

*Association of State Dam Safety Officials
December 2000*

*Suggested Reference Materials
for
State Dam Safety Programs*

TABLE OF CONTENTS

Introduction.....	pp. 4-5
Using this list	p. 5
Tier I materials.....	pp. 6-12
Tier II materials	pp. 13-22

APPENDICES

Table of all materials	pp. 24-55
Obtaining these materials.....	pp. 56-57

**Association of State Dam Safety Officials
450 Old Vine Street, 2nd Floor
Lexington, KY 40507-1544
Phone: 859-257-5140
Fax: 859-323-1958
info@damsafety.org
http://www.damsafety.org**

Introduction

In an effort to help improve state dam safety programs, the Association of State Dam Safety Officials Model Library Committee has identified a recommended core collection of materials primarily for state dam safety libraries. Committee members, listed below, represent state, federal and academic sectors:

Terry Hampton, Mead & Hunt Consulting Engineers
Dan R. Lawrence, Tetra Tech, Inc.
A. Leon Smothers, Kentucky Division of Water Resources
J. Lawrence Von Thun, U.S. Bureau of Reclamation (retired)
Bruce A. Tschantz, University of Tennessee Department of Civil Engineering
Sarah M. Mayfield, Association of State Dam Safety Officials

ASDSO's *Suggested Reference Materials for State Dam Safety Programs* includes approximately seventy-five references from sixteen general categories of materials, all of which are representative of knowledge deemed essential for state dam safety personnel. Other dam safety engineers and specialists should also find this listing useful in their practice and research. The categories comprise a cross-section of technical, classical and historical documents.

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

The committee selected individual materials based on recommendations from state programs, ASDSO members, and personal experience. Though many of the identified items are old, or even out of print, the committee feels that they are "classics", and recognizes that while many principles involved in the practice of dam safety are constantly evolving, fundamental principles seldom change.

The Model Library Committee also identified a secondary tier of recommended materials, which follows the core list. Because they are too numerous to list individually, most conference and workshop papers are omitted. However, the committee recognizes their importance, and highly recommends:

- All ASDSO annual conference proceedings
- All ASDSO-sponsored regional/state dam safety workshop and conference publications
- All American Society of Civil Engineers Engineering Foundation Conference Proceedings (1970's)
- All U.S. Society on Dams (formerly USCOLD) annual lecture series proceedings

Engineering literature published by McGraw-Hill, Prentice Hall, John Wiley, and Elsevier is also highly recommended. The committee acknowledges that many excellent references exist, aside from those listed in this document.

The committee gratefully acknowledges the advice of Dr. Francis McLean of the U.S. Bureau of Reclamation, and others whose comments helped shape the final product. ASDSO hopes that the Model Library will be a useful tool for anyone seeking helpful references on a variety of dam safety topics. Users of this model library listing are encouraged to recommend to ASDSO other important or new references, documents, or websites, which should be considered for inclusion in either tier in future editions. If you have questions or comments regarding the ASDSO Model Library, please contact Sarah Mayfield at 859/257-5140, or smayfield@damsafety.org.

Using this Document

This document is split into four sections. The first two sections include separate lists of Tier I (the core library) and Tier II (also highly recommended) materials. Individual items may appear several times in these lists, as many contain information applicable to more than one of the sixteen identified categories.

The table in the appendices includes all listed documents and shows how each item is categorized. Bold type indicates core library materials (Tier I). Materials that are available through ASDSO are preceded by a check mark (✓).

The final section aims to assist the user in locating materials for purchase.

*ASDSO Suggested References
for
State Dam Safety Programs*

Tier I Materials

1. General Handbooks, Reference Manuals, Textbooks

- Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.
- Federal Emergency Management Agency. *Glossary of Terms for Dam Safety*, FEMA 148, Washington, D. C., February 1988, 18 pp.
- Golzé, Alfred R.[Ed.]. *Handbook of Dam Engineering*, New York: Van Nostrand Reinhold, 1977, 793 pp.
- Sherard, James L.; Woodward, Richard J.; Gizienski, Stanley F. and Clevenger, William A. *Earth and Earth-Rock Dams: Engineering Problems of Design and Construction*. New York: John Wiley and Sons, Inc., 1963, 738 pp.
- U.S. Bureau of Reclamation. *Design of Small Dams, 3rd Edition*, 1987, 860 pp.
- U.S. Bureau of Reclamation. *Glossary of Terms*. Available on-line
<http://www.usbr.gov/cdams/glossary.html>
- U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.
- U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)

- Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.
- Guggenheim Productions. *The Johnstown Flood*, Washington, D.C.: Public Broadcasting System, 1991, RT: 26 min.
- Jansen, Robert B. *Dams and Public Safety*, Denver: U.S. Bureau of Reclamation 1983, 332 pp.
- Simons, Li & Associates. *Minimizing Embankment Damage During Overtopping Flow*, Federal Highway Administration, Report 88-181 and video, November 1988.
- U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.
- U.S. Committee on Large Dams. Committee on Failures and Accidents to Large Dams. *Lessons from Dam Incidents*, New York: American Society of Civil Engineers, 1975, 387 pp.
- Web site: National Performance of Dams <http://npdp.stanford.edu>

3. Inspections, Operating Procedures and Maintenance

- American Concrete Institute Committee 201. *Guide for Making a Condition Survey of Concrete in Service*, American Concrete Institute, 1984, 14 pp.
- Association of State Dam Safety Officials. *Woody Vegetation/Animal Impacts on Dams Workshop Manual* (not yet published).
- Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.
- STS Consultants, Ltd. *Dam Safety Guidebook*, Lansing, Michigan, 1985, ~180pp.
- Tschantz, Bruce, et al. *Bibliography on the Effects of Woody Vegetation on Dams*, ASDSO Steering Committee on Plant and Animal Penetration of Earthen Dams, University of Tennessee, September 1999, 18 pp.
- U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.
- U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.
- U. S. Department of Agriculture, Soil Conservation Service. *Operations and Maintenance Alternatives for Removing Trees from Dams*, Technical Note 705, Fort Worth, Texas: South Technical Service Center, April 1981, 8 pp.

