



US Army Corps
of Engineers®

Urban Flood Demonstration Program

Evaluation of Sediment Bypass Technologies for Application in the Southwest United States



Figure 1. Passing Sediment, Sanmenxia Dam, Yellow River, China (Morris and Fan 1998)

- Products** This research effort will produce a technical report detailing the use of sediment bypass technology.
- Benefits** The report will provide a knowledge base of existing sediment bypass technology that may provide guidance for improved dam operations to effectively, efficiently and economically remove sediment from reservoirs.
- Issue** Sediment deposition reduces the useful life of reservoirs, severely impacting water quality and authorized project purposes. Regular removal by dredging deposited sediment to maintain a project may be cost prohibitive. Sediment bypass has been used in Asia and Europe and has shown substantial cost savings. If applicable in the Southwestern United States, sediment bypass technology could extend the useful life of reservoirs and reduce the cost to maintain water resource projects.
- Description** The results of this effort as documented in the report are to present the design and application of existing sediment bypass technology to assess applicability for dams in the Southwestern United States.
- Sponsor** Urban Flood Damage Reduction and Channel Restoration Development and Demonstration Program for Arid and Semi-Arid Regions (UFDP).

Points of Contact

Deborah R. Cooper, ERDC, Coastal and Hydraulics Laboratory
Email: Deborah.R.Cooper@usace.army.mil
Phone: 601-634-3558

Cary A. Talbot, Program Manager, ERDC, Coastal and Hydraulics Laboratory
Email: Cary.A.Talbot@usace.army.mil
Phone: 601-634-2625

References

Morris, Gregory L. and Fan, Jiahua. 1998. *Reservoir sedimentation handbook*. New York: McGraw-Hill Book Co.