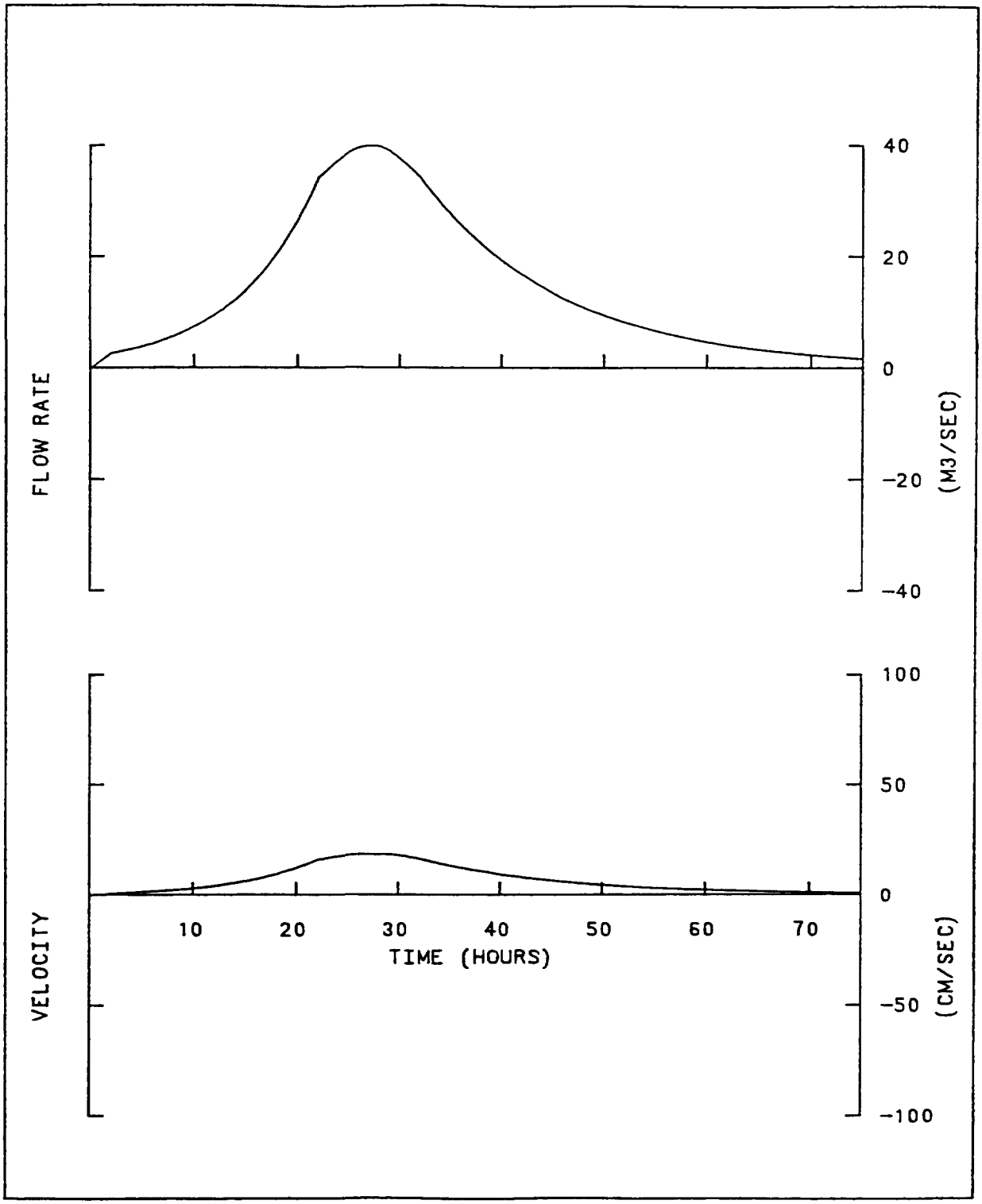

Figure 2.5 Variation of flow and velocity at section 3 in the upper estuary grid in response to the 50-year storm. Results are with the 45 cm cap in place, after consolidation.

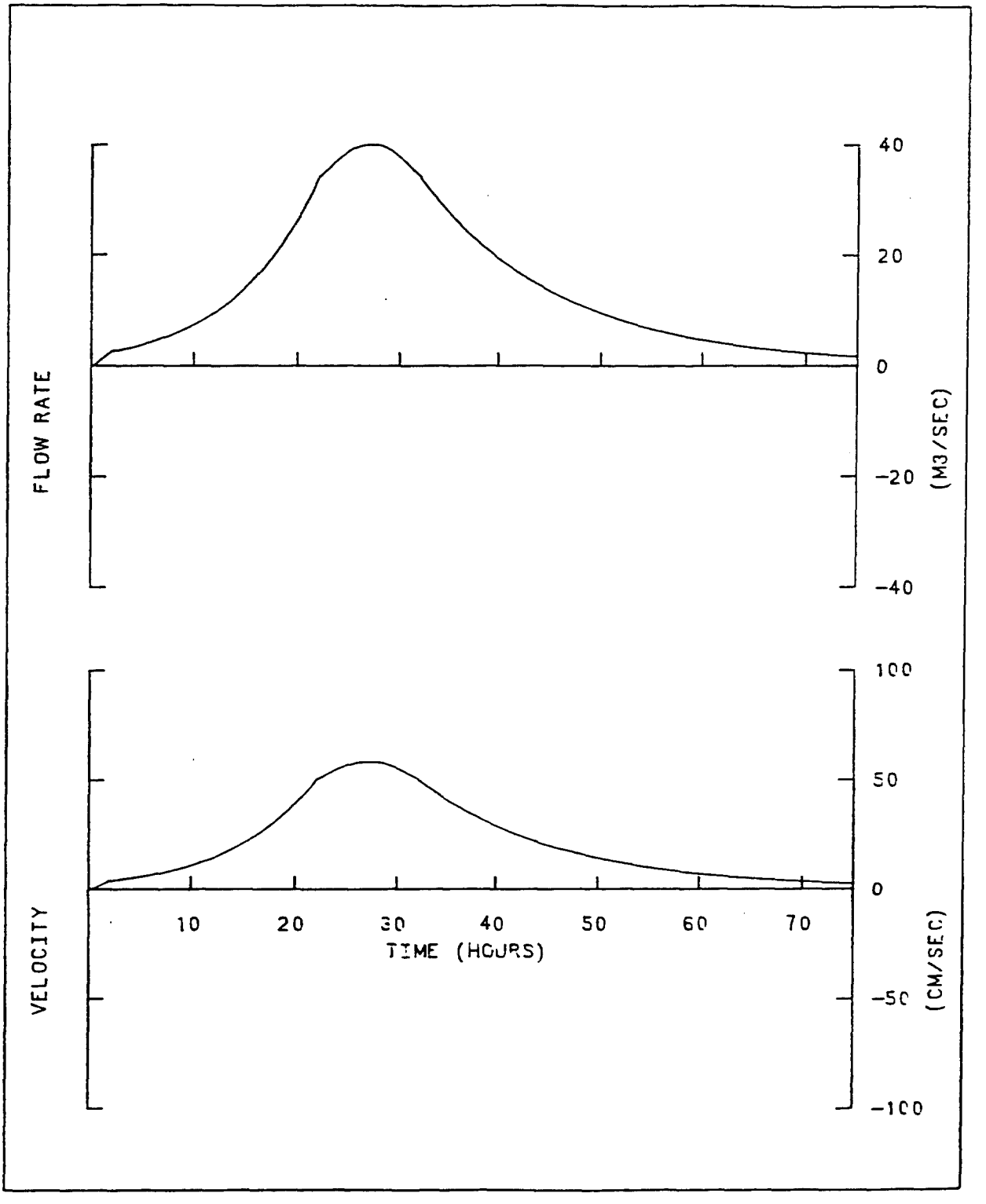

Figure 2.6 Variation of flow and velocity at section 8 in the upper estuary grid in response to the 50-year storm. Results are with the 45 cm cap in place, after consolidation.

2.3 Comparison with DAMBRK Model Results

A companion study (ASA, 1989) used the DAMBRK hydrodynamic model to estimate peak velocities in the upper estuary in response to the same 50-year storm hydrograph used above. The use of a separate model to estimate velocities was done to provide an independent comparison with the inlet-basin model results. The DAMBRK model was specifically developed to route flood flows through a downstream channel and as such would be expected to more realistically portray the nature of the flood flow in the upper estuary. Complete details of the DAMBRK model's assumptions and application are given in ASA (1989).

Peak velocities calculated by each model are given in Table 2.4 as a function of distance downstream from Wood Street. The DAMBRK model was run under two scenarios: with constant water mass below MLW (mean low water) and with constant water mass below MSL (mean sea level). The first scenario was simulated to provide worst-case velocities; the second scenario is comparable to the inlet-basin model conditions. Neither the DAMBRK nor the inlet-basin model simulations included tidal fluctuations.

Table 2.4 Maximum velocities in the upper Acushnet River estuary computed by the inlet-basin model and the DAMBRK model, after cap placement and consolidation.

Distance downstream from Wood Street (m)	Velocity (cm/sec) Inlet model	DAMBRK model MSL case	DAMBRK model MLW case
165	58.6	119.2	130.8
265	37.1	70.7	85.3
350	33.4	56.7	78.3
430	28.3	41.5	76.8
640	22.9	22.3	47.2
815	19.1	25.3	58.2
1000	13.1	20.7	43.6
1215	12.1	17.1	32.0

Both the inlet-basin and DAMBRK models predict maximum velocities near the head of the estuary and velocities decreasing with increasing distance downstream. A maximum velocity of 59 cm/sec (1.9 ft/sec) calculated by the inlet-basin model compares to maximums of 119 and 131 cm/sec (3.9 and 4.3 ft/sec) calculated by the DAMBRK model. The DAMBRK model continues to predict higher velocities in the rest of the upper estuary, with velocities approximately a factor of 2 higher than predicted by the inlet-basin model. However, the MSL case of the DAMBRK model is in reasonably good agreement with the inlet-basin model in the estuary reach greater than 640 m (700 yds) downstream of Wood Street.

3. CONCLUSIONS

Application of the inlet-basin hydrodynamic model to the Acushnet River estuary provides a first-order estimate of flow velocities to be expected under 50-year storm conditions. Results indicate the maximum velocities are to be expected nearest the head of the estuary. As the storm flow travels south through the estuary, the channel cross-section expands and the velocities slow. Therefore the proposed cap will be subjected to the highest velocities and greatest erosion potential in the northernmost portion of the upper estuary. For the scenario investigated with the cap in place and assuming consolidation of the bottom sediments, peak velocities ranged from 59 cm/sec at the head of the estuary to 13 cm/sec at the southernmost grid of the model. This represents a reduction in peak velocities by a factor of 4-5 over the region considered.