4. Hazard Classification, Inundation Studies, and Emergency Preparedness

Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.

Federal Emergency Management Agency. *Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners*, FEMA 64, 1998, 36 pp.

Federal Emergency Management Agency. *Federal Guidelines for Dam Safety: Hazard Potential Classification Systems for Dams*, FEMA 333, 1998, 90 pp.

Fread, Danny L. *DAMBRK – Revision 4, National Weather Service, 1998* (manual only), or Fread, Danny L. and Lewis, J.M. *FLDWAV, National Weather Service, 1996* (manual only).

Graham, Wayne. *A Procedure for Estimating Loss of Life Due to Dam Failure*, 1997 ASDSO Annual Conference, pp. 629-640.

U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

5. Monitoring, Instrumentation, and Surveillance

Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.

Federal Energy Regulatory Commission, *Engineering Guidelines for the Evaluation of Hydropower Projects*.

U.S. Bureau of Reclamation, *Embankment Dams Instrumentation Manual*, 1995, 268 pp.

U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

6. Dam Design and Analysis

(a) General

Golzé, Alfred R.[Ed.]. *Handbook of Dam Engineering*, New York: Van Nostrand Reinhold, 1977, 793 pp.

Koerner, R. *Designing with Geosynthetics*, Prentice-Hall, Englewood Cliffs, N. J., 1998, 777 pp.

Lowe, John III. *Rapid Drawdown Stability/Filters and Sinkholes*, 1997, Interagency Committee on Dam Safety (ICODS) video series.

McCook, Danny. *Chimney Filters - Design and Construction Considerations*, 1997 ASDSO Annual Conference Proceedings, pp. 29-38.

McCook, Danny and Talbot, James. *NRCS Filter Design Criteria: A Step by Step Approach*, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 49-58.

Portland Cement Association. [*Collection of Roller-Compacted Concrete Manuals*]

U.S. Bureau of Reclamation. *Design of Small Dams, 3rd Edition*, 1987, 860 pp.

U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Some sections available on-line – see table.)

(b) Earthen Dams and Tailings Dams

Casagrande, Arthur; Hirschfeld, Ronald C. and Bertram, George E. *Embankment Dam Engineering: Casagrande Volume*. New York: John Wiley, 1973, 465 pp.

Cedergren, Harry R. *Seepage, Drainage and Flownets, 3rd Ed.*. New York: John Wiley & Sons, 1997.

McCook, Danny and Talbot, James. *NRCS Filter Design Criteria: A Step by Step Approach*, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 49-58.

Sherard, James L.; Woodward, Richard J.; Gizienski, Stanley F. and Clevenger, William A. *Earth and Earth-Rock Dams: Engineering Problems of Design and Construction*. New York: John Wiley and Sons, Inc., 1963, 738 pp.

STABL IV, REAM or SWASE slope stability analysis program manuals.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Some sections available on-line – see table.)

U. S. Department of the Interior, Mining Enforcement and Safety Administration (MESA), Prepared by D'Appolonia Consulting Engineers, Inc. *Engineering and Design Manual, Coal Refuse Disposal Facilities*, U. S. GPO: 1975, O-579-601, 9 chapters.

(c) Concrete Gravity Dams

U.S. Army Corps of Engineers. *Gravity Dam Design*, EM 1110-2-2200.

U.S. Bureau of Reclamation. *Design of Gravity Dams*, 1995, 556 pp.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

(d) Arch and Buttress Dams

U.S. Army Corps of Engineers. *Arch Dam Design*, EM 1110-2-2201, 1994, 238 pp.

U.S. Bureau of Reclamation. *Design of Arch Dams*, 1995, 915 pp.

7. Construction Inspection and Materials Testing

American Society for Testing and Materials. *ASTM Book of Standards: Cement; Lime; Gypsum, Vol. 4.01*. West Conshohocken, PA. 2001, 638 pp.

American Society for Testing and Materials. *ASTM Book of Standards: Chemical-Resistant Nonmetallic Materials; Vitrified Clay Pipe, Concrete Pipe, Fiber-Reinforced Cement Products; Mortars and Grouts; Masonry, Vol 4.05*. 2001, 1244 pp.

American Society for Testing and Materials. *ASTM Book of Standards: Concrete and Aggregates, Vol 4.02*. 2001, 780 pp.

American Society for Testing and Materials. *ASTM Book of Standards: Plastic Pipe and Building Products, Vol. 8.04*. 2001, 1488 pp.

American Society for Testing and Materials. *ASTM Book of Standards: Road and Paving Materials; Vehicle-Pavement Systems, Vol 4.03*. 2001, 1126 pp.

American Society for Testing and Materials. *ASTM Book of Standards: Soil and Rock (I): D 420 to D 5779, Vol 4.08*. 2001, 1658pp.

