

TABLE IX-5.—ESTIMATED BENEFITS FROM REDUCED MP&M DISCHARGES
[Annual Benefits—Thousands of 2001\$]

Benefit category	Traditional extrapolation	Post-stratification extrapolation
1. Reduced Cancer Risk: Fish Consumption	\$0.09	\$0.13
Water Consumption	\$0	\$0
2. Reduced Risk from Exposure to Lead:		
Children	\$0	\$0
Adults	\$0	\$0
3. Avoided Sewage Sludge Disposal Costs ^a	N/A	N/A
4. Enhanced Fishing	\$537.20	\$349.98
5. Enhanced Boating	\$202.69	\$132.05
6. Enhanced Wildlife Viewing	\$259.95	\$169.36
7. Non-Use benefits (½ of Recreational Use Benefits)	\$499.92	\$325.70

TABLE IX-5.—ESTIMATED BENEFITS FROM REDUCED MP&M DISCHARGES—Continued
[Annual Benefits—Thousands of 2001\$]

Benefit category	Traditional extrapolation	Post-stratification extrapolation
Total monetized benefits	\$1,499.85	\$977.22

^a Not applicable to the final rule.*F. National Cost-Benefit Comparison*

The comparison of costs and benefits for the final rule is inevitably incomplete because EPA cannot value all of the benefits resulting from the final rule in dollar terms. A comparison of costs and benefits is thus limited by the lack of a comprehensive benefits valuation and also by uncertainties in the estimates. Bearing these limitations in mind, EPA presents a summary comparison of costs and benefits for the final rule in Table IX-6. The estimated social cost of the final rule is \$13.8 million annually (2001\$). The total benefits that can be valued in dollar terms in the categories traditionally analyzed for effluent guidelines range from around \$977,000 to \$1,500,000

annually (2001\$), based on the alternative extrapolation methods.

As previously noted, EPA used more detailed information and a more comprehensive analytic method to estimate expected benefits of the final rule for the State of Ohio. This more rigorous analysis was undertaken to address certain issues in the national-level analysis and to supplement the national-level analysis performed for the final rule. The following section presents this analysis. The Ohio case study showed that the more rigorous analytic approach leads to a different conclusion from that found in the simpler, national-level analysis approach—in particular, that the estimated State-level benefits exceed the estimated State-level cost. As previously discussed, given (1) that Ohio accounts for only about 6 percent of total MP&M facilities, and (2) that other States with substantial numbers of MP&M facilities have similar population and water body characteristics to Ohio, EPA believes that use of the more rigorous approach nationally would yield a higher estimate of national benefits. On this basis, the Agency estimates that national benefits from the final rule may be comparable to its social costs.

TABLE IX-6.—COST-BENEFIT COMPARISON [THOUSANDS OF 2001\$]

Category	Traditional extrapolation	Post-stratification extrapolation*
Social Cost of Regulation	\$13,824.56	\$13,824.56
Monetized Benefits	\$1,499.85	\$977.22
Net Benefits	(–\$12,324.72)	(–\$12,847.34)

* Post-Stratification extrapolation is applied to benefits estimates only.

G. Ohio Case Study

1. Overview

The Ohio Case Study Report presents a detailed case study of the expected State-level costs and benefits of the MP&M rule in Ohio. The case study assesses the costs and benefits of the final rule for facilities and water bodies located in Ohio. Ohio is among the ten States with the largest numbers of MP&M facilities. The State has a diverse water resource base and a more extensive water quality ecological database than many other States. EPA gathered data on MP&M facilities and on Ohio's baseline water quality conditions and water-based recreation activities to support the case study analysis. These data characterize current water quality conditions, water quality changes expected from the regulation, and the expected welfare changes from

water quality improvements at water bodies affected by MP&M discharges. The case study also estimates the social costs of the final rule for facilities in Ohio and compares estimated social costs and benefits for the State.

The case study analysis supplements the national level analysis performed for the final MP&M regulation in two important ways. First, the analysis used improved data and methods to determine MP&M pollutant discharges from both MP&M facilities and other sources. In particular, EPA administered 1,600 screener questionnaires to augment information on the Ohio's MP&M facilities. The Agency also used information from the sampled MP&M facilities to estimate discharge characteristics of non-sampled MP&M facilities, as described in Appendix H of the EEBA report. The Agency assigned discharge characteristics to all non-

MP&M industrial direct discharges based on the information provided in PCS. Second, the analysis used an original travel cost study to value four recreational uses of water resources affected by the regulation: swimming, fishing, boating, and near-water activities. The added detail provides a more complete and reliable analysis of water quality changes from reduced MP&M discharges. The study provides more complete estimates of changes in human welfare resulting from reduced health risk, enhanced recreational opportunities, and improved economic productivity.

EPA estimated human health benefits from reduced MP&M dischargers in Ohio using similar methodologies to those used for the national-level analysis. Section IX.B of this preamble summarizes these methodologies. Uncertainties and assumptions of EPA's