Comparison of the model predictions with those of the DAMBRK model under the same flow scenario show a similar pattern with the peak velocities decreasing with increasing distance downstream. However, the DAMBRK predicted velocities are approximately a factor of 2 higher than those predicted by the inlet-basin model. Since the DAMBRK model was specifically developed for routing flood flows, its predicted velocities are expected to be the more accurate.

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APPENDIX A

INPUT FILES USED FOR INLET-BASIN MODEL APPLICATIONS

PRESENT CONDITIONS

```
  TIMEND =    270000.
  TSTEP  =        60.
  TWOUT  =    000000.
  INIEND =        00
NSEA     =         1
  PERIOD =     10800.   AMP     =     0.0000
NBAY     =         5
BAY2AREA = 1.9900E+6   ARATIO =       1.00   QINFLO =          0
BAY3AREA = 1.1400E+6   ARATIO =       1.00   QINFLO =          0
BAY4AREA = 5.1610E+4   ARATIO =       1.00   QINFLO =          0
BAY5AREA = 4.6200E+5   ARATIO =       1.00   QINFLO =          0
BAY6AREA = 1.6235E+4   ARATIO =       1.00   QINFLO =       40.0
NINLET   =         5
 FROM-TO =         1          2      /* INLET 1
 NCHANN  =         4
 NSECTI  =         6
 FRICTION=     0.030         0.
 ENTRANCE=       0.5        0.5
 SANGLE  =       0.0
D1              7.16      14.00      14.00       7.92
D2              8.38      13.10      13.10       8.99
D3             11.88      11.88      11.88      11.88
D4             11.88      11.88      11.88      11.88
D5              9.60      12.00      12.00       9.97
D6              7.92      13.00      13.00       8.23
W1              65.0       50.0       50.0       65.0
W2              35.0       25.0       25.0       35.0
W3              11.5       11.5       11.5       11.5
W4              11.5       11.5       11.5       11.5
W5              35.0       25.0       25.0       35.0
W6              65.0       50.0       50.0       65.0
L1               35.        35.        35.        35.        35.
L2               25.        30.        30.        30.        25.
L3               55.        55.        55.        55.        55.
L4               25.        30.        30.        30.        25.
L5               35.        35.        35.        35.        35.
 FROM-TO =         2          3      /* INLET 2
 NCHANN  =         4
 NSECTI  =         6
 FRICTION=     0.030         0.
 ENTRANCE=       0.5        0.5
 SANGLE  =       0.0
D1              9.14       9.14       9.14       2.43
D2              8.38       8.38       8.38       2.00
D3              5.18       7.62       7.62       1.83
D4              5.18       7.62       7.62       1.83
D5              8.38       8.38       8.38       2.00
D6              9.14       9.14       9.14       2.43
W1             120.0      120.0      120.0      300.0
W2              60.0      100.0      100.0      200.0
W3              30.0       20.0       30.0      180.0
W4              30.0       20.0       30.0      180.0
W5              35.0      100.0      100.0      200.0
W6             100.0      200.0      200.0      300.0
L1               80.        80.        80.        80.        80.
L2               50.        50.        50.        50.        50.
L3               30.        30.        30.        30.        30.
L4               50.        50.        50.        50.        50.
L5               80.        80.        80.        80.        80.
 FROM-TO =         3          4      /* INLET 3
```

```
 NCHANN   =        3
 NSECTI   =        6
 FRICTION=     0.030        0.
 ENTRANCE=       0.5        0.5
 SANGLE   =      0.0
D1              3.05       6.00       3.05
D2              3.45       4.88       3.45
D3              3.05       3.05       3.05
D4              3.05       3.05       3.05
D5              3.05       3.65       3.05
D6              3.00       3.96       3.00
W1              50.0       40.0       50.0
W2              25.0       20.0       25.0
W3              10.0       10.0       10.0
W4              10.0       10.0       10.0
W5              25.0       20.0       25.0
W6              50.0       40.0       50.0
L1               20.        25.        25.        20.
L2               15.        20.        20.        15.
L3               60.        60.        60.        60.
L4               15.        20.        20.        15.
L5               20.        25.        25.        20.
 FROM-TO =        4          5      /* INLET 4
 NCHANN   =        3
 NSECTI   =        6
 FRICTION=     0.030        0.
 ENTRANCE=       0.5        0.5
 SANGLE   =      0.0
D1              3.05       3.96       3.05
D2              3.05       3.96       3.05
D3              3.30       5.60       3.40
D4              3.30       5.60       3.40
D5              3.05       4.57       3.05
D6              3.05       4.57       3.05
W1              50.0       63.0       50.0
W2              27.0       30.0       27.0
W3              12.1       12.1       12.1
W4              12.1       12.1       12.1
W5              27.0       30.0       27.0
W6              50.0       63.0       50.0
L1               20.        30.        30.        20.
L2               15.        25.        25.        15.
L3               35.        35.        35.        35.
L4               15.        25.        25.        15.
L5               20.        30.        30.        20.
 FROM-TO =        5          6      /* INLET 5
 NCHANN   =        3
 NSECTI   =        9
 FRICTION=     0.030        0.
 ENTRANCE=       0.5        0.5
 SANGLE   =      0.0
D1              2.89       1.37       0.76
D2              2.59       1.37       0.76
D3              1.68       1.07       0.61
D4              0.76       1.37       0.61
D5              0.76       1.22       0.61
D6              0.76       0.76       0.61
D7              0.76       0.76       0.61
D8              0.76       0.61       0.61
D9              0.61       0.61       0.61
```

W1	72.0	72.0	72.0		
W2	84.0	84.0	84.0		
W3	104.0	104.0	104.0		
W4	73.0	73.0	73.0		
W5	101.0	101.0	101.0		
W6	64.0	64.0	64.0		
W7	98.0	98.0	98.0		
W8	58.0	58.0	58.0		
W9	55.0	55.0	55.0		
L1	201.	196.	192.	187.	
L2	219.	205.	192.	178.	
L3	165.	163.	162.	160.	
L4	178.	190.	203.	215.	
L5	155.	164.	174.	183.	
L6	91.	116.	141.	165.	
L7	87.	113.	139.	165.	
L8	105.	103.	102.	101.	

END

WITH 40 cm CAP

AFTER CONSOLIDATION

```
  TIMEND =    270000.
  TSTEP  =        60.
  TWOUT  =    000000.
  INIEND =        00
NSEA     =         1
  PERIOD =     3600.   AMP     =     0.0000
NBAY     =         5
BAY2AREA = 1.9900E+6  ARATIO =       1.00  QINFLO =          0
BAY3AREA = 1.1400E+6  ARATIO =       1.00  QINFLO =          0
BAY4AREA = 5.1610E+4  ARATIO =       1.00  QINFLO =          0
BAY5AREA = 4.8200E+5  ARATIO =       1.00  QINFLO =          0
BAY6AREA = 1.6235E+4  ARATIO =       1.00  QINFLO =       40.0
NINLET   =         5
 FROM-TO =         1          2      /* INLET 1
 NCHANN  =         4
 NSECTI  =         6
 FRICTION=     0.030         0.
 ENTRANCE=       0.5        0.5
 SANGLE  =       0.0
D1               7.16      14.00      14.00       7.92
D2               8.38      13.10      13.10       8.99
D3              11.88      11.88      11.88      11.88
D4              11.88      11.88      11.88      11.88
D5               9.60      12.00      12.00       9.97
D6               7.92      13.00      13.00       8.23
W1               65.0       50.0       50.0       65.0
W2               35.0       25.0       25.0       35.0
W3               11.5       11.5       11.5       11.5
W4               11.5       11.5       11.5       11.5
W5               35.0       25.0       25.0       35.0
W6               65.0       50.0       50.0       65.0
L1                35.        35.        35.        35.        35.
L2                25.        30.        30.        30.        25.
L3                55.        55.        55.        55.        55.
L4                25.        30.        30.        30.        25.
L5                35.        35.        35.        35.        35.
 FROM-TO =         2          3      /* INLET 2
 NCHANN  =         4
 NSECTI  =         6
 FRICTION=     0.030         0.
 ENTRANCE=       0.5        0.5
 SANGLE  =       0.0
D1               9.14       9.14       9.14       2.43
D2               8.38       8.38       8.38       2.00
D3               5.18       7.62       7.62       1.83
D4               5.18       7.62       7.62       1.83
D5               8.38       8.38       8.38       2.00
D6               9.14       9.14       9.14       2.43
W1              120.0      120.0      120.0      300.0
W2               60.0      100.0      100.0      200.0
W3               30.0       20.0       30.0      180.0
W4               30.0       20.0       30.0      180.0
W5               35.0      100.0      100.0      200.0
W6              100.0      200.0      200.0      300.0
L1                80.        80.        80.        80.        80.
L2                50.        50.        50.        50.        50.
L3                30.        30.        30.        30.        30.
L4                50.        50.        50.        50.        50.
L5                80.        80.        80.        80.        80.
 FROM-TO =         3          4      /* INLET 3
```

```
 NCHANN   =          3
 NSECTI   =          6
 FRICTION=       0.030          0.
 ENTRANCE=         0.5          0.5
 SANGLE   =        0.0
D1                3.05         6.00         3.05
D2                3.45         4.88         3.65
D3                3.05         3.05         3.05
D4                3.05         3.05         3.05
D5                3.05         3.65         3.05
D6                3.00         3.96         3.00
W1                50.0         40.0         50.0
W2                25.0         20.0         25.0
W3                10.0         10.0         10.0
W4                10.0         10.0         10.0
W5                25.0         20.0         25.0
W6                50.0         40.0         50.0
L1                 20.          25.          25.          20.
L2                 15.          20.          20.          15.
L3                 60.          60.          60.          60.
L4                 15.          20.          20.          15.
L5                 20.          25.          25.          20.
 FROM-TO =           4            5       /* INLET 4
 NCHANN   =          3
 NSECTI   =          6
 FRICTION=       0.030          0.
 ENTRANCE=         0.5          0.5
 SANGLE   =        0.0
D1                3.05         3.96         3.05
D2                3.05         3.96         3.05
D3                3.30         5.60         3.40
D4                3.30         5.60         3.40
D5                3.05         4.57         3.05
D6                3.05         4.57         3.05
W1                50.0         63.0         50.0
W2                27.0         30.0         27.0
W3                12.1         12.1         12.1
W4                12.1         12.1         12.1
W5                27.0         30.0         27.0
W6                50.0         63.0         50.0
L1                 20.          30.          30.          20.
L2                 15.          25.          25.          15.
L3                 35.          35.          35.          35.
L4                 15.          25.          25.          15.
L5                 20.          30.          30.          20.
 FROM-TO =           5            6       /* INLET 5
 NCHANN   =          3
 NSECTI   =          9
 FRICTION=       0.030          0.
 ENTRANCE=         0.5          0.5
 SANGLE   =        0.0
D1                2.66         1.14         0.50
D2                2.36         1.14         0.35
D3                1.46         0.84         0.35
D4                0.54         1.14         0.36
D5                0.54         1.00         0.37
D6                0.54         0.54         0.37
D7                0.53         0.53         0.37
D8                0.52         0.38         0.35
D9                0.36         0.36         0.35
```

W1	72.0	72.0	72.0		
W2	84.0	84.0	84.0		
W3	104.0	104.0	104.0		
W4	73.0	73.0	73.0		
W5	101.0	101.0	101.0		
W6	64.0	64.0	64.0		
W7	98.0	98.0	98.0		
W8	58.0	58.0	58.0		
W9	55.0	55.0	55.0		
L1	201.	196.	192.	187.	
L2	219.	205.	192.	178.	
L3	165.	163.	162.	160.	
L4	178.	190.	203.	215.	
L5	155.	164.	174.	183.	
L6	91.	116.	141.	165.	
L7	87.	113.	139.	165.	
L8	105.	103.	102.	101.	

