



Alternative Approaches for Funding Cleanup of Contaminated Sediments

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Background/Objectives. Contaminated sediments pose significant ecological and health threats in ports and harbors around the world. Yet there is surprisingly little progress towards cleanup in most countries. The U.S. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund law) facilitates cleanup projects, but these typically suffer lengthy delays nonetheless. Participants waste valuable time debating relative responsibility over cost shares. Project finance is often insufficient, in part because resources are diverted toward adversarial legalism (Spadaro and Rosenthal 2003, Kagan 2001). Expediting projects now appears more worthwhile, since technologies of sediment remediation (e.g., precision dredging, engineered cap placement, natural attenuation) can increasingly address even the most significant contamination. These innovations allow increasing economies of operation and simplification of remediation design. Applying these technologies in risk-based proportions has produced significant successes, but far too few given the enormity of the challenge worldwide. Without innovations in funding, improved project coordination, and coherent waterfront planning, greater progress will remain difficult to achieve.

Approach/Activities. We analyze relationships between waterway cleanup of contaminated sediments and waterfront redevelopment. Using examples from North America, we evaluate possible changes in funding paradigms that, if implemented, could accelerate reclamation and remediation. We question the efficacy of the 100-percent-polluter-pays model currently employed in cleanups under the Superfund program and state-equivalent models. Despite its compensatory logic, polluter-pays often fails to secure polluters' participation or adequately attribute proportions of contamination to original sources. Further, legacy polluters often lack roots in the present-day community, aiming primarily to minimize their financial exposure. By contrast, longer-term interests in waterways and on the waterfront—e.g. municipal governments, port authorities, and community organizations—can play leadership roles via planning, development regulation, and uplands remediation. Though these entities ought not bear more cost than is equitable, they should help coordinate the process whenever possible, given their naturally occurring stakes in cleanup and revitalization.

Results/Lessons Learned. We propose new roles for cleanup authorities and innovations in project finance. Tax-increment investment and other approaches can salvage public value and limit windfalls for speculators. Better funding and planning methods enhance local control over these projects and their outcomes. Importantly, new approaches can reduce levels of community displacement, as property values rise when cleanup succeeds. Without such coordination of waterway-waterfront cleanup and redevelopment in the public interest, significant opportunities are lost. Through enlightened practices, perhaps spurred by positive regulation and negotiated solutions emphasizing local constituencies, greater numbers of effective cleanup projects providing meaningful community benefits become possible.