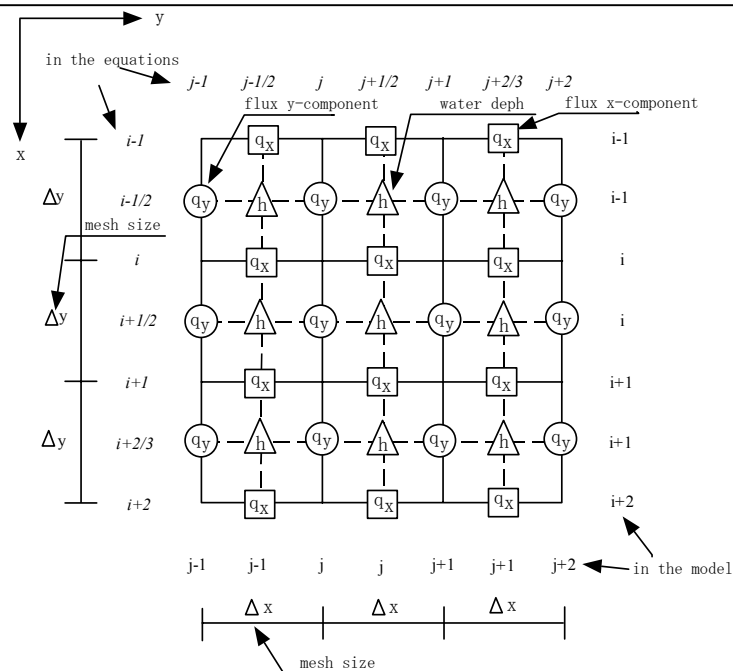


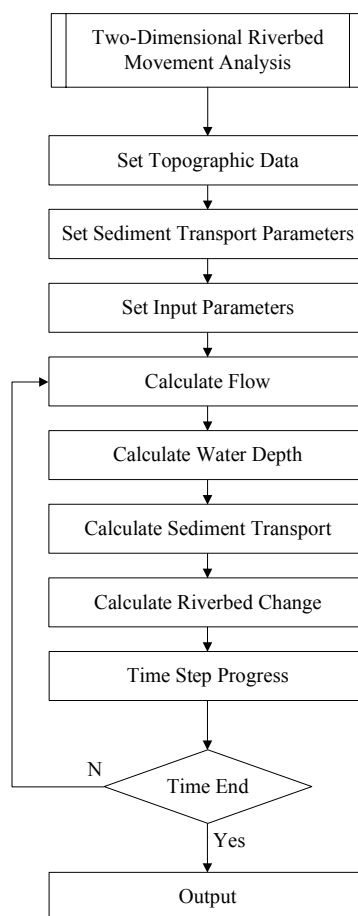
Note : D= Grain Size of Riverbed Material, I = Bed Slope, A= Catchment Area  
 Qb= Sediment Transport Ability by Water Flow (using Brown's Formula)

Figure 6.3.8

Annual Sediment Transport Capacity in  
 the Sto. Tomas River



Coordinates and locations of  $q_x$ ,  $q_y$ , and  $h$  on the staggered mesh system