---------- END

APPENDIX B

OUTPUT FILES FROM INLET-BASIN MODEL APPLICATIONS

```
$ [illegible]
$ [illegible]SS)[illegible]ALL
$ COPY INLET.INF[illegible].NBD5L    ESEN            UT.
$ ASSIGN INPUT.SCR                          FOR005
$ ASSIGN PAR.NBD5B-PRESENT                          FOR006
$ ASSIGN LST.NBD5B-PRESENT                          FOR007
$ ASSIGN TSR.NBD5B-PRESENT                          FOR008
$
$ IF(DBG .EQS. "DEBUG") THEN ASSIGN SYS$COMMAND SYS$INPUT
$ IF(DBG .EQS. "DEBUG") THEN DEFINE DBG$INIT [TATSU.TOOLS]DEBUG.COM
$
$ RUN/NODEBUG INLET
TIMEND =    270000.0
TSTEP  =         60.0
TWOUT  =          0.0


INLET #5 AREAS

SECT.CHAN.AREA =      1     1       0.20671E+03
SECT.CHAN.AREA =      1     2       0.10686E+03
SECT.CHAN.AREA =      1     3       0.58702E+02
SECT.CHAN.AREA =      2     1       0.19613E+03
SECT.CHAN.AREA =      2     2       0.11468E+03
SECT.CHAN.AREA =      2     3.      0.63921E+02
SECT.CHAN.AREA =      3     1       0.10648E+03
SECT.CHAN.AREA =      3     2       0.10797E+03
SECT.CHAN.AREA =      3     3       0.53613E+02
SECT.CHAN.AREA =      4     1       0.65542E+02
SECT.CHAN.AREA =      4     2       0.11267E+03
SECT.CHAN.AREA =      4     3       0.52698E+02
SECT.CHAN.AREA =      5     1       0.62122E+02
SECT.CHAN.AREA =      5     2       0.81675E+02
SECT.CHAN.AREA =      5     3       0.49953E+02
SECT.CHAN.AREA =      6     1       0.60962E+02
SECT.CHAN.AREA =      6     2       0.61560E+02
SECT.CHAN.AREA =      6     3       0.49038E+02
SECT.CHAN.AREA =      7     1       0.58702E+02
SECT.CHAN.AREA =      7     2       0.53430E+02
SECT.CHAN.AREA =      7     3       0.47208E+02
SECT.CHAN.AREA =      8     1       0.38203E+02
SECT.CHAN.AREA =      8     2       0.34465E+02
SECT.CHAN.AREA =      8     3       0.34093E+02

TIME(HOURS)=     3.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)   0.00000    0.00000    0.00000    0.00000   -0.00014
MIN. VELOCITY(+M3)  -0.01246   -0.00397   -0.04357   -0.02510   -0.02963

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00851
SECTION  2 : VSECT =   -0.00845
SECTION  3 : VSECT =   -0.01181
SECTION  4 : VSECT =   -0.01371
SECTION  5 : VSECT =   -0.01634
SECTION  6 : VSECT =   -0.01845
SECTION  7 : VSECT =   -0.01986
SECTION  8 : VSECT =   -0.02963


SUM OF FLOW(-M3)    -59937.    -59965.    -59994.    -60002.    -60091.
```

```
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF         -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =               1           2           3           4           5
HIGH WATER          0.00003     0.00003     0.00028     0.00036     0.00060
LOW WATER           0.00000     0.00000     0.00013     0.00018     0.00021
ELEVATION           0.00002     0.00002     0.00021     0.00027     0.00045
TIDAL PRISM              52         40.          7.         80.          8.
BAY WATER RANGE     0.00003     0.00004     0.00014     0.00018     0.00047

TIME(HOURS)=    12.00
      INLET=            1           2           3           4           5
MAX. VELOCITY(-M3)  -0.02450    -0.00800    -0.09174    -0.05291    -0.06256
MIN. VELOCITY(+M3)  -0.03544    -0.01163    -0.13297    -0.07670    -0.09092

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.02615
SECTION  2 : VSECT =   -0.02594
SECTION  3 : VSECT =   -0.03625
SECTION  4 : VSECT =   -0.04208
SECTION  5 : VSECT =   -0.05014
SECTION  6 : VSECT =   -0.05661
SECTION  7 : VSECT =   -0.06095
SECTION  8 : VSECT =   -0.09092

GT. Y(5) =    -0.0116   -9.7089

SUM OF FLOW(-M3)   -87254.    -87288.    -87310.    -87324.    -87497.
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF         -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =               1           2           3           4           5
HIGH WATER          0.00004     0.00006     0.00055     0.00072     0.00118
LOW WATER           0.00002     0.00002     0.00028     0.00036     0.00054
ELEVATION           0.00003     0.00004     0.00041     0.00054     0.00086
TIDAL PRISM              51.         39.         14.        170.         10.
BAY WATER RANGE     0.00003     0.00003     0.00027     0.00035     0.00063

TIME(HOURS)=    15.00
      INLET=            1           2           3           4           5
MAX. VELOCITY(-M3)  -0.03560    -0.01168    -0.13356    -0.07704    -0.09119
MIN. VELOCITY(+M3)  -0.05153    -0.01689    -0.19338    -0.11156    -0.13211

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.03804
SECTION  2 : VSECT =   -0.03773
SECTION  3 : VSECT =   -0.05273
SECTION  4 : VSECT =   -0.06120
SECTION  5 : VSECT =   -0.07290
SECTION  6 : VSECT =   -0.08229
SECTION  7 : VSECT =   -0.08859
SECTION  8 : VSECT =   -0.13211

GT. Y(5) =    -0.0105  -14.1231

SUM OF FLOW(-M3)  -126895.   -126968.   -127018.   -127047.   -127409.
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF         -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =               1           2           3           4           5
HIGH WATER          0.00008     0.00010     0.00111     0.00146     0.00223
```

```
LOW WATER          0.00004   0.00005   0.00055   0.00072   0.00108
ELEVATION          0.00006   0.00007   0.00083   0.00107   0.00166
TIDAL PRISM            85.        57.       29.      354.       19.
BAY WATER RANGE    0.00004   0.00005   0.00056   0.00074   0.00114

TIME(HOURS)=    18.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.05176  -0.01693  -0.19420  -0.11203  -0.13269
MIN. VELOCITY(+M3)  -0.07491  -0.02450  -0.28111  -0.16216  -0.19169

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.05532
SECTION  2 : VSECT =   -0.05486
SECTION  3 : VSECT =   -0.07663
SECTION  4 : VSECT =   -0.08891
SECTION  5 : VSECT =   -0.10588
SECTION  6 : VSECT =   -0.11947
SECTION  7 : VSECT =   -0.12858
SECTION  8 : VSECT =   -0.19168

GT, Y(5) =    -0.0073  -20.5623

SUM OF FLOW(-M3)  -184441.  -184503.  -184712.  -184773.  -185526.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
HIGH WATER         0.00017   0.00019   0.00229   0.00301   0.00439
LOW WATER          0.00008   0.00010   0.00112   0.00147   0.00220
ELEVATION          0.00013   0.00014   0.00171   0.00224   0.00329
TIDAL PRISM           163.      108.       61.      740.       36.
BAY WATER RANGE    0.00008   0.00010   0.00117   0.00154   0.00219

TIME(HOURS)=    21.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.07522  -0.02461  -0.28227  -0.16283  -0.19250
MIN. VELOCITY(+M3)  -0.10874  -0.03560  -0.40819  -0.23544  -0.27724

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.08039
SECTION  2 : VSECT =   -0.07969
SECTION  3 : VSECT =   -0.11122
SECTION  4 : VSECT =   -0.12896
SECTION  5 : VSECT =   -0.15347
SECTION  6 : VSECT =   -0.17303
SECTION  7 : VSECT =   -0.18614
SECTION  8 : VSECT =   -0.27724

GT, Y(5) =    -0.0088  -29.9431

SUM OF FLOW(-M3)  -267099.  -268234.  -268452.  -268579.  -270144.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
HIGH WATER         0.00033   0.00038   0.00476   0.00623   0.00881
LOW WATER          0.00017   0.00019   0.00231   0.00303   0.00442
ELEVATION          0.00025   0.00029   0.00353   0.00463   0.00661
TIDAL PRISM           334.      215.      126.     1543.       71.
BAY WATER RANGE    0.00017   0.00019   0.00244   0.00320   0.00439
```

```
TIME(HOURS)=    24.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.10919  -0.03576  -0.40988  -0.23641  -0.27837
MIN. VELOCITY(+M3)  -0.13685  -0.04470  -0.51267  -0.29549  -0.34426

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =    -0.10025
SECTION  2 : VSECT =    -0.09933
SECTION  3 : VSECT =    -0.13851
SECTION  4 : VSECT =    -0.16052
SECTION  5 : VSECT =    -0.19091
SECTION  6 : VSECT =    -0.21510
SECTION  7 : VSECT =    -0.23130
SECTION  8 : VSECT =    -0.34426

GT. Y(5) =      0.0345  -37.4647

SUM OF FLOW(-M3)  -371119.   -371420.   -371618.   -371749.   -373352
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00049    0.00056    0.00729    0.00954    0.01296
LOW WATER         0.00034    0.00039    0.00479    0.00628    0.00889
ELEVATION         0.00042    0.00047    0.00604    0.00791    0.01092
TIDAL PRISM           311.       193.       129.      1570.        66.
BAY WATER RANGE   0.00016    0.00017    0.00250    0.00326    0.00408

TIME(HOURS)=    27.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.13697  -0.04489  -0.51319  -0.29381  -0.34505
MIN. VELOCITY(+M3)  -0.14641  -0.04787  -0.54782  -0.31566  -0.36660

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =    -0.10684
SECTION  2 : VSECT =    -0.10585
SECTION  3 : VSECT =    -0.14756
SECTION  4 : VSECT =    -0.17097
SECTION  5 : VSECT =    -0.20330
SECTION  6 : VSECT =    -0.22902
SECTION  7 : VSECT =    -0.24625
SECTION  8 : VSECT =    -0.36646

GT. Y(5) =      0.0078  -39.9935

SUM OF FLOW(-M3)  -421974.   -422094.   -422151.   -422200.   -422807.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00055    0.00061    0.00826    0.01080    0.01429
LOW WATER         0.00049    0.00054    0.00731    0.00956    0.01271
ELEVATION         0.00052    0.00058    0.00778    0.01018    0.01350