American Society for Testing and Materials. *ASTM Book of Standards: Soil and Rock (II): D5780 - latest; Geosynthetics, Vol 4.09*. 2001, 1382 pp.

Sherard, James L.; Woodward, Richard J.; Gizienski, Stanley F. and Clevenger, William A. *Earth and Earth-Rock Dams: Engineering Problems of Design and Construction*. New York: John Wiley and Sons, Inc., 1963, 738 pp.

U.S. Army Corps of Engineers. *Construction Control for Earth and Rock-fill Dams*, EM 1110-2-1911, 1995.

U.S. Bureau of Reclamation. *Design of Small Dams, 3rd Edition*, 1987, 860 pp.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

8. Spillway Capacity Evaluation, Modification, and Hydraulics

Brater, E.F., and King, H.W. *Handbook of Hydraulics for the Solution of Hydraulic Engineering Problems*, New York: McGraw-Hill, Seventh Edition, 1996, 640 pp.

- Chow, Ven Te. *Open Channel Hydraulics*, McGraw-Hill, 1959, 680 pp.
- Davis, Calvin V. and Sorenson, Kenneth E. *Handbook of Applied Hydraulics*, New York: McGraw-Hill, 1969 (1 v., various pagings).
- Doubt, P.B., et. al. *Hydraulics of Broad-Crested Spillways*, Technical Release 39, Soil Conservation Service, U.S. Department of Agriculture, 1968.
- Elevatorski, Edward A. *Hydraulic Energy Dissipators*, New York: McGraw Hill, 1959, 214 pp.
- Federal Highway Administration. *Hydraulic Charts for the Selection of Highway Culverts*, Hydraulic Engineering Circular No. 5, December 1965, 54 pp.
- Federal Highway Administration. *Hydraulic Design of Energy Dissipators for Culverts and Channels*, Hydraulic Circular No. 14, US Dept of Transportation, September 1983, 316 pp.
- U.S. Army Corps of Engineers. *Hydraulic Design of Spillways*, Engineering Manual EM 1110-2-1603, March 1965 (On-line document).
- U.S. Army Corps of Engineers. Hydrologic Engineering Center. *HEC-2 Water Surface Profiles*, Version 4.6k or *HEC-RAS Program and Manual*: Davis, CA., 1990 (revised September 1991).
- U.S. Bureau of Reclamation. *Design of Small Dams, 3rd Edition*, 1987, 860 pp.
- U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.
- U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Some sections available on-line – see table.)

9. Site Exploration, Foundations, Geology, Geotechnical

- Casagrande, Arthur; Hirschfeld, Ronald C. and Bertram, George E. *Embankment Dam Engineering: Casagrande Volume*. New York: John Wiley, 1973, 465 pp.
- Cedergren, Harry R. *Seepage, Drainage and Flownets, 3rd Ed.*. New York: John Wiley & Sons, 1997.
- Deere, D.U. *Dam Foundations*, 1996, Interagency Committee on Dam Safety (ICODS) video series.
- Legget, Robert F. and Karrow, Paul F. *Handbook of Geology in Civil Engineering*, McGraw-Hill, 1983.
- Lowe, John III. *Rapid Drawdown Stability/Filters and Sinkholes*, 1997, Interagency Committee on Dam Safety (ICODS) video series.
- McCook, Danny. *Chimney Filters - Design and Construction Considerations*, 1997 ASDSO Annual Conference Proceedings, pp. 29-38.
- Mitchell, James K. *Ground Improvements for Dam Safety*, 1999, Interagency Committee on Dam Safety (ICODS) video series.
- Terzaghi, Karl, Peck, Ralph, Mesri, Gholamreza. *Soil Mechanics and Engineering Practice*, 1996.
- Tschebotariouff, Gregory P. *Foundations, Retaining and Earth Structures: The Art of Design and Construction and Its Scientific Basis in Soil Mechanics*, 1973.
- U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

10. Seismic Evaluation and Design Earthquake Selection

- Cedergren, Harry R. *Seepage, Drainage and Flownets, 3rd Ed.*. New York: John Wiley & Sons, 1997.
- Hynes-Griffin, Mary and Franklin, Arley. *Rationalizing the Seismic Coefficient Method*, USACE Misc. Paper GL-84 13, 1984.
- Idriss, I.M. *Behavior of Embankment Dams During Earthquakes* (To be released as part of Interagency Committee on Dam Safety (ICODS) video series).
- Makdisi, F. I. and Seed, H. I. *A Simplified Procedure for Estimating Earthquake Induced Deformations in Dams and Embankments*, EERC 77/19 August 1977.

National Research Council. *Liquefaction of Soils During Earthquakes*, Washington, D.C.: National Academy Press, 1985, 240 pp.

National Research Council. *Safety of Dams Flood and Earthquake Criteria*, Washington, D.C.: National Academy Press, 1985, 292 pp. (Available online, <http://www.nap.edu>).

Seed, H. Bolton; Makdisi, Faiz I. and De Alba, Pedro. *Performance of Embankment Dams during Earthquakes*, 1977, Report No. UCB/EERC-77/20, Earthquake Engineering Research Center College of Engineering University of California – Berkeley.

11. Hydrology, Design Flood and PMF

Brater, E.F., and King, H.W. *Handbook of Hydraulics for the Solution of Hydraulic Engineering Problems*, New York: McGraw-Hill, Seventh Edition, 1996, 640 pp.