Flowchart of Calculation

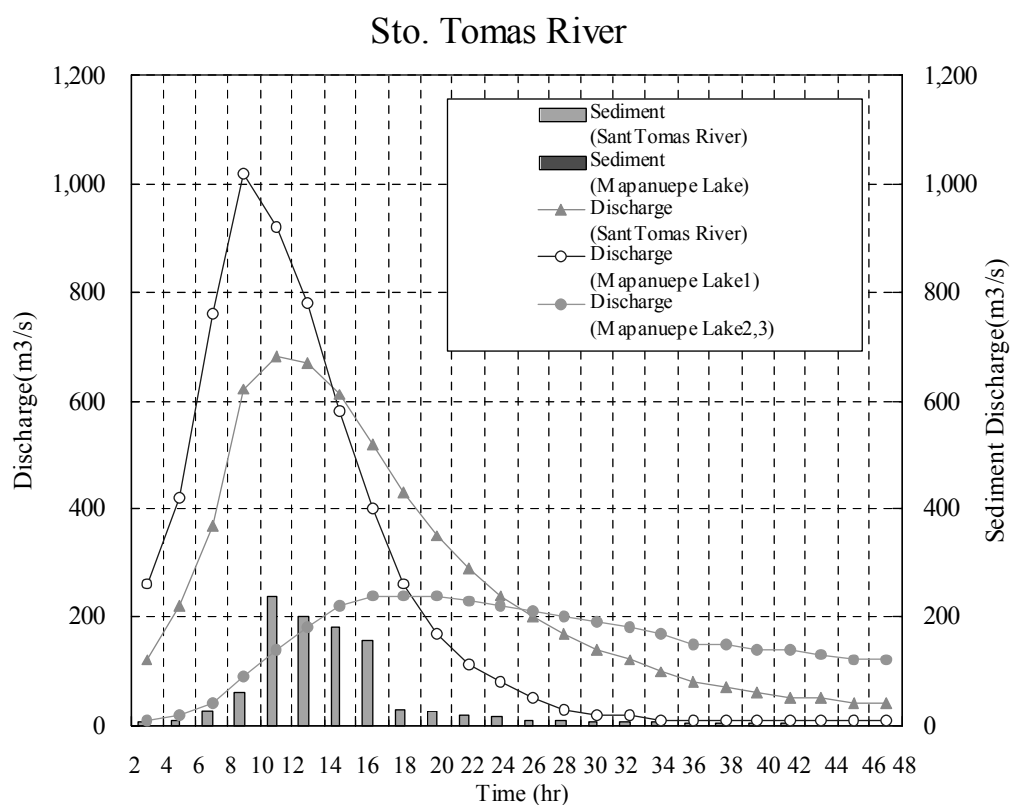
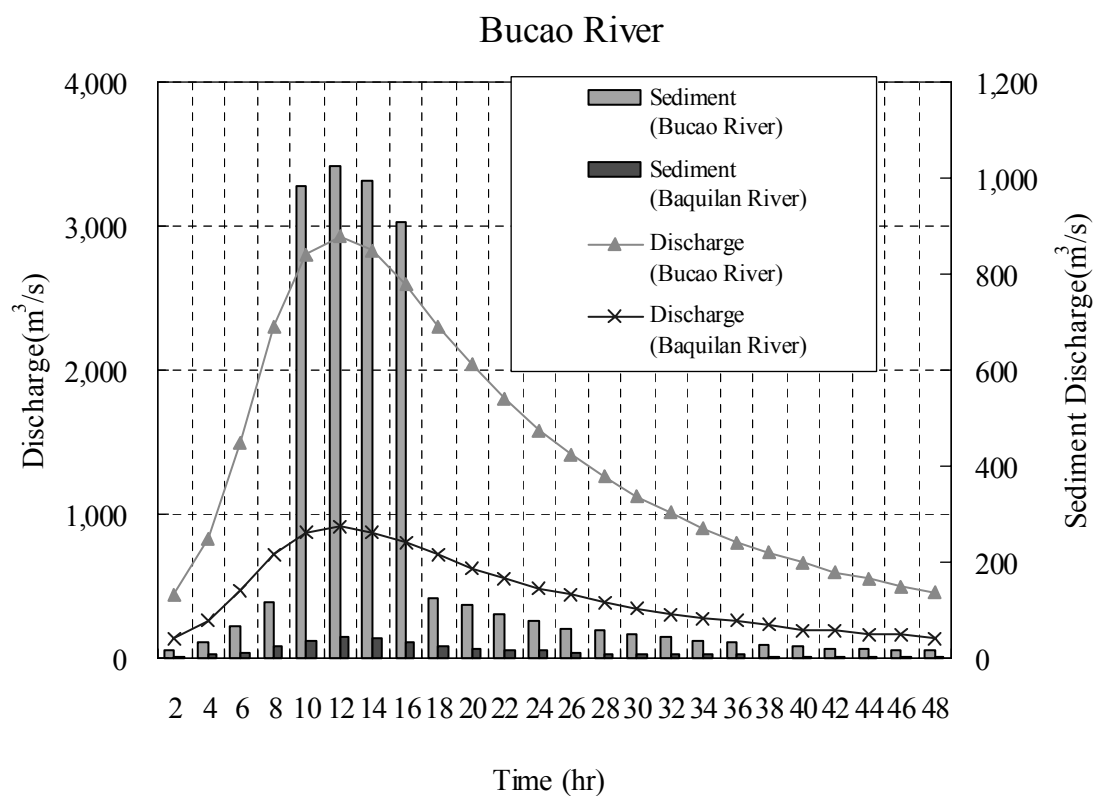
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**Figure 6.4.1**