TIDAL PRISM           119         71         49        975         26.
BAY WATER RANGE   0.00006    0.00006    0.00095    0.00123    0.00158

TIME(HOURS)=    30.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.13788  -0.04505  -0.51555  -0.29704  -0.34487
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MIN. VELOCITY(+M3)  -0.14643  -0.04707  -0.54783  -0.31567  -0.36659

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.10033
SECTION  2 : VSECT =   -0.09942
SECTION  3 : VSECT =   -0.13864
SECTION  4 : VSECT =   -0.16069
SECTION  5 : VSECT =   -0.19113
SECTION  6 : VSECT =   -0.21539
SECTION  7 : VSECT =   -0.23165
SECTION  8 : VSECT =   -0.34487

GT. Y(5) =     0.0041  -37.5505

SUM OF FLOW(-M3)  -423720.  -423570.  -423468.  -423415.  -422770.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =            1         2         3         4         5
HIGH WATER        0.00055   0.00061   0.00825   0.01079   0.01426
LOW WATER         0.00047   0.00052   0.00724   0.00946   0.01224
ELEVATION         0.00051   0.00056   0.00775   0.01013   0.01325
TIDAL PRISM          151.      101.       52.      641.       33.
BAY WATER RANGE   0.00008   0.00009   0.00101   0.00133   0.00202

TIME(HOURS)=   33.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.11687  -0.03819  -0.43691  -0.25176  -0.29326
MIN. VELOCITY(+M3)  -0.13770  -0.04499  -0.51487  -0.29665  -0.34443

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.08500
SECTION  2 : VSECT =   -0.08425
SECTION  3 : VSECT =   -0.11757
SECTION  4 : VSECT =   -0.13634
SECTION  5 : VSECT =   -0.16226
SECTION  6 : VSECT =   -0.18296
SECTION  7 : VSECT =   -0.19685
SECTION  8 : VSECT =   -0.29326

GT. Y(5) =     0.0073  -31.7661

SUM OF FLOW(-M3)  -378563.  -378273.  -378088.  -377980.  -376649.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =            1         2         3         4         5
HIGH WATER        0.00047   0.00052   0.00722   0.00944   0.01222
LOW WATER         0.00033   0.00035   0.00514   0.00671   0.00857
ELEVATION         0.00040   0.00043   0.00618   0.00807   0.01039
TIDAL PRISM          287.      184.      107.     1312.       59.
BAY WATER RANGE   0.00014   0.00016   0.00208   0.00272   0.00365

TIME(HOURS)=   36.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.09412  -0.03073  -0.35217  -0.20299  -0.23766
MIN. VELOCITY(+M3)  -0.11657  -0.03809  -0.43585  -0.25115  -0.29269

VELOCITIES FOR EACH TRANSECT IN INLET #5
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```
SECTION  1 : VSECT =   -0.06866
SECTION  2 : VSECT =   -0.06808
SECTION  3 : VSECT =   -0.09506
SECTION  4 : VSECT =   -0.11027
SECTION  5 : VSECT =   -0.13131
SECTION  6 : VSECT =   -0.14814
SECTION  7 : VSECT =   -0.15943
SECTION  8 : VSECT =   -0.23766

GT. Y(5) =     0.0079  -25.6250

SUM OF FLOW(-M3)  -310029.   -309797.   -309650.   -309556.   -308406.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00032    0.00035    0.00511    0.00668    0.00852
LOW WATER         0.00021    0.00023    0.00332    0.00434    0.00540
ELEVATION         0.00027    0.00029    0.00422    0.00551    0.00700
TIDAL PRISM           230.       143.        92.       1128.        47.
BAY WATER RANGE   0.00012    0.00013    0.00179    0.00234    0.00300

TIME(HOURS)=   39.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.07585  -0.02470  -0.28393  -0.16369  -0.19229
MIN. VELOCITY(+M3)  -0.09389  -0.03068  -0.35132  -0.20250  -0.23712

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.05543
SECTION  2 : VSECT =   -0.05498
SECTION  3 : VSECT =   -0.07680
SECTION  4 : VSECT =   -0.08912
SECTION  5 : VSECT =   -0.10615
SECTION  6 : VSECT =   -0.11979
SECTION  7 : VSECT =   -0.12895
SECTION  8 : VSECT =   -0.19229

GT. Y(5) =     0.0056  -20.6709

SUM OF FLOW(-M3)  -249809.   -249658.   -249563.   -249503.   -248756.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00021    0.00022    0.00331    0.00432    0.00546
LOW WATER         0.00013    0.00014    0.00215    0.00280    0.00350
ELEVATION         0.00017    0.00018    0.00273    0.00356    0.00448
TIDAL PRISM           148.        94.        60.       731.        32.
BAY WATER RANGE   0.00007    0.00008    0.00116    0.00152    0.00197

TIME(HOURS)=   42.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.06113  -0.01998  -0.22892  -0.13199  -0.15541
MIN. VELOCITY(+M3)  -0.07566  -0.02473  -0.28325  -0.16330  -0.19183

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.04474
SECTION  2 : VSECT =   -0.04438
SECTION  3 : VSECT =   -0.06201
SECTION  4 : VSECT =   -0.07197
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SECTION  5 : VSECT =   -0.08574
SECTION  6 : VSECT =   -0.09678
SECTION  7 : VSECT =   -0.10420
SECTION  8 : VSECT =   -0.15541

GT. Y(5) =      0.0043  -16.6734

SUM OF FLOW(-M3)  -201326.   -201229.   -201169.   -201129.   -200645.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER         0.00013    0.00014    0.00214    0.00279    0.00348
LOW WATER          0.00008    0.00009    0.00138    0.00181    0.00222
ELEVATION          0.00011    0.00012    0.00176    0.00230    0.00285
TIDAL PRISM            95.        60.        39.       473.        20.
BAY WATER RANGE    0.00005    0.00005    0.00075    0.00098    0.00126

TIME(HOURS)=    45.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.04928   -0.01611   -0.18458   -0.10644   -0.12551
MIN. VELOCITY(+M3)  -0.06098   -0.01993   -0.22837   -0.13168   -0.15504

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.03610
SECTION  2 : VSECT =   -0.03581
SECTION  3 : VSECT =   -0.05005
SECTION  4 : VSECT =   -0.05809
SECTION  5 : VSECT =   -0.06922
SECTION  6 : VSECT =   -0.07815
SECTION  7 : VSECT =   -0.08414
SECTION  8 : VSECT =   -0.12551

GT. Y(5) =      0.0037  -13.4485

SUM OF FLOW(-M3)  -162280.   -162218.   -162179.   -162154.   -161840.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER         0.00008    0.00009    0.00138    0.00180    0.00221
LOW WATER          0.00005    0.00006    0.00089    0.00116    0.00140
ELEVATION          0.00007    0.00007    0.00113    0.00148    0.00181
TIDAL PRISM            61.        38.        25.       306.        13.
BAY WATER RANGE    0.00003    0.00003    0.00049    0.00064    0.00081

TIME(HOURS)=    48.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.03973   -0.01299   -0.14884   -0.08583   -0.10132
MIN. VELOCITY(+M3)  -0.04916   -0.01607   -0.18414   -0.10618   -0.12521

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.02913
SECTION  2 : VSECT =   -0.02890
SECTION  3 : VSECT =   -0.04039
SECTION  4 : VSECT =   -0.04688
SECTION  5 : VSECT =   -0.05586
SECTION  6 : VSECT =   -0.06307
SECTION  7 : VSECT =   -0.06791
SECTION  8 : VSECT =   -0.10132
```

```
QT, Y(5) =      0.0033  -10.8475

SUM OF FLOW(-M3)  -130824.  -130784.  -130760.  -130743.  -130540.
SUM OF FLOW(+M3)        0.        0.        0.        0.        0.
PERCENT DIFF         -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =           1         2         3         4         5
HIGH WATER        0.00005   0.00006   0.00089   0.00116   0.00140
LOW WATER         0.00003   0.00003   0.00057   0.00075   0.00088
ELEVATION         0.00004   0.00004   0.00073   0.00095   0.00114
TIDAL PRISM            39.       24.       16.      178.        8.
BAY WATER RANGE   0.00002   0.00002   0.00031   0.00041   0.00052

TIME(HOURS)=    51.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.03203  -0.01047  -0.12002  -0.06922  -0.00177
MIN. VELOCITY(+M3)  -0.03963  -0.01296  -0.14848  -0.08563  -0.10108

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.02350
SECTION  2 : VSECT =   -0.02331
SECTION  3 : VSECT =   -0.03259
SECTION  4 : VSECT =   -0.03783
SECTION  5 : VSECT =   -0.04508
SECTION  6 : VSECT =   -0.05090
SECTION  7 : VSECT =   -0.05480
SECTION  8 : VSECT =   -0.08177

QT, Y(5) =      0.0028   -8.7497

SUM OF FLOW(-M3)  -105477.  -105452.  -105436.  -105426.  -105294.
SUM OF FLOW(+M3)        0.        0.        0.        0.        0.
PERCENT DIFF         -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =           1         2         3         4         5
HIGH WATER        0.00003   0.00003   0.00057   0.00074   0.00087
LOW WATER         0.00002   0.00002   0.00037   0.00048   0.00054
ELEVATION         0.00003   0.00003   0.00047   0.00061   0.00071
TIDAL PRISM            25.       15.       10.      128.        5.
BAY WATER RANGE   0.00001   0.00001   0.00020   0.00027   0.00033

TIME(HOURS)=    54.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.02583  -0.00844  -0.09679  -0.05582  -0.06597
MIN. VELOCITY(+M3)  -0.03196  -0.01043  -0.11974  -0.06905  -0.08157

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.01896
SECTION  2 : VSECT =   -0.01881
SECTION  3 : VSECT =   -0.02629
SECTION  4 : VSECT =   -0.03052
SECTION  5 : VSECT =   -0.03637
SECTION  6 : VSECT =   -0.04107
SECTION  7 : VSECT =   -0.04422
SECTION  8 : VSECT =   -0.06597

QT, Y(5) =      0.0023   -7.0576

SUM OF FLOW(-M3)   -85048.   -85032.   -85023.   -85016.   -84931.
```