Chow, Ven Te. *Handbook of Applied Hydrology*, New York: McGraw-Hill, 1964.

Davis, Calvin V. and Sorenson, Kenneth E. *Handbook of Applied Hydraulics*, New York: McGraw-Hill, 1969 (1 v., various pagings).

Federal Emergency Management Agency. *Selecting and Accommodating Inflow Design Floods for Dams*, FEMA 94, 1998.

Federal Energy Regulatory Commission. *Engineering Guidelines for the Evaluation of Hydropower Projects*.

U.S. Army Corps of Engineers. Hydrologic Engineering Center. *HEC-1 Flood Hydrograph Package, Version 4.0* or HEC-HMS (program and manual), Davis, CA, 1990.

U. S. Army Corps of Engineers, Hydrologic Engineering Center. *HMR-52, Probable Maximum Storm (Eastern United States), Users Manual and Software*, March 1984, 89 pp. (all HMR manuals appropriate to region).

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Some sections available on-line – see table).

U. S. Department of Commerce, NOAA and U. S. Department of Army, Corps of Engineers. *Hydrometeorological Report No. 51 (HMR-51), Probable Maximum Precipitation Estimates, United States East of the 105th Meridian*, Washington, D. C., June 1978, 87 pp. (HMR reports appropriate to region).

12. Overtopping Evaluation and Protection

Brater, E.F., and King, H.W. *Handbook of Hydraulics for the Solution of Hydraulic Engineering Problems*, New York: McGraw-Hill, Seventh Edition, 1996, 640 pp.

Davis, Calvin V. and Sorenson, Kenneth E. *Handbook of Applied Hydraulics*, New York: McGraw-Hill, 1969 (1 v., various pagings).

Simons, Li & Associates. *Minimizing Embankment Damage During Overtopping Flow*, Federal Highway Administration, Report 88-181 and video, November 1988.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

13. Seepage and Piping

Cedergren, Harry R. *Seepage, Drainage and Flownets, 3rd Ed.*. New York: John Wiley & Sons, 1997.

Koerner, R. *Designing with Geosynthetics*, Prentice-Hall, Englewood Cliffs, N. J., 1998, 777 pp.

McCook, Danny. *Chimney Filters - Design and Construction Considerations*, 1997 ASDSO Annual Conference Proceedings, pp. 29-38.

McCook, Danny and Talbot, James. *NRCS Filter Design Criteria: A Step by Step Approach*, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 49-58.

Peck, Ralph. *Seepage and Piping*, 1995, Interagency Committee on Dam Safety (ICODS) video series.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Some sections available on-line – see table).

Von Thun, Lawrence. *Understanding Piping and Seepage Failure – the No. 1 Dam Safety Problem in the West*, ASDSO West Regional Conference, 1996, pp. 3-21.

14. Laws, Regulations, and Guidelines

Association of State Dam Safety Officials. *Summary of State Laws & Regulations on Dam Safety*, July 2000, 163 pp.

Federal Emergency Management Agency. *Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners*, FEMA 64, 1998, 36 pp.

Federal Emergency Management Agency. *Federal Guidelines for Dam Safety: Hazard Potential Classification Systems for Dams*, FEMA 333, 1998, 90 pp.

Federal Energy Regulatory Commission, *Engineering Guidelines for the Evaluation of Hydropower Projects*.

National Research Council. *Safety of Dams Flood and Earthquake Criteria*, Washington, D.C.: National Academy Press, 1985, 292 pp. (Available online, <http://www.nap.edu>).

Web site: Washington State Guidelines (good model)
http://www.wa.gov/ecology/wr/dams/guidelines_part_1.pdf

15. Dam Safety Programs/Management

Association of State Dam Safety Officials. *Summary of State Laws & Regulations on Dam Safety*, July 2000, 163 pp.

Association of State Dam Safety Officials and the Federal Emergency Management Agency. *Model State Dam Safety Program*, FEMA 316, March 1998, 211 pp.

Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.

U.S. Bureau of Reclamation. *Safety Evaluation of Existing Dams (SEED Manual)*, 1992. 178 pp.

U.S. Bureau of Reclamation. *Training Aids for Dam Safety*, Denver, 1988.

Web site: Washington State Guidelines: http://www.wa.gov/ecology/wr/dams/guidelines_part_1.pdf

16. Risk Assessment

American Society of Civil Engineers. [*Risk Guidelines*]- not yet published.

Federal Emergency Management Agency. *Dam Safety: An Owner's Guidance Manual*, FEMA 145, July 1987, 117 pp.

Graham, Wayne. *A Procedure for Estimating Loss of Life Due to Dam Failure*, 1997 ASDSO Annual Conference, pp. 629-640.

National Research Council. *Safety of Dams Flood and Earthquake Criteria*, Washington, D.C.: National Academy Press, 1985, 292 pp. (Available online, <http://www.nap.edu>).

U.S. Bureau of Reclamation. *Guidelines to Decision Analysis*, ACER Technical Memorandum No. 7, Denver, 1986, 223 pp.

U.S. Committee on Large Dams. *Eighteenth Annual USCOLD Lecture: Managing the Risks of Dam Project Development, Safety and Operation*, 1998.

Von Thun, Lawrence; Bowles, David and McCann, Martin. *Workshop on Risk Assessment*, ASDSO Technical Seminar, Oct. 1999, 325 pp.