**Calculation Procedure of Two-Dimensional  
Mudflow Analysis**



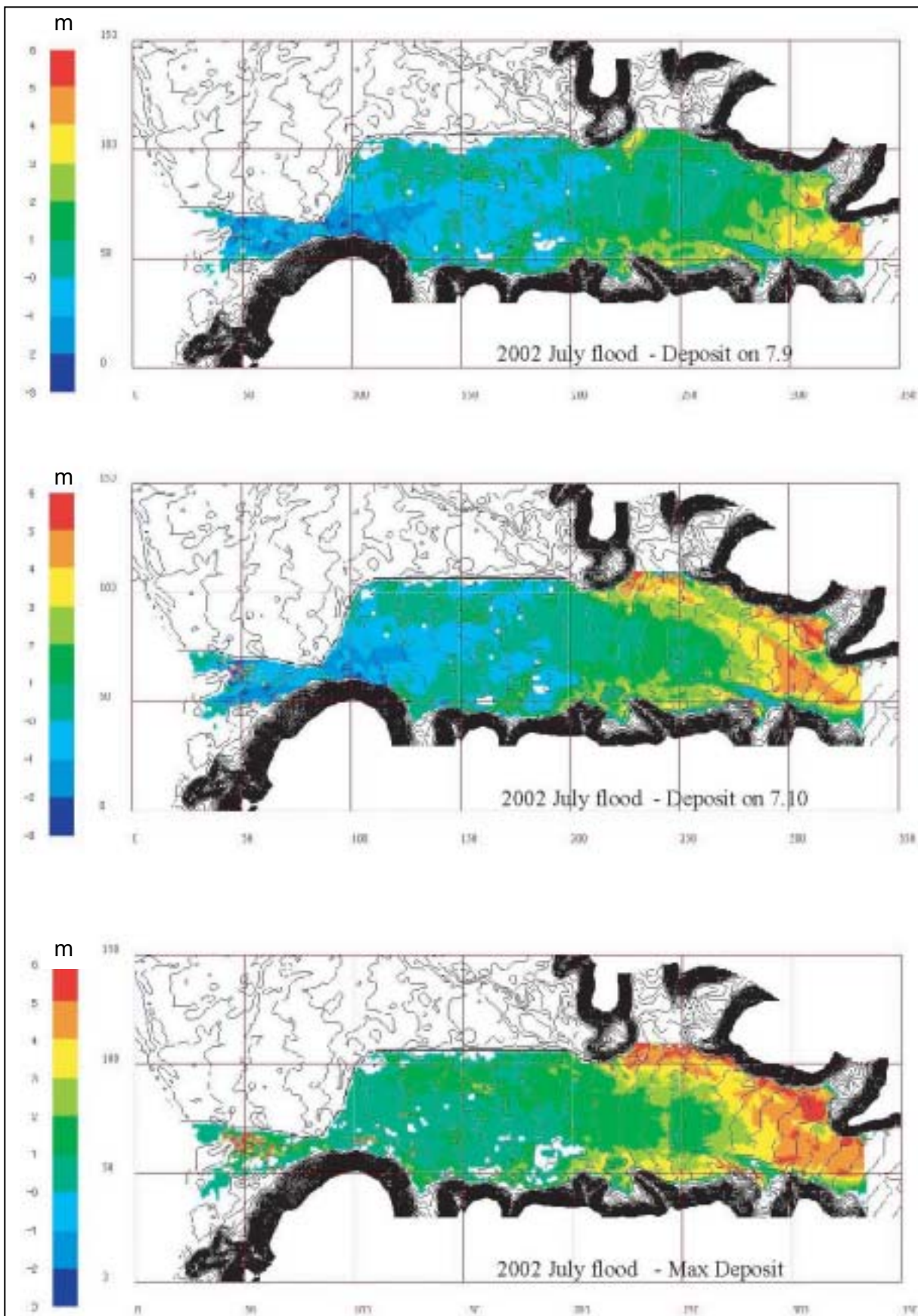
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**Figure 6.4.2**

