

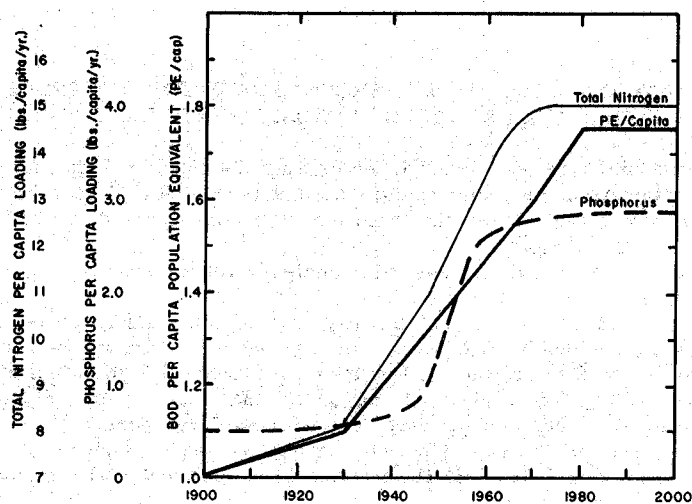


FIGURE 11. Variation in per capita loadings for BOD, total nitrogen, and phosphorus.

The amount of BOD discharged to U.S. streams from municipal outfalls for any year, n , was estimated from the formula:

$$\text{(lbs. BOD discharged per year)}_n = 365 p_{\text{BOD}} (\text{PE/capita})_n \left[(\text{SP})_{\text{on}}^f \text{oBOD} + (\text{SP})_{\text{pn}}^f \text{pBOD} + (\text{SP})_{\text{sn}}^f \text{sBOD} \right]$$

Total Nitrogen

6. Assumed values for annual total nitrogen per capita loadings in raw municipal sewage (P_{TN}) between 1900 and 2000 were obtained from References 4, 12, 13, and 14. The data were plotted, and an "average" curve was drawn and extrapolated as shown in FIGURE 11.

The amount of total nitrogen discharged to U.S. streams from municipal outfalls for any year, n , was estimated from the formula:

$$\text{(lbs. total nitrogen discharged per year)}_n = (P_{\text{TN}})_n \left[(\text{SP})_{\text{on}}^f \text{oTN} + (\text{SP})_{\text{pn}}^f \text{pTN} + (\text{SP})_{\text{sn}}^f \text{sTN} \right]$$

Phosphorus

7. Assumed values for annual phosphorus per capita loadings in raw municipal sewage (P_{p}) between 1900 and 2000 were obtained from References 4, 13, 15, 16, 17, and 18. The data were plotted, and an "average" curve was drawn and extrapolated as shown in FIGURE 11.