*ASDSO Suggested References
for
State Dam Safety Programs*

Tier II Materials

ASDSO Model Library – Second Tier Materials

1. General Handbooks, Reference Manuals, Textbooks

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

Creager, William P.; Justin, Joel D. and Hinds, Julian. *Engineering for Dams*, New York: John Wiley and Sons, 1945 (3 vol.).

Jansen, Robert B. *Advanced Dam Engineering for Design, Construction, and Rehabilitation*, New York: Van Nostrand Reinhold, 1990, 832 pp.

National Academy of Sciences, National Research Council Committee on Safety of Existing Dams. *Safety of Existing Dams - Evaluation and Improvement*, Washington, D. C.: National Academy Press, 1983, 354 pp.

Roberson, John, Cassidy, John, and Chaudhry, M. *Hydraulic Engineering*, Boston: Houghton Mifflin Co., 1988, 662 pp.

Singh, Sukhmander [Ed.]. *Embankment Dams, James L. Sherard Contributions*, American Society of Civil Engineers, 1992, 573 pp.

U.S. Ad Hoc Interagency Committee on Dam Safety. *Federal Guidelines for Dam Safety*, Washington, D. C.: Federal Coordinating Council for Science, Engineering and Technology (FCCSET), June 1979, 39 pp. + appdc.

2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)

Colorado State University Engineering Research Center (for Terra Aqua Co, Reno, NV). *Hydraulic Tests on Reno Mattresses*.

Foster, K. Neill and Mills, Eric. *Dam Break in Georgia*, Camp Hill, Pa.: Horizon House Publishers, 1978, 160 pp.

Foster, Mark A.; Spannagle, Matt and Fell, Robin. *Report on the Analysis of Embankment Dam Incidents*, 1998, University of New South Wales, UNICIV report ; no. R-374.

International Commission on Large Dams. *Lessons from Dam Incidents, CD-ROM*, Paris, 1974-1999 (re-issue of the 1974 book), 1069 pp.

International Water Power and Dam Construction. *Four Major Dam Failures* [Baldwin Hills, Teton, Malpasset, and Vaiont] *Re-examined*, Vol. 37, No. 11, November 1985, p. 33.

Johnson, Willis F. *History of the Johnstown Flood*, Philadelphia: Edgewood Publishing Co., 1889, 518 pp.

Quail Creek Dike Failure Independent Review Team (Utah); Utah State Engineer. *Investigation of the Cause of Quail Creek Dike Failure*. Office of the State Engineer, Salt Lake City, 1989, 155 pp

Re-Evaluation of the Lower San Fernando Dam:

- 1) *Report 1. An Investigation of the February 9, 1971 Slide*. Volume 1. (Castro, G; Keller, TO; Boynton, SS). GEI Consultants, Inc., Winchester, MA. Sep 1989. 108p. Report: GLTR-89.
- 2) *Report 2. Examination of the Post-Earthquake Slide of February 9, 1971*. (Seed, HB; Seed, RB; Harder, LF; Jong, H). Seed (H. Bolton), Inc., Orinda, CA. Sep 1989. 274p. Report: WES/CR/GL89-2-2.
- 3) *Report 3. The Behavior of Undrained Contractive Sand and Its Effect on Seismic Liquefaction Flow Failures of Earth Structures* (Vasquez-Herrera, A; Dobry, R). Army Engineer Waterways Experiment Station, Vicksburg, MS. Geotechnical Lab. Sept 1989. 546pp. Report: WES/CR-GL-89-2.

Stenger, Ferdinand. *Bibliography of Dam Failures*, Denver: U.S. Bureau of Reclamation, 1964.

U.S. Bureau of Reclamation. *Concrete Dams: Case Histories of Failures and Nonfailures with Back Calculations*, USBR DSO-98-005, Denver, 1998.

U. S. Department of the Interior, Teton Dam Failure Review Group. *Failure of Teton Dam, Final Report*, Washington, D. C.: Government Printing Office, January 1980, 800 pp.

U. S. House of Representatives, 95th Congress, Subcommittee of the Committee on Government Operations. *Dam Safety Hearings, March 15, 17 and June 30, 1977*, Washington, D. C.: Government Printing Office, 1977, 618 pp.

U. S. House of Representatives, 95th Congress, Subcommittee of the Committee on Government Operations. *Teton Dam Disaster: Hearings, August 5, 6, and 31, 1976*, Washington, D. C.: Government Printing Office, 1976, 678 pp.

Wiley, A.J.; et al. *Causes Leading to the Failure of the Saint Francis Dam*, March 24, 1928.

3. Inspections, Operating Procedures and Maintenance

American Society of Civil Engineers. *Inspection, Maintenance and Rehabilitation of Old Dams*, Proceedings of the Engineering Foundation Conference, Pacific Grove, California, September 1973, 946 pp.

Association of State Dam Safety Officials. *Compendium of State Dam Safety Program Inspection Forms*, 1997, 250 pp.

Brock, Dan S.; Levy, Sidney M. and Sutcliffe, Lystre L. *Field Inspection Handbook*, New York: McGraw-Hill, 1995 (1 v. – various pagings).

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp

Cassidy, J.J. *Reservoir Freeboard Design, Fundamental Hydraulics and Hydrology of Dam Design*, Short Course - University of Missouri, Rolla, 1981.

Johnson, S.H. and Anderson, D.C. *Freeboard Determination and Management in Hazardous Waste Surface Impoundments*, Cincinnati, Ohio: U.S. Environmental Protection Agency Hazardous Waste Engineering Research Center, Sept. 1988 (1 v.).