**Hydrograph and Sediment Input for Two-  
Dimensional Mudflow Analysis**



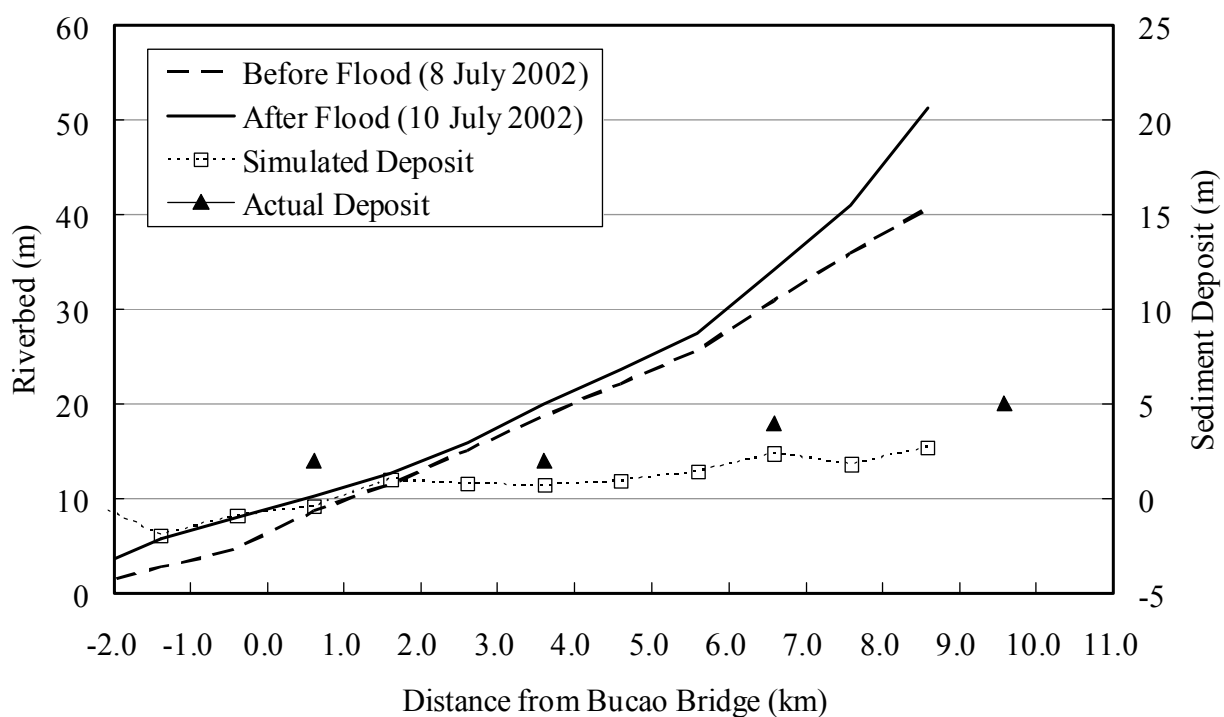
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**Figure 6.4.3**