TIDAL PRISM					
BAY WATER RANGE	0.00001	0.00001	0.00013	0.00017	[illegible]

TIME(HOURS)= 57.00

INLET=	1	2	3	4	5
MAX. VELOCITY(-M3)	-0.02083	-0.00681	-0.07806	-0.04502	-0.05323
MIN. VELOCITY(+M3)	-0.02577	-0.00842	-0.09656	-0.05569	-0.06582

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION 1 : VSECT = -0.01529
SECTION 2 : VSECT = -0.01517
SECTION 3 : VSECT = -0.02121
SECTION 4 : VSECT = -0.02462
SECTION 5 : VSECT = -0.02934
SECTION 6 : VSECT = -0.03313
SECTION 7 : VSECT = -0.03567
SECTION 8 : VSECT = -0.05323

GT. Y(5) = 0.0019 -5.6927

SUM OF FLOW(-M3)	-68581.	-68571.	-68565.	-68561.	-68506.
SUM OF FLOW(+M3)	0.	0.	0.	0.	0.
PERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00001	0.00001	0.00023	0.00030	0.00033
LOW WATER	0.00001	0.00001	0.00015	0.00019	0.00020
ELEVATION	0.00001	0.00001	0.00019	0.00025	0.00026
TIDAL PRISM	10.	6.	4.	53.	2.
BAY WATER RANGE	0.00000	0.00001	0.00008	0.00011	0.00013

TIME(HOURS)= 60.00

INLET=	1	2	3	4	5
MAX. VELOCITY(-M3)	-0.01680	-0.00549	-0.06295	-0.03631	-0.04294
MIN. VELOCITY(+M3)	-0.02078	-0.00679	-0.07787	-0.04491	-0.05310

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION 1 : VSECT = -0.01234
SECTION 2 : VSECT = -0.01224
SECTION 3 : VSECT = -0.01711
SECTION 4 : VSECT = -0.01986
SECTION 5 : VSECT = -0.02367
SECTION 6 : VSECT = -0.02673
SECTION 7 : VSECT = -0.02878
SECTION 8 : VSECT = -0.04294

GT. Y(5) = 0.0016 -4.5917

SUM OF FLOW(-M3)	-55306.	-55299.	-55296.	-55293.	-55257.
SUM OF FLOW(+M3)	0.	0.	0.	0.	0.
PERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00001	0.00001	0.00015	0.00019	0.00020

	0.	0.	0.	0.	0.
PERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00000	0.00000	0.00006	0.00008	0.00006
LOW WATER	0.00000	0.00000	0.00004	0.00005	0.00003
ELEVATION	0.00000	0.00000	0.00005	0.00006	0.00005
TIDAL PRISM	2.	1.	1.	14.	1.
BAY WATER RANGE	0.00000	0.00000	0.00002	0.00003	0.00003

```
TIME(HOURS)=    69.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00881  -0.00288  -0.03303  -0.01905  -0.02254
MIN. VELOCITY(+M3)  -0.01090  -0.00352  -0.04085  -0.02356  -0.02787

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00647
SECTION  2 : VSECT =   -0.00642
SECTION  3 : VSECT =   -0.00898
SECTION  4 : VSECT =   -0.01042
SECTION  5 : VSECT =   -0.01242
SECTION  6 : VSECT =   -0.01403
SECTION  7 : VSECT =   -0.01510
SECTION  8 : VSECT =   -0.02254

GT, Y(5) =      0.0008   -2.4097

SUM OF FLOW(-M3)   -29011.   -29010.   -29009.   -29008.   -28999.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
HIGH WATER        0.00000   0.00000   0.00004   0.00005   0.00003
LOW WATER         0.00000   0.00000   0.00002   0.00003   0.00001
ELEVATION         0.00000   0.00000   0.00003   0.00004   0.00002
TIDAL PRISM             1.        1.        1.        9.        0.
BAY WATER RANGE   0.00000   0.00000   0.00001   0.00002   0.00002

TIME(HOURS)=    72.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00711  -0.00232  -0.02664  -0.01537  -0.01818
MIN. VELOCITY(+M3)  -0.00879  -0.00287  -0.03295  -0.01900  -0.02248

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00522
SECTION  2 : VSECT =   -0.00518
SECTION  3 : VSECT =   -0.00724
SECTION  4 : VSECT =   -0.00841
SECTION  5 : VSECT =   -0.01002
SECTION  6 : VSECT =   -0.01131
SECTION  7 : VSECT =   -0.01218
SECTION  8 : VSECT =   -0.01818

GT, Y(5) =      0.0007   -1.9437

SUM OF FLOW(-M3)   -23398.   -23398.   -23397.   -23397.   -23391.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
HIGH WATER        0.00000   0.00000   0.00002   0.00003   0.00001
LOW WATER         0.00000   0.00000   0.00001   0.00002   0.00000
ELEVATION         0.00000   0.00000   0.00002   0.00002   0.00001
TIDAL PRISM             1.        0.        0.        5.        0.
BAY WATER RANGE   0.00000   0.00000   0.00001   0.00001   0.00001

TIME(HOURS)=    75.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00573  -0.00187  -0.02149  -0.01239  -0.01466
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MIN. VELOCITY(+M3)  -0.00709  -0.00232  -0.02658  -0.01533  -0.01814

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00421
SECTION  2 : VSECT =   -0.00418
SECTION  3 : VSECT =   -0.00584
SECTION  4 : VSECT =   -0.00678
SECTION  5 : VSECT =   -0.00808
SECTION  6 : VSECT =   -0.00913
SECTION  7 : VSECT =   -0.00983
SECTION  8 : VSECT =   -0.01466

QT, Y(5) =     0.0006   -1.5678

SUM OF FLOW(-M3)   -18872.   -18872.   -18871.   -18871.   -18867.
SUM OF FLOW(+M3)       0.        0.        0.        0.        0.
PERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =            1         2         3         4         5
HIGH WATER        0.00000   0.00000   0.00001   0.00002   0.00000
LOW WATER         0.00000   0.00000   0.00001   0.00001   0.00000
ELEVATION         0.00000   0.00000   0.00001   0.00001   0.00000
TIDAL PRISM           0.        0.        0.        3.        0.
BAY WATER RANGE   0.00000   0.00000   0.00001   0.00001   0.00001
FORTRAN STOP
$
$ DEASSIGN/ALL
$ DELETE INPUT.SCR;*
%DELETE-I-FILDEL, DISK2:[TATSU.INLET.MODEL2]INPUT.SCR;3 deleted (12 blocks)
$ SET NOVERIFY
  DAN_CERC     job terminated at 24-AUG-1989 16:19:31.34

  Accounting information:
  Buffered I/O count:          150      Peak working set size:   455
  Direct I/O count:            340      Peak page file size:    2160
  Page faults:                 623      Mounted volumes:           0
  Charged CPU time:     0 00:29:10.74   Elapsed time:     0 00:32:37.02
```