Maynard, S.T. *Practical Riprap Design*, Miscellaneous Paper H-78-7, Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station, Flood Control Structures Research Program, June 1978, 66 pp.

Saville, T. Jr. *An Approximation of the Wave Run-up Frequency Distribution*, Proceedings 8th Conference on Coastal Engineering, Mexico City, 1962.

Simiu, E.; Changery, M.J. and Filliben, J.J. *Extreme Wind Speeds at 129 Stations in the Contiguous United States*, Washington, D.C.: U.S. Department of Commerce, National Bureau of Standards, 1979, 314 pp.

Smith, J.M. *Wind-Wave Generation on Restricted Fetches*, Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station Coastal Engineering Research Center, 1991.

Thom, H.C.S. *New Distribution of Extreme Winds in the United States*, American Society of Civil Engineers Journal of the Structural Division, July 1968.

U.S. Army Corps of Engineers. *Computation of Freeboard Allowances for Waves in Reservoirs*, ETL 1110-2-8, Washington, D.C.: Office of the Chief of Engineers, 1966.

U.S. Army Corps of Engineers. *Shore Protection Manual, 4th Edition*, Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station, 1984 (2 v.).

U.S. Army Corps of Engineers, Seattle District. *Unpublished Data on the Magnitude-Frequency-Duration of Observed Winds at Selected Stations in Washington*, 1987 .

U.S. Bureau of Reclamation. *Concrete Manual - 8th Edition* [revised], U.S. Government Printing Office, 1988, 627 pp. *Concrete Manual, 9th Edition, Part 2*, U.S. Bureau of Reclamation, U.S. Government Printing Office, 1992, 900 pp.

U.S. Bureau of Reclamation. *Concrete Repair Manual*, 1997.

U. S. Bureau of Reclamation. Division of Water Operation and Maintenance, Engineering and Research Center, Denver. *Water Operation and Maintenance, Bulletin No. 97: Equipment for the Prevention, Control and Disposal of Weeds on Irrigation Projects*, September 1976, 260 pp.

U. S. Bureau of Reclamation Technical Service Center. *Standing Operating Procedures Guide for Dams, Reservoirs and Power Facilities*, Denver, August 1996.

4. Hazard Classification, Inundation Studies, and Emergency Preparedness

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

King, Horace W. and Brater, Ernest F. *Handbook of Hydraulics for the Solution of Hydrostatic and Fluid-Flow Problems, 1963 [NEW VERSION: Handbook of Hydraulics for the Solution of Hydraulic Engineering Problems, 1996]*.

5. Monitoring, Instrumentation, and Surveillance

American Society of Civil Engineers. *Instrumentation of Embankment Dams and Levees*, Technical engineering and design guides as adapted from the U.S. Army Corps of Engineers ; no. 26, ASCE Press, 1999, 88 pp.

Dunncliff, John. *Geotechnical Instrumentation for Monitoring Field Performance*, Wiley Interscience Publications, 1993, 608 pp.

U.S. Army Corps of Engineers. *Deformation Monitoring and Control Surveying (EM 1110-2-1004)*, Oct. 1994.

U.S. Bureau of Reclamation. *Concrete Dams Instrumentation Manual*.

U.S. Committee on Large Dams. *General Considerations Applicable to Performance Monitoring of Dams*, December 1986.

6. Dam Design and Analysis - (a) general (b) earthen dams and tailings dams (c) concrete gravity dams (d) arch and buttress dams.

6A. General

American Society of Civil Engineers. Soil Mechanics and Foundations Division. *Terzaghi Lectures : 1963-1972*, New York: American Society of Civil Engineers, 1974, 421 pp.

American Society of Civil Engineers. Soil Mechanics and Foundations Division. *Terzaghi Lectures : 1974-1982*, New York: American Society of Civil Engineers, 1974, 435 pp.

American Society of Civil Engineers (ASCE) and U. S. Committee on Large Dams (USCOLD). *Joint ASCE-USCOLD Committee on Current U. S. Practice in the Design and Construction of Arch Dams, Embankment Dams, Concrete Dams*, 1967, 131 pp.

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

Cassidy, J.J. *Reservoir Freeboard Design, Fundamental Hydraulics and Hydrology of Dam Design*, Short Course - University of Missouri, Rolla, 1981.

Creager, William P.; Justin, Joel D. and Hinds, Julian. *Engineering for Dams*, New York: John Wiley and Sons, 1965 (3 vol.).

Gerard, Robert. *River and Lake Ice Processes Relevant to Ice Loads*, Design for Ice Forces, ASCE Conference Proceedings, March 1983, pp. 121-138.

Saville, T. Jr. *An Approximation of the Wave Runup Frequency Distribution*, Proceedings 8th Conference on Coastal Engineering, Mexico City, 1962.

Sherard, J.L.; Dunnigan, L.P. and Talbot, J.R. *Basic Properties of Sand and Gravel Filters*, ASCE Journal of Geotechnical Engineering, 1984.

Sherard, J.L.; Dunnigan, L.P. and Talbot, J.R. *Filters for Silts and Clays*, ASCE Journal of Geotechnical Engineering, 1984.

Simiu, E., Changery, M.J., and Filliben, J.J. *Extreme Wind Speeds at 129 Stations in the Contiguous United States*, U.S. Department of Commerce, National Bureau of Standards, March 1973.

Smith, J.M. *Wind-Wave Generation on Restricted Fetches*, U.S. Army Corps of Engineers, Coastal Engineering Research Center, Waterways Experiment Station, Vicksburg, MS, 1991.