**Calibration Results for Two-Dimensional  
Mudflow Model**



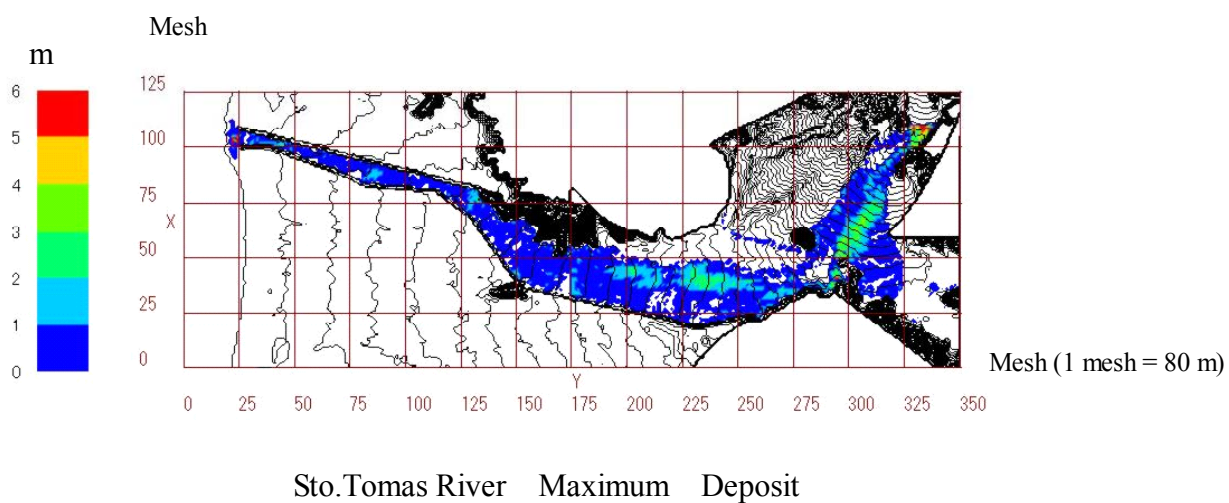
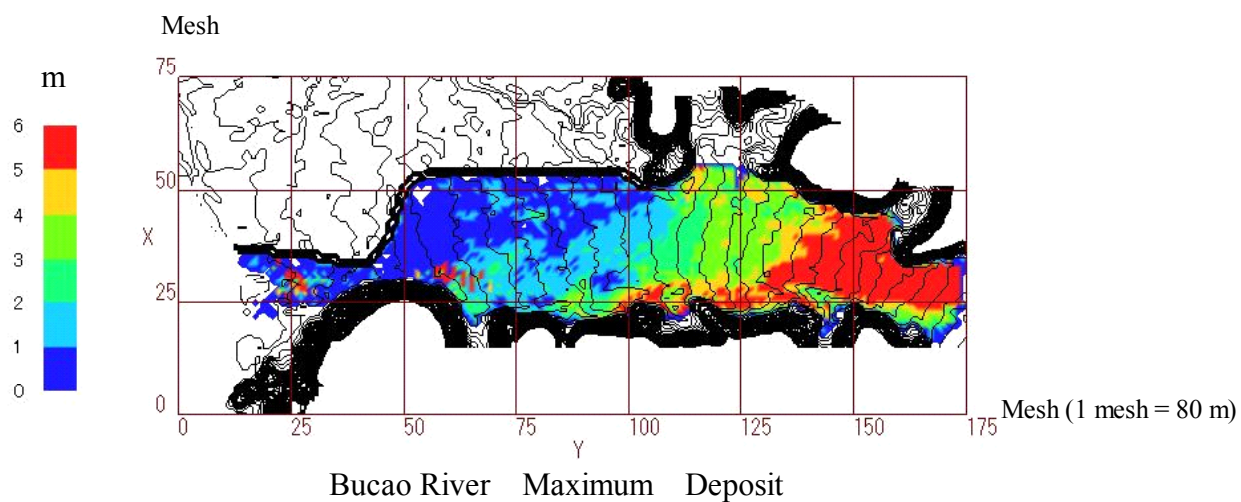
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**Figure 6.4.4**