WITH 45 CM CAP
AFTER CONSOLIDATION

```
$ SET NOVERIFY
$ SET DEF [DAN.INLET.MODEL]
$ DEASSIGN/ALL
$ COPY INLET.INPUT_NBD5B-BALSAM INPUT.SCR
$ ASSIGN INPUT.SCR                          FOR005
$ ASSIGN PAR.NBD5B-BALSAM                          FOR006
$ ASSIGN LST.NBD5B-BALSAM                          FOR007
$ ASSIGN TSR.NBD5B-BALSAM                          FOR008
$
$ IF(DBG .EQS. "DEBUG") THEN ASSIGN SYS$COMMAND SYS$INPUT
$ IF(DBG .EQS. "DEBUG") THEN DEFINE DBG$INIT [DAN.UTILS]DEBUG.COM
$
$ RUN/NODEBUG INLET
TIMEND =    270000.0
TSTEP  =         60.0
TNOUT  =          0.0


INLET #5 AREAS

SECT,CHAN,AREA =      1     1       0.18748E+03
SECT,CHAN,AREA =      1     2       0.83920E+02
SECT,CHAN,AREA =      1     3       0.32769E+02
SECT,CHAN,AREA =      2     1       0.17569E+03
SECT,CHAN,AREA =      2     2       0.93060E+02
SECT,CHAN,AREA =      2     3       0.32777E+02
SECT,CHAN,AREA =      3     1       0.87500E+02
SECT,CHAN,AREA =      3     2       0.87615E+02
SECT,CHAN,AREA =      3     3       0.31791E+02
SECT,CHAN,AREA =      4     1       0.46688E+02
SECT,CHAN,AREA =      4     2       0.93090E+02
SECT,CHAN,AREA =      4     3       0.31622E+02
SECT,CHAN,AREA =      5     1       0.44258E+02
SECT,CHAN,AREA =      5     2       0.63525E+02
SECT,CHAN,AREA =      5     3       0.30388E+02
SECT,CHAN,AREA =      6     1       0.43049E+02
SECT,CHAN,AREA =      6     2       0.43335E+02
SECT,CHAN,AREA =      6     3       0.29833E+02
SECT,CHAN,AREA =      7     1       0.40674E+02
SECT,CHAN,AREA =      7     2       0.35490E+02
SECT,CHAN,AREA =      7     3       0.27950E+02
SECT,CHAN,AREA =      8     1       0.24666E+02
SECT,CHAN,AREA =      8     2       0.20905E+02
SECT,CHAN,AREA =      8     3       0.19653E+02

TIME(HOURS)=     3.00
      INLET=          1          2          3          4          5
MAX.  VELOCITY(-M3)   0.00000    0.00000    0.00000    0.00000   -0.00017
MIN.  VELOCITY(+M3)  -0.01252   -0.00384   -0.04362   -0.02516   -0.04847

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.01016
SECTION  2 : VSECT =   -0.01048
SECTION  3 : VSECT =   -0.01532
SECTION  4 : VSECT =   -0.01845
SECTION  5 : VSECT =   -0.02289
SECTION  6 : VSECT =   -0.02721
SECTION  7 : VSECT =   -0.03037
SECTION  8 : VSECT =   -0.04847
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?T, Y(5) =     -0.0171    -3.1563

SUM OF FLOW(-M3)    -20706.    -20680.    -20663.    -20664.    -20688.
SUM OF FLOW(+M3)         0.         0.         0.         0.         0.
PERCENT DIFF          -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =            1          2          3          4          5
HIGH WATER          0.00005    0.00006    0.00015    0.00019    0.00085
LOW WATER          -0.00002   -0.00003   -0.00001   -0.00002   -0.00001
ELEVATION           0.00001    0.00001    0.00007    0.00008    0.00042
TIDAL PRISM            139.       101.         8.       101.        14.
BAY WATER RANGE     0.00007    0.00009    0.00016    0.00021    0.00086

TIME(HOURS)=     6.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.01060   -0.00365   -0.04259   -0.02463   -0.04850
MIN. VELOCITY(+M3)  -0.01641   -0.00540   -0.06213   -0.03587   -0.07032

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.01474
SECTION  2 : VSECT =   -0.01521
SECTION  3 : VSECT =   -0.02224
SECTION  4 : VSECT =   -0.02678
SECTION  5 : VSECT =   -0.03322
SECTION  6 : VSECT =   -0.03948
SECTION  7 : VSECT =   -0.04407
SECTION  8 : VSECT =   -0.07032

?T, Y(5) =     -0.0106    -4.5787

SUM OF FLOW(-M3)    -41112.    -41155.    -41186.    -41192.    -41261.
SUM OF FLOW(+M3)         0.         0.         0.         0.         0.
PERCENT DIFF          -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =            1          2          3          4          5
HIGH WATER          0.00003    0.00004    0.00015    0.00020    0.00052
LOW WATER          -0.00001   -0.00001    0.00003    0.00004    0.00009
ELEVATION           0.00001    0.00001    0.00009    0.00012    0.00030
TIDAL PRISM             92.        62.         6.        74.         7.
BAY WATER RANGE     0.00005    0.00005    0.00012    0.00015    0.00043

TIME(HOURS)=     9.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.01644   -0.00543   -0.06255   -0.03611   -0.07060
MIN. VELOCITY(+M3)  -0.02434   -0.00796   -0.09127   -0.05266   -0.10218

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.02144
SECTION  2 : VSECT =   -0.02212
SECTION  3 : VSECT =   -0.03234
SECTION  4 : VSECT =   -0.03894
SECTION  5 : VSECT =   -0.04829
SECTION  6 : VSECT =   -0.05739
SECTION  7 : VSECT =   -0.06405
SECTION  8 : VSECT =   -0.10218

QT, Y(5) =     -0.0070    -6.6608

SUM OF FLOW(-M3)    -59933.    -59971.    -59993.    -60000.    -60085.
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SUM OF FLOW(+M3)          0.          0.          0          0.          0.
 ERCENT DIFF           -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
HIGH WATER            0.00003     0.00003     0.00027     0.00036     0.00086
 OW WATER             0.00000     0.00000     0.00014     0.00018     0.00040
 LEVATION             0.00001     0.00002     0.00020     0.00027     0.00063
TIDAL PRISM               51.         31.          7.         86.          7.
BAY WATER RANGE       0.00003     0.00003     0.00014     0.00018     0.00046

 IME(HOURS)=    12.00
      INLET=              1           2           3           4           5
 AX.  VELOCITY(-M3)  -0.02450    -0.00799    -0.09168    -0.05290    -0.10265
 IN.  VELOCITY(+M3)  -0.03547    -0.01159    -0.13300    -0.07672    -0.14846

'ELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =    -0.03120
SECTION  2 : VSECT =    -0.03219
 ECTION  3 : VSECT =    -0.04704
 ECTION  4 : VSECT =    -0.05663
SECTION  5 : VSECT =    -0.07022
 ECTION  6 : VSECT =    -0.08344
 ECTION  7 : VSECT =    -0.09310
SECTION  8 : VSECT =    -0.14846

 T, Y(5) =     -0.0051    -9.6971

SUM OF FLOW(-M3)    -87251.     -87283.     -87307.     -87320.     -87494.
 UM OF FLOW(+M3)          0.          0.          0.          0.          0.
 ERCENT DIFF           -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
 IGH WATER            0.00004     0.00005     0.00054     0.00072     0.00159
 OW WATER             0.00002     0.00003     0.00028     0.00037     0.00080
ELEVATION             0.00003     0.00004     0.00041     0.00054     0.00119
TIDAL PRISM               43.         29.         14.        168.         13.
 AY WATER RANGE       0.00002     0.00003     0.00027     0.00035     0.00079

TIME(HOURS)=    15.00
      INLET=              1           2           3           4           5
 AX.  VELOCITY(-M3)  -0.03562    -0.01165    -0.13355    -0.07704    -0.14912
MIN.  VELOCITY(+M3)  -0.05154    -0.01687    -0.19339    -0.11156    -0.21539

 'ELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =    -0.04540
 ECTION  2 : VSECT =    -0.04683
SECTION  3 : VSECT =    -0.06842
SECTION  4 : VSECT =    -0.08235
 ECTION  5 : VSECT =    -0.10208
 ECTION  6 : VSECT =    -0.12123
SECTION  7 : VSECT =    -0.13519
 ECTION  8 : VSECT =    -0.21539

GT, Y(5) =     -0.0054   -14.1210

 UM OF FLOW(-M3)   -126879.    -126958.    -127011.    -127041.    -127402.
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF          -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
 IGH WATER            0.00008     0.00010     0.00111     0.00146     0.00307
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LOW WATER          0.00004   0.00005   0.00055   0.00072   0.00157
 LEVATION          0.00006   0.00008   0.00083   0.00109   0.00232
 IDAL PRISM            80.       53.       29.      356.       24.
BAY WATER RANGE    0.00004   0.00005   0.00056   0.00074   0.00150

 IME(HOURS)=    18.00
      INLET=          1         2         3         4         5
MAX. VELOCITY(-M3)  -0.05176  -0.01694  -0.19419  -0.11202  -0.21630
 IN. VELOCITY(+M3)  -0.07489  -0.02450  -0.28108  -0.16214  -0.31140

VELOCITIES FOR EACH TRANSECT IN INLET #5

 ECTION  1 : VSECT =   -0.06603
SECTION  2 : VSECT =   -0.06809
ECTION  3 : VSECT =   -0.09942
 ECTION  4 : VSECT =   -0.11959
SECTION  5 : VSECT =   -0.14812
SECTION  6 : VSECT =   -0.17574
 ECTION  7 : VSECT =   -0.19580
SECTION  8 : VSECT =   -0.31140

 T, Y(5) =     -0.0064  -20.5623

SUM OF FLOW(-M3)  -184427.  -184591.  -184698.  -184759.  -185510.
UM OF FLOW(+M3)        0.        0.        0.        0.        0.
 ERCENT DIFF        -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
HIGH WATER         0.00017   0.00019   0.00229   0.00301   0.00608
 OW WATER          0.00008   0.00010   0.00112   0.00147   0.00309
ELEVATION          0.00013   0.00015   0.00171   0.00224   0.00459
TIDAL PRISM            163.      106.       61.      741.       49.
 AY WATER RANGE    0.00008   0.00009   0.00117   0.00154   0.00300

TIME(HOURS)=    21.00
      INLET=          1         2         3         4         5
 AX. VELOCITY(-M3)  -0.07521  -0.02462  -0.28225  -0.16282  -0.31268
MIN. VELOCITY(+M3)  -0.10873  -0.03560  -0.40814  -0.23541  -0.44695

 ELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.09590
 ECTION  2 : VSECT =   -0.09884
ECTION  3 : VSECT =   -0.14412
SECTION  4 : VSECT =   -0.17318
 ECTION  5 : VSECT =   -0.21416
 ECTION  6 : VSECT =   -0.25356
SECTION  7 : VSECT =   -0.28202
ECTION  8 : VSECT =   -0.44695

QT, Y(5) =     -0.0059  -29.9399

 UM OF FLOW(-M3)  -267872.  -268208.  -268425.  -268552.  -270114.
UM OF FLOW(+M3)        0.        0.        0.        0.        0.
PERCENT DIFF       -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =          1         2         3         4         5
 IGH WATER         0.00034   0.00038   0.00475   0.00623   0.01219
LOW WATER          0.00017   0.00019   0.00231   0.00303   0.00613
LEVATION           0.00025   0.00029   0.00353   0.00463   0.00916
 IDAL PRISM            333.      216.      126.     1542.       98.
BAY WATER RANGE    0.00017   0.00019   0.00244   0.00320   0.00606
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TIME(HOURS)=    24.00
      INLET=          1          2          3          4          5
MAX.  VELOCITY(-M3)  -0.10918  -0.03575  -0.40984  -0.23639  -0.44872
MIN.  VELOCITY(+M3)  -0.13682  -0.04475  -0.51253  -0.29544  -0.55195

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.11970
SECTION  2 : VSECT =   -0.12329
SECTION  3 : VSECT =   -0.17954
SECTION  4 : VSECT =   -0.21551
SECTION  5 : VSECT =   -0.26612
SECTION  6 : VSECT =   -0.31452
SECTION  7 : VSECT =   -0.34929
SECTION  8 : VSECT =   -0.55195

GT, Y(5) =     -0.0126  -37.5048

SUM OF FLOW(-M3)  -371094.   -371406.   -371593.   -371724.   -373325.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00049    0.00055    0.00729    0.00954    0.01780
LOW WATER         0.00034    0.00039    0.00479    0.00628    0.01229
ELEVATION         0.00041    0.00047    0.00604    0.00791    0.01504
TIDAL PRISM           307.       184.       129.      1571.        87.
BAY WATER RANGE   0.00015    0.00016    0.00250    0.00326    0.00551

TIME(HOURS)=    27.00
      INLET=          1          2          3          4          5
MAX.  VELOCITY(-M3)  -0.13702  -0.04480  -0.51321  -0.29584  -0.55295
MIN.  VELOCITY(+M3)  -0.14641  -0.04786  -0.54781  -0.31566  -0.58569

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.12743
SECTION  2 : VSECT =   -0.13122
SECTION  3 : VSECT =   -0.19099
SECTION  4 : VSECT =   -0.22917
SECTION  5 : VSECT =   -0.28287
SECTION  6 : VSECT =   -0.33413
SECTION  7 : VSECT =   -0.37094
SECTION  8 : VSECT =   -0.58569

GT, Y(5) =     -0.0013  -40.0017

SUM OF FLOW(-M3)  -421967.   -422076.   -422143.   -422193.   -422800.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00055    0.00061    0.00825    0.01079    0.01957
LOW WATER         0.00049    0.00055    0.00731    0.00957    0.01761
ELEVATION         0.00052    0.00058    0.00778    0.01018    0.01859
TIDAL PRISM           109.        65.        49.       570.        32.
BAY WATER RANGE   0.00005    0.00006    0.00094    0.00122    0.00195

