Economic Value of the Delaware Estuary Basin

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The objectives of this research include: (1) trace the history of water quality change in the Delaware Estuary, (2) examine the historic role of watershed governance and policy in protecting the estuary, (3) prepare an ecosystems services model to establish the economic value of the estuary, (4) recommend future governance and economic policies to restore the estuary to Clean Water Act standards. A preliminary ecosystems services model indicates the present value of the Delaware Basin is at least \$12.3 billion annually. Current financing mechanisms for restoring the basin are focused largely on grants and loans, subsidies which have low probabilities of award for restoration. New business models in sustainable watershed funding are explored which rely on fees and taxes to provide dedicated sources of restoration financing. Principles of environmental economics are proposed to determine the most equitable and effective funding streams to meet Clean Water Act standards.