**Longitudinal Profile of Simulated and Actual  
Sediment Deposit by the Lahar in July 2002**



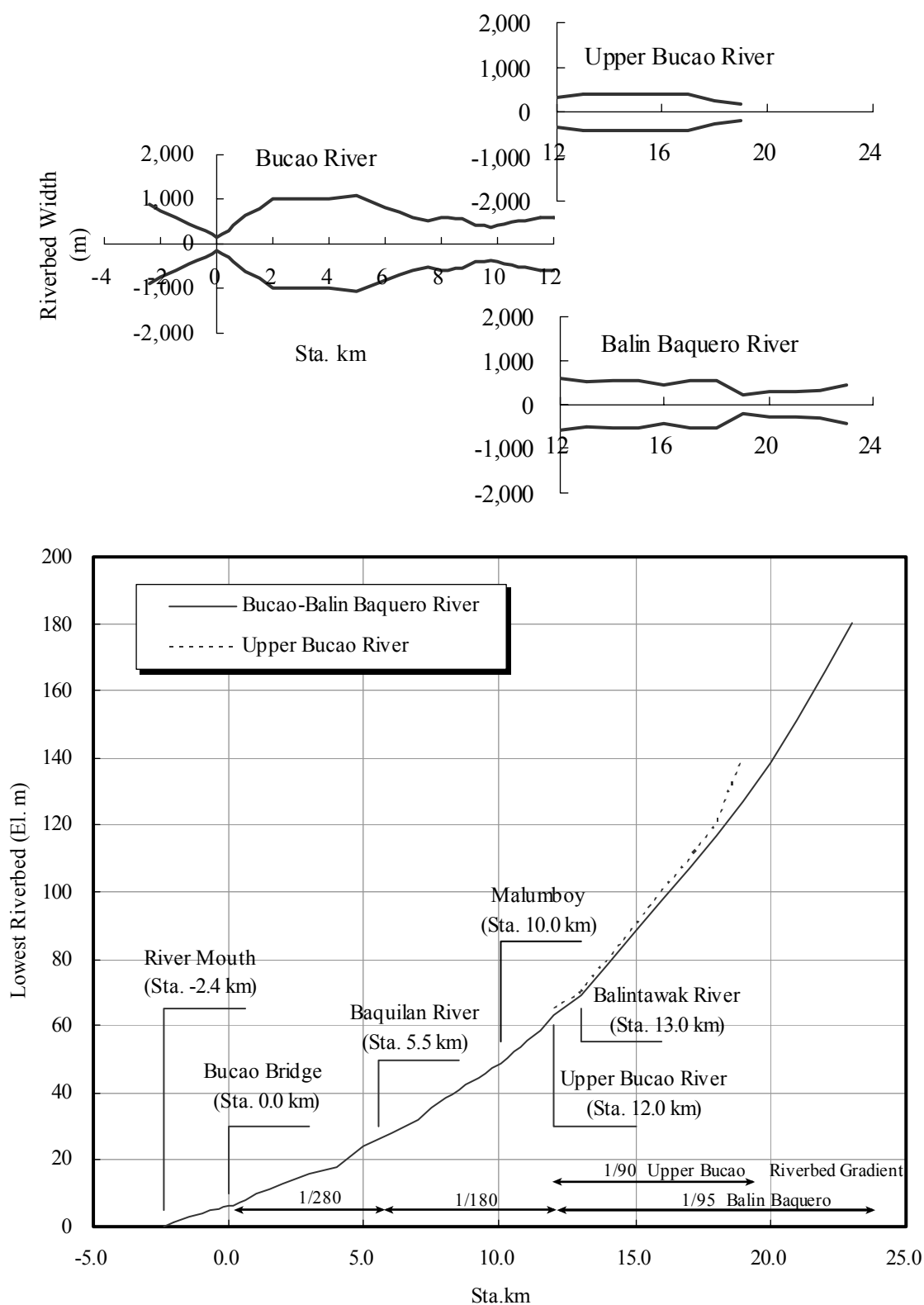
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**Figure 6.4.5**