TIME(HOURS)=    30.00
      INLET=          1          2          3          4          5
MAX.  VELOCITY(-M3)  -0.13788  -0.04506  -0.51557  -0.29705  -0.55280
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MIN. VELOCITY(+M3) -0.14642 -0.04787 -0.54783 -0.31567 -0.55568

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION 1 : VSECT = -0.11967
SECTION 2 : VSECT = -0.12326
SECTION 3 : VSECT = -0.17951
SECTION 4 : VSECT = -0.21549
SECTION 5 : VSECT = -0.26617
SECTION 6 : VSECT = -0.31467
SECTION 7 : VSECT = -0.34959
SECTION 8 : VSECT = -0.55280

QT, Y(5) = 0.0011 -37.5530

SUM OF FLOW(-M3)	-423730.	-423580.	-423478.	-423426.	-422782.
SUM OF FLOW(+M3)	0.	0.	0.	0.	0.
PERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00055	0.00061	0.00825	0.01079	0.01953
LOW WATER	0.00047	0.00052	0.00724	0.00946	0.01690
ELEVATION	0.00051	0.00056	0.00775	0.01013	0.01821
TIDAL PRISM	150.	101.	52.	642.	43.
BAY WATER RANGE	0.00008	0.00009	0.00101	0.00133	0.00262

TIME(HOURS)= 33.00

INLET=	1	2	3	4	5
MAX. VELOCITY(-M3)	-0.11689	-0.03817	-0.43694	-0.25178	-0.47302
MIN. VELOCITY(+M3)	-0.13771	-0.04500	-0.51489	-0.29666	-0.55212

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION 1 : VSECT = -0.10143
SECTION 2 : VSECT = -0.10453
SECTION 3 : VSECT = -0.15239
SECTION 4 : VSECT = -0.18311
SECTION 5 : VSECT = -0.22645
SECTION 6 : VSECT = -0.26816
SECTION 7 : VSECT = -0.29833
SECTION 8 : VSECT = -0.47302

QT, Y(5) = -0.0009 -31.7753

SUM OF FLOW(-M3)	-378584.	-378296.	-378109.	-378001.	-376672.
SUM OF FLOW(+M3)	0.	0.	0.	0.	0.
PERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00047	0.00052	0.00722	0.00944	0.01686
LOW WATER	0.00033	0.00035	0.00514	0.00671	0.01194
ELEVATION	0.00040	0.00043	0.00618	0.00808	0.01440
TIDAL PRISM	286.	184.	107.	1312.	80.
BAY WATER RANGE	0.00014	0.00016	0.00208	0.00272	0.00492

TIME(HOURS)= 36.00

INLET=	1	2	3	4	5
MAX. VELOCITY(-M3)	-0.09412	-0.03076	-0.35218	-0.20300	-0.38533
MIN. VELOCITY(+M3)	-0.11659	-0.03808	-0.43588	-0.25117	-0.47206

VELOCITIES FOR EACH TRANSECT IN INLET #5

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SECTION  1 : VSECT =   -0.08195
SECTION  2 : VSECT =   -0.08449
SECTION  3 : VSECT =   -0.12330
SECTION  4 : VSECT =   -0.14827
SECTION  5 : VSECT =   -0.18356
SECTION  6 : VSECT =   -0.21765
SECTION  7 : VSECT =   -0.24245
SECTION  8 : VSECT =   -0.38533

GT, Y(5) =      0.0031  -25.6298

SUM OF FLOW(-M3)  -310048.   -309815.   -309669.   -309575.   -308426.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00032    0.00035    0.00511    0.00668    0.01183
LOW WATER         0.00021    0.00023    0.00332    0.00434    0.00770
ELEVATION         0.00027    0.00029    0.00422    0.00551    0.00976
TIDAL PRISM          229.       144.        92.       1128.        67.
BAY WATER RANGE   0.00012    0.00013    0.00179    0.00234    0.00413

TIME(HOURS)=    39.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.07585  -0.02479  -0.28394  -0.16369  -0.31283
MIN. VELOCITY(+M3)  -0.09390  -0.03060  -0.35134  -0.20251  -0.38444

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.06617
SECTION  2 : VSECT =   -0.06825
SECTION  3 : VSECT =   -0.09965
SECTION  4 : VSECT =   -0.11990
SECTION  5 : VSECT =   -0.14854
SECTION  6 : VSECT =   -0.17631
SECTION  7 : VSECT =   -0.19653
SECTION  8 : VSECT =   -0.31283

GT, Y(5) =      0.0039  -20.6721

SUM OF FLOW(-M3)  -249821.   -249670.   -249576.   -249515.   -248770.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF         -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =           1          2          3          4          5
HIGH WATER        0.00021    0.00022    0.00331    0.00432    0.00765
LOW WATER         0.00013    0.00014    0.00215    0.00280    0.00495
ELEVATION         0.00017    0.00018    0.00273    0.00356    0.00630
TIDAL PRISM          149.        93.        60.        731.        44.
BAY WATER RANGE   0.00007    0.00008    0.00116    0.00152    0.00270

TIME(HOURS)=    42.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.06113  -0.01998  -0.22893  -0.13200  -0.25340
MIN. VELOCITY(+M3)  -0.07567  -0.02473  -0.28326  -0.16330  -0.31210

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.05341
SECTION  2 : VSECT =   -0.05510
SECTION  3 : VSECT =   -0.08049
SECTION  4 : VSECT =   -0.09687
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SECTION  5 : VSECT =   -0.12007
SECTION  6 : VSECT =   -0.14260
SECTION  7 : VSECT =   -0.15903
SECTION  8 : VSECT =   -0.25340

GT, Y(5) =      0.0037  -16.6738

SUM OF FLOW(-M3)  -201334.   -201237.   -201177.   -201138.   -200655.
SUM OF FLOW(+M3)        0.          0.          0.          0.          0.
PERCENT DIFF         -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =            1           2           3           4           5
HIGH WATER         0.00013     0.00014     0.00214     0.00279     0.00492
LOW WATER          0.00008     0.00009     0.00138     0.00181     0.00316
ELEVATION          0.00011     0.00012     0.00176     0.00230     0.00404
TIDAL PRISM            96.         60.         39.        473.         29.
BAY WATER RANGE    0.00005     0.00005     0.00075     0.00098     0.00176

TIME(HOURS)=    45.00
      INLET=           1           2           3           4           5
MAX. VELOCITY(-M3)  -0.04928    -0.01611    -0.18459    -0.10644    -0.20496
MIN. VELOCITY(+M3)  -0.06099    -0.01993    -0.22838    -0.13168    -0.25280

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.04310
SECTION  2 : VSECT =   -0.04447
SECTION  3 : VSECT =   -0.06498
SECTION  4 : VSECT =   -0.07822
SECTION  5 : VSECT =   -0.09698
SECTION  6 : VSECT =   -0.11522
SECTION  7 : VSECT =   -0.12854
SECTION  8 : VSECT =   -0.20496

GT, Y(5) =      0.0034  -13.4490

SUM OF FLOW(-M3)  -162285.   -162223.   -162185.   -162159.   -161846.
SUM OF FLOW(+M3)        0.          0.          0.          0.          0.
PERCENT DIFF         -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =            1           2           3           4           5
HIGH WATER         0.00008     0.00009     0.00138     0.00180     0.00315
LOW WATER          0.00005     0.00006     0.00089     0.00116     0.00201
ELEVATION          0.00007     0.00007     0.00113     0.00148     0.00258
TIDAL PRISM            61.         38.         25.        306.         19.
BAY WATER RANGE    0.00003     0.00003     0.00049     0.00064     0.00114

TIME(HOURS)=    48.00
      INLET=           1           2           3           4           5
MAX. VELOCITY(-M3)  -0.03973    -0.01299    -0.14884    -0.08584    -0.16561
MIN. VELOCITY(+M3)  -0.04916    -0.01607    -0.18415    -0.10619    -0.20447

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.03478
SECTION  2 : VSECT =   -0.03588
SECTION  3 : VSECT =   -0.05244
SECTION  4 : VSECT =   -0.06314
SECTION  5 : VSECT =   -0.07829
SECTION  6 : VSECT =   -0.09304
SECTION  7 : VSECT =   -0.10382
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.T.  Y(5) =      0.0029  -10.8479

 UM OF FLOW(-M3)  -130828.   -130788.   -130764.   -130747.   -130544.
 UM OF FLOW(+M3)        0.          0.          0.          0.          0.
ERCENT DIFF          -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =            1           2           3           4           5
 IGH WATER         0.00005     0.00006     0.00089     0.00116     0.00200
OW WATER           0.00003     0.00003     0.00057     0.00075     0.00126
ELEVATION          0.00004     0.00004     0.00073     0.00095     0.00163
 IDAL PRISM             39.         24.         16.        198.         12.
AY WATER RANGE     0.00002     0.00002     0.00031     0.00041     0.00073

 IME(HOURS)=    51.00
      INLET=           1           2           3           4           5
AX.  VELOCITY(-M3)  -0.03203  -0.01047  -0.12003  -0.06922  -0.13374
IN.  VELOCITY(+M3)  -0.03963  -0.01296  -0.14849  -0.08563  -0.16522

VELOCITIES FOR EACH TRANSECT IN INLET #5

 ECTION  1 : VSECT =   -0.02806
ECTION  2 : VSECT =   -0.02895
SECTION  3 : VSECT =   -0.04231
 ECTION  4 : VSECT =   -0.05095
 ECTION  5 : VSECT =   -0.06319
SECTION  6 : VSECT =   -0.07511
ECTION  7 : VSECT =   -0.08382
 ECTION  8 : VSECT =   -0.13374

T,  Y(5) =      0.0025   -8.7499

UM OF FLOW(-M3)  -105479.   -105454.   -105439.   -105428.   -105297.
SUM OF FLOW(+M3)        0.          0.          0.          0.          0.
 ERCENT DIFF          -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =            1           2           3           4           5
HIGH WATER         0.00003     0.00003     0.00057     0.00074     0.00126
OW WATER           0.00002     0.00002     0.00037     0.00048     0.00079
 LEVATION          0.00003     0.00003     0.00047     0.00061     0.00102
TIDAL PRISM             25.         15.         10.        128.          8.
AY WATER RANGE     0.00001     0.00001     0.00020     0.00027     0.00047

IME(HOURS)=    54.00
      INLET=           1           2           3           4           5
AX.  VELOCITY(-M3)  -0.02583  -0.00844  -0.09679  -0.05582  -0.10795
IN.  VELOCITY(+M3)  -0.03196  -0.01045  -0.11974  -0.06906  -0.13342

ELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.02263
SECTION  2 : VSECT =   -0.02336
 ECTION  3 : VSECT =   -0.03414
SECTION  4 : VSECT =   -0.04111
SECTION  5 : VSECT =   -0.05099
 ECTION  6 : VSECT =   -0.06061
ECTION  7 : VSECT =   -0.06765
SECTION  8 : VSECT =   -0.10795

T,  Y(5) =      0.0021   -7.0577
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SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF           -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
HIGH WATER           0.00002     0.00002     0.00036     0.00048     0.00073
LOW WATER            0.00001     0.00001     0.00023     0.00030     0.00049
ELEVATION            0.00002     0.00002     0.00030     0.00039     0.00063
TIDAL PRISM               16.         10.          7.         82.          5.
BAY WATER RANGE      0.00001     0.00001     0.00013     0.00017     0.00030

TIME(HOURS)=    57.00
      INLET=             1           2           3           4           5
MAX. VELOCITY(-M3)   -0.02083    -0.00681    -0.07806    -0.04502    -0.08711
MIN. VELOCITY(+M3)   -0.02577    -0.00842    -0.09656    -0.05569    -0.10769

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.01826
SECTION  2 : VSECT =   -0.01884
SECTION  3 : VSECT =   -0.02754
SECTION  4 : VSECT =   -0.03316
SECTION  5 : VSECT =   -0.04114
SECTION  6 : VSECT =   -0.04890
SECTION  7 : VSECT =   -0.05458
SECTION  8 : VSECT =   -0.08711

DT, Y(5) =      0.0018    -5.6928

SUM OF FLOW(-M3)    -68582.     -68572.     -68566.     -68562.     -68507.
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF           -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
HIGH WATER           0.00001     0.00001     0.00023     0.00030     0.00048
LOW WATER            0.00001     0.00001     0.00015     0.00019     0.00029
ELEVATION            0.00001     0.00001     0.00019     0.00025     0.00038
TIDAL PRISM               10.          6.          4.         53.          3.
BAY WATER RANGE      0.00000     0.00001     0.00008     0.00011     0.00019

TIME(HOURS)=    60.00
      INLET=             1           2           3           4           5
MAX. VELOCITY(-M3)   -0.01680    -0.00549    -0.06295    -0.03631    -0.07029
MIN. VELOCITY(+M3)   -0.02078    -0.00679    -0.07787    -0.04491    -0.08691

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.01473
SECTION  2 : VSECT =   -0.01520
SECTION  3 : VSECT =   -0.02222
SECTION  4 : VSECT =   -0.02675
SECTION  5 : VSECT =   -0.03319
SECTION  6 : VSECT =   -0.03945
SECTION  7 : VSECT =   -0.04404
SECTION  8 : VSECT =   -0.07029

DT, Y(5) =      0.0015    -4.5918

SUM OF FLOW(-M3)    -55306.     -55300.     -55296.     -55293.     -55258.
SUM OF FLOW(+M3)          0.          0.          0.          0.          0.
PERCENT DIFF           -1.000      -1.000      -1.000      -1.000      -1.000
    BAY # =              1           2           3           4           5
```