Sodhi, D.S. and Haynes, F.D. *Measurement of Ice Forces on Structures*, ASCE Journal of Structural Engineering, pp. 139-155, March 1983.

Thom, H.C.S. *New Distribution of Extreme Winds in the United States*, ASCE Journal of the Structural Division, July 1968.

U.S. Army Corps of Engineers. *Computation of Freeboard Allowances for Waves in Reservoirs*, ETL 1110-2-8, Washington, D.C.: Office of the Chief of Engineers, 1966.

U.S. Army Corps of Engineers. *Ice Engineering, Engineering Manual*, EM 1110-2-1612, 1982.

U.S. Army Corps of Engineers. *Seepage Analysis and Control for Dams*, EM 1110-2-1901.

U.S. Army Corps of Engineers. *Shore Protection Manual, Volumes I,II, III*, Coastal Engineering Research Center, Fort Belvoir, Virginia, 1973, pp. 7-205.

U.S. Army Corps of Engineers. Seattle District. *Unpublished Data on the Magnitude-Frequency-Duration of Observed Winds at Selected Stations in Washington*, 1987.

U.S. Committee on Large Dams. *Seismicity and Dam Design*, Bulletin 46, 1983.

U.S. Committee on Large Dams. *Updated Guidelines for Selecting Seismic Parameters for Dam Projects*, 1999.

URS Greiner Woodward Clyde and Portland Cement Association. *Roller-Compacted Concrete Quality Control Manual*, Skokie, IL: Portland Cement Association, 2000, 58 pp.

6B. Earthen Dams and Tailings Dams

American Society of Civil Engineers. *Construction Control for Earth and Rockfill Dams*, 1999 (Technical engineering and design guides as adapted from the U.S. Army Corps of Engineers; no. 27).

American Society of Civil Engineers. *Embankment Dams: James L. Sherard Contributions, 1992*, pp. 384-402.

California Department of Water Resources. *Guidelines for the Design and Construction of Small Embankment Dams*, 1993. On-line document: <http://damsafety.water.ca.gov/guidelines/guidelines.htm>

Gannett Fleming Inc. and Portland Cement Association. *Guide for Developing RCC Specifications and Commentary: Roller-Compacted Concrete for Embankment Armoring and Spillway Projects*, Skokie, IL: Portland Cement Association, 2000, 91 pp.

International Commission on Large Dams. *Embankment dams - Granular Filters and Drains*, ICOLD Bulletin N° 95, 1994.

Johnson, S.H. and Anderson, D.C. *Freeboard Determination and Management in Hazardous Waste Surface Impoundments*, Environmental Protection Agency Hazardous Waste Engineering Research Center, Cincinnati, OH, Sept. 1988.

Maynard, S.T. *Practical Riprap Design*, USACE Waterways Experiment Station, Vicksburg, MS, Miscellaneous Paper H-78-7, June 1978.

Perry, Edward and Al-Hussaini, Mosaid. *Filters and Drains for Earth Dams*, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 59-68.

Talbot, James R. and Ralston, David C. *Earth Dam Seepage Control, SCS Experience*, American Society of Civil Engineers. Journal of Geotechnical Engineering, Vol. 112, no.10, October, 1986.

U.S. Army Corps of Engineers. *Earth and Rockfill Dams – General Design and Construction Considerations*, EM 1110-2-2300, January 15, 1989.

U.S. Bureau of Reclamation. *Embankment Design Standards No. 13, Protective Filters*.

6C. Concrete Gravity Dams

American Society of Civil Engineers. *Economical Construction of Concrete Dams*, Proceedings of the Engineering Foundation Conference, Pacific Grove, California, May 1972, 558 pp.

Hansen, Kenneth D. and Reinhardt, William G. *Roller Compacted Concrete Dams*, McGraw-Hill, 1991, 298 pp.

U.S. Bureau of Reclamation. *Concrete Manual - 8th Edition* [revised], U.S. Government Printing Office, 1988, 627 pp. and *Concrete Manual, 9th Edition, Part 2*, U.S. Government Printing Office, 1992, 900 pp

6D. Arch and Buttress Dams

Ambursen Hydraulic Construction Company. *Ambursen Dams: Selected Articles from the Ambursen Hydraulic Construction Company*, 1912.

7. Construction Inspection and Materials Testing

U.S. Bureau of Reclamation. *Concrete Manual - 8th Edition* [revised], U.S. Government Printing Office, 1988, 627 pp. and *Concrete Manual, 9th Edition, Part 2*, U.S. Government Printing Office, 1992, 900 pp.

U.S. Bureau of Reclamation, *Earth Manual*

Part 1: Young, R; Howard, A; Kit Fuller, H. Third Edition, USBR Earth Sciences and Research Lab. 1999, 356 pp. Part 2: Scavuzzo, R. USBR Water Resources Technical Publication, Feb 1991, 1279 pp

8. Spillway Capacity Evaluation, Modification, and Hydraulics

Afshar, A. *The Development of Labyrinth Spillway Designs*, Water Power and Dam Construction, May 1988.

Aisenberg, A.J., et al. *Design of Small Canal Structures*, US Bureau of Reclamation, Denver Co., 1974.

Akmedov, T.K. *Calculation of the Depth of Scour in Rock Downstream of a Spillway*, Water Power and Dam Construction, December 1988.

