



Figure 11.--The comparison of 7-day average discharges computed by a relation of simulated and tributary discharges with simulated 7-day average flows for the 1986 water year for the Atlantic Intracoastal Waterway near Myrtle Beach, South Carolina.

each climatic year of the period of record. The climatic year ends on March 31 and begins on April 1 of the preceding year to avoid dividing the summer-fall dry season. For each climatic year, the minimum 7-day average discharge of the AICW was determined by entering the minimum summed 7-day average discharge of the tributary streams into equation 5. In computing the minimum 7-day discharges, equation 5 was extrapolated from 208 ft<sup>3</sup>/s to 90 ft<sup>3</sup>/s for AICW 7-day average discharges.

A recurrence interval (RI) was calculated for each minimum 7-day average discharge using the formula:

$$RI = (N+1)/m, \quad (10)$$

where N is the number of years of record, and m is the rank order of the discharge.

The 7-day average minimum discharges were plotted on a log-normal-probability graph and the low-flow frequency curve was drawn graphically (fig. 12). The low-frequency curve should not be used to obtain minimum discharges for recurrence intervals greater than 20 years, because of the short period of simulated discharge and the use of an extended record.