**Simulated Maximum Deposit by a 20-Year  
Probable Flood under Present Condition in  
the Bucao and Sto.Tomas Rivers**



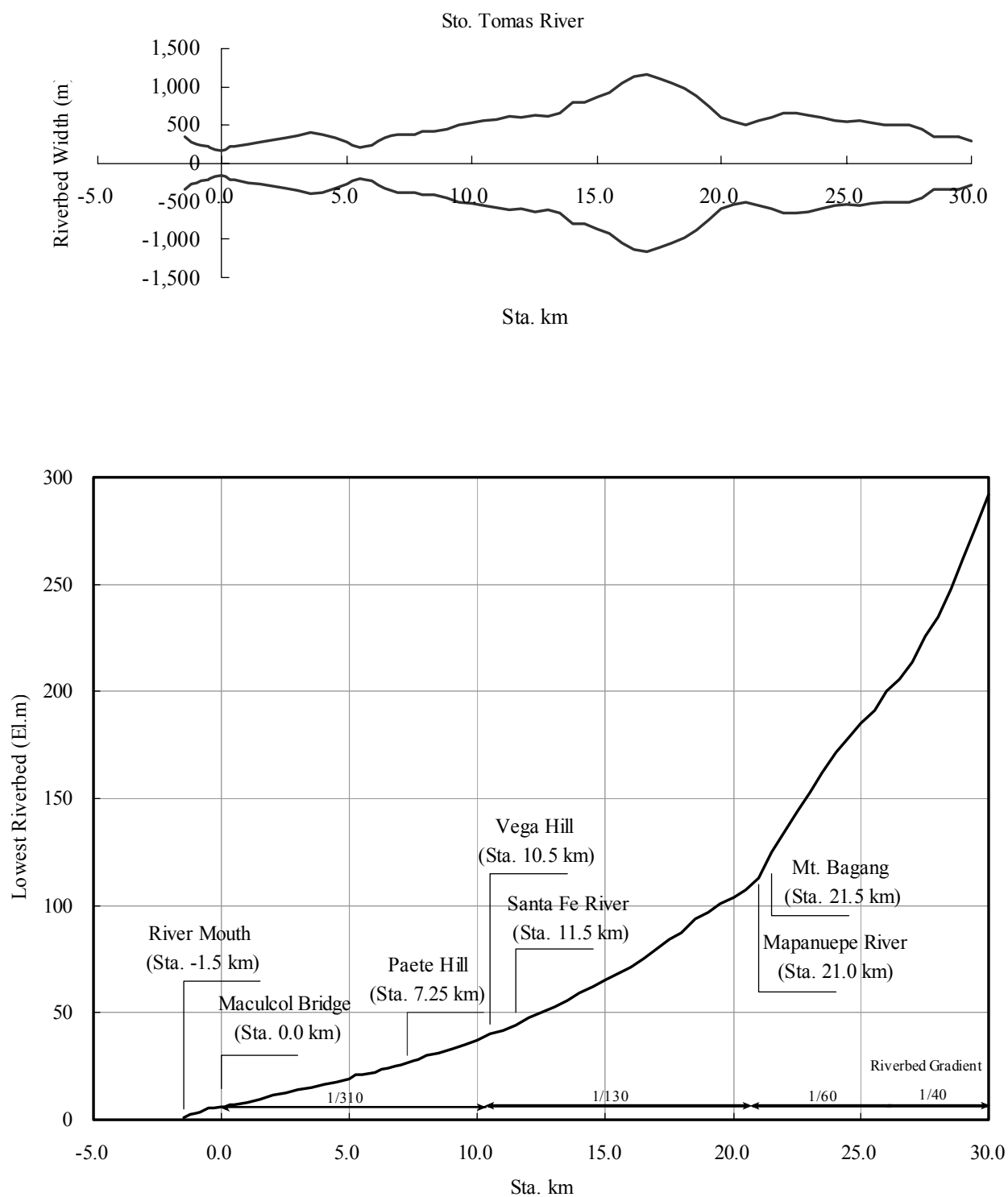
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**Figure 6.4.6**

**Longitudinal Profile and River Width of the  
Bucao River**



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**Figure 6.4.7**

**Longitudinal Profile and River Width of Sto.  
Tomas River**