OW WATER	0.00000	0.00000	0.00009	0.00012	0.00017
LEVATION	0.00001	0.00001	0.00012	0.00016	0.00023
TIDAL PRISM	6.	4.	3.	34.	2.
AY WATER RANGE	0.00000	0.00000	0.00005	0.00007	0.00012

TIME(HOURS)= 63.00

INLET=	1	2	3	4	5
AX. VELOCITY(-M3)	-0.01355	-0.00443	-0.05077	-0.02928	-0.05670
IN. VELOCITY(+M3)	-0.01676	-0.00543	-0.06280	-0.03622	-0.07012

ELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION 1 : VSECT = -0.01188
ECTION 2 : VSECT = -0.01226
ECTION 3 : VSECT = -0.01792
SECTION 4 : VSECT = -0.02158
SECTION 5 : VSECT = -0.02677
ECTION 6 : VSECT = -0.03183
ECTION 7 : VSECT = -0.03552
SECTION 8 : VSECT = -0.05670

T, Y(5) = 0.0012 -3.7038

UM OF FLOW(-M3)	-44602.	-44598.	-44596.	-44594.	-44572.
UM OF FLOW(+M3)	0.	0.	0.	0.	0.
ERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
IGH WATER	0.00000	0.00000	0.00009	0.00012	0.00017
OW WATER	0.00000	0.00000	0.00006	0.00008	0.00009
ELEVATION	0.00000	0.00000	0.00008	0.00010	0.00013
IDAL PRISM	4.	2.	2.	22.	1.
AY WATER RANGE	0.00000	0.00000	0.00003	0.00005	0.00007

TIME(HOURS)= 66.00

INLET=	1	2	3	4	5
MAX. VELOCITY(-M3)	-0.01093	-0.00357	-0.04095	-0.02362	-0.04574
MIN. VELOCITY(+M3)	-0.01351	-0.00442	-0.05065	-0.02921	-0.05657

ELOCITIES FOR EACH TRANSECT IN INLET #5

ECTION 1 : VSECT = -0.00958
ECTION 2 : VSECT = -0.00989
SECTION 3 : VSECT = -0.01446
ECTION 4 : VSECT = -0.01741
ECTION 5 : VSECT = -0.02159
SECTION 6 : VSECT = -0.02567
SECTION 7 : VSECT = -0.02866
ECTION 8 : VSECT = -0.04574

GT, Y(5) = 0.0010 -2.9875

UM OF FLOW(-M3)	-35971.	-35969.	-35968.	-35966.	-35952.
SUM OF FLOW(+M3)	0.	0.	0.	0.	0.
ERCENT DIFF	-1.000	-1.000	-1.000	-1.000	-1.000
BAY # =	1	2	3	4	5
HIGH WATER	0.00000	0.00000	0.00006	0.00008	0.00009
OW WATER	0.00000	0.00000	0.00004	0.00005	0.00005
LEVATION	0.00000	0.00000	0.00005	0.00006	0.00007
IDAL PRISM	2.	1.	1.	14.	1.
AY WATER RANGE	0.00000	0.00000	0.00002	0.00003	0.00004

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TIME(HOURS)=    69.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00881  -0.00286  -0.03303  -0.01905  -0.03690
MIN. VELOCITY(+M3)  -0.01090  -0.00356  -0.04085  -0.02356  -0.04563

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00773
SECTION  2 : VSECT =   -0.00798
SECTION  3 : VSECT =   -0.01166
SECTION  4 : VSECT =   -0.01404
SECTION  5 : VSECT =   -0.01742
SECTION  6 : VSECT =   -0.02071
SECTION  7 : VSECT =   -0.02312
SECTION  8 : VSECT =   -0.03690

GT. Y(5) =      0.0008    -2.4098

SUM OF FLOW(-M3)   -29011.    -29010.    -29009.    -29008.    -28999.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF        -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =          1          2          3          4          5
HIGH WATER        0.00000    0.00000    0.00004    0.00005    0.00005
LOW WATER         0.00000    0.00000    0.00002    0.00003    0.00002
ELEVATION         0.00000    0.00000    0.00003    0.00004    0.00004
TIDAL PRISM             1.         1.         1.         9.         0.
BAY WATER RANGE   0.00000    0.00000    0.00001    0.00002    0.00003

TIME(HOURS)=    72.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00711  -0.00232  -0.02664  -0.01537  -0.02976
MIN. VELOCITY(+M3)  -0.00879  -0.00287  -0.03295  -0.01900  -0.03681

VELOCITIES FOR EACH TRANSECT IN INLET #5

SECTION  1 : VSECT =   -0.00624
SECTION  2 : VSECT =   -0.00643
SECTION  3 : VSECT =   -0.00941
SECTION  4 : VSECT =   -0.01133
SECTION  5 : VSECT =   -0.01405
SECTION  6 : VSECT =   -0.01670
SECTION  7 : VSECT =   -0.01865
SECTION  8 : VSECT =   -0.02976

GT. Y(5) =      0.0007    -1.9437

SUM OF FLOW(-M3)   -23398.    -23398.    -23397.    -23397.    -23391.
SUM OF FLOW(+M3)        0.         0.         0.         0.         0.
PERCENT DIFF        -1.000     -1.000     -1.000     -1.000     -1.000
    BAY # =          1          2          3          4          5
HIGH WATER        0.00000    0.00000    0.00002    0.00003    0.00002
LOW WATER         0.00000    0.00000    0.00001    0.00002    0.00001
ELEVATION         0.00000    0.00000    0.00002    0.00002    0.00001
TIDAL PRISM             1.         0.         0.         5.         0.
BAY WATER RANGE   0.00000    0.00000    0.00001    0.00001    0.00002

TIME(HOURS)=    75.00
      INLET=          1          2          3          4          5
MAX. VELOCITY(-M3)  -0.00573  -0.00187  -0.02149  -0.01239  -0.02401
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MIN. VELOCITY(+M3)  -0.00709  -0.00232  -0.02658  -0.01533  -0.02969

VELOCITIES FOR EACH TRANSECT IN INLET #5

 SECTION  1 : VSECT =   -0.00503
 SECTION  2 : VSECT =   -0.00519
SECTION  3 : VSECT =   -0.00759
SECTION  4 : VSECT =   -0.00914
 SECTION  5 : VSECT =   -0.01133
SECTION  6 : VSECT =   -0.01347
SECTION  7 : VSECT =   -0.01504
 SECTION  8 : VSECT =   -0.02401

QT. Y(5) =      0.0005   -1.5679

 SUM OF FLOW(-M3)   -18872.   -18872.   -18871.   -18871.   -18867.
SUM OF FLOW(+M3)        0.        0.        0.        0.        0.
PERCENT DIFF         -1.000    -1.000    -1.000    -1.000    -1.000
    BAY # =            1         2         3         4         5
HIGH WATER         0.00000   0.00000   0.00001   0.00002   0.00001
LOW WATER          0.00000   0.00000   0.00001   0.00001   0.00000
ELEVATION          0.00000   0.00000   0.00001   0.00001   0.00000
TIDAL PRISM              0.        0.        0.        3.        0.
BAY WATER RANGE    0.00000   0.00000   0.00001   0.00001   0.00001
 OFTRAN STOP

$ DEASSIGN/ALL
$ DELETE INPUT.SCR;*
 DELETE-I-FILDEL, DISK2:[DAN.INLET.MODEL]INPUT.SCR;1 deleted (12 blocks)
$ SET NOVERIFY
  DAN_NBEP      job terminated at 15-SEP-1989 11:48:30.42

  Accounting information:
  Buffered I/O count:          149      Peak working set size:    439
  Direct I/O count:            349      Peak page file size:     2160
  Page faults:                 868      Mounted volumes:            0
  Charged CPU time:     0 00:28:46.10   Elapsed time:      0 00:32:03.33
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