American Iron and Steel Institute. *Handbook of Steel Drainage and Highway Construction Products*, Second Edition, 1971.

Barkau, Robert Leonard. UNET, one-dimensional unsteady flow through a full network of open channels : user's manual – Version 3.1, U.S. Army Corps of Engineers Hydrologic Engineering Center, Davis, CA (1 v., various pagings).

Bodaine, G.L. *Measurement of Peak Discharge at Culverts by Indirect Methods*, U.S. Geological Survey Publication, *Application of Hydraulics*, Chapter A3, 1968.

Bradley, J.N. *Discharge Coefficients for Irregular Overfall Spillways*, Engineering Monograph No. 9, U.S. Bureau of Reclamation, March 1952.

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

Colorado State University. *Hydraulic Tests on Reno Mattresses*, Engineering Research Center for Terra Aqua Co., Reno, NV.

Creager, William P., Joel P. Justin, and Julian Hinds. *Engineering for Dams*, John Wiley & Sons, Inc., 1966, pp. 227-243.

Falvey, H.T. *Cavitation in Chutes and Spillways*, U.S. Bureau of Reclamation Engineering Monograph No. 42, April 1990.

Franz, Delbert D. and Melching, Charles S. *Full Equations Utilities (FEQUTL) Model for the Approximation of Hydraulic Characteristics of Open Channels and Control Structures During Unsteady Flow*, Water Resources Investigations Report 97-4037, U.S. Geological Survey, 1997. Available online: http://il.water.usgs.gov/proj/feq/fequtl/fequtl.toc_1.html

- Hager, W. H. *Discharge Characteristics of Gated Standard Spillways*, Water power and Dam Construction, January 1988.
- Huising, H. *Measurement of Peak Discharge at Dams by Indirect Methods*, US Geological Survey Publication, *Applications of Hydraulics*, Chapter A5, Book 3, 1967.
- Keim, S.R. *The Contra Costa Energy Dissipator*, Proceedings ASCE Hydraulics Division, March 1962, pp 109-122.
- Maynard, S.T. *General Spillway Investigation*, US Army Corps of Engineers, Waterway Experiment Station, Technical Report HL-85-1, March 1985.
- Peyras, L., Royet, P. and Degoutte, G. *Flow and Energy Dissipation Over Stepped Gabion Weirs*, ASCE Journal of Hydraulic Engineering, Vol. 8, No. 5, May 1990.
- Pinto, N.L., et al. *Aeration of High Velocity Flows*, Parts 1 and 2, Water Power and Dam Construction, February, March 1982.
- Roberson, John, Cassidy, John, and Chaudhry, M. *Hydraulic Engineering*, Boston: Houghton Mifflin Co., 1988, 662 pp.
- Rutschmann, P. & P. Volkart. *Spillway Chute Aeration*, Water Power & Dam Construction, Jan 1988.
- Schaefer, M.G. *Shaft Spillways*, Fundamental Hydraulics and Hydrology of Dam Design, University of Missouri Short Course, May 1981, Available through dam Safety Section, Dept. of Ecology, Olympia, Washington.
- Sorenson, R.M. *Stepped Spillway Hydraulic Model Investigation*, Lehigh University, ASCE Hydraulics Division Specialty Conference.
- U.S. Army Corps of Engineers. *Hydraulic Design of Reservoir Outlet Works*, EM 1110-2-1602, Washington, D.C., Oct 1982.
- U.S. Bureau of Reclamation. *Criteria and Guidelines for Evacuating Reservoir Storage Reservoirs and Sizing Low-level Outlet Works*, ACER Technical memorandum No. 3, 1982.
- U.S. Bureau of Reclamation. *Hydraulic Design of Stilling Basins and Energy Dissipators*, Engineering Monograph No. 25, US Dept of Interior, Denver CO, 1974.
- U.S. Department of Agriculture, Soil Conservation Service. *Gated Outlet Appurtenances, Earth Dams*, Technical Release No. 46, USDA, 1969.
- U.S. Department of Agriculture, Soil Conservation Service. *A Guide for Design and Layout of Earth Emergency Spillways as Part of Emergency Spillway Systems for Earth Dams*, USDA Technical Release No. 52, Feb. 1973.
- U.S. Department of Agriculture, Soil Conservation Service. *Riprap Lined Plunge Pool for Cantilever Outlet*, Design Note No. 6, Dept. of Agriculture, Washington, DC, 1986.
- Wagner, W.E. *Morning Glory Shaft Spillways: Determination of Pressure-Controlled Profiles*, Transactions, ASCE, Vol. 121, 1956, p. 345.
- Young, M.F. *Feasibility Study of a Stepped Spillway*, ASCE Hydraulics Division Specialty Conference, Jackson, MS, August 1982.

9. Site Exploration, Foundations, Geology, Geotechnical

- American Society of Civil Engineers. *Embankment Dams: James L. Sherard Contributions, 1992*, 384-402.
- Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.
- Lambe, T. William and Whitman, Robert V. *Soil Mechanics*, New York: John Wiley & Sons, 1969, 553 pp.
- Sherard, James L. *Hydraulic Fracturing in Embankment Dams*, ASCE Journal of Geotechnical Engineering, Vol. 112, no.10, October, 1986.

Sherard, J.; Dunnigan, L.; Talbot, J. *Basic Properties of Sand and Gravel Filters*, ASCE Journal of Geotechnical Engineering, 1984.

Sherard, J.; Dunnigan, L. and Talbot, J. *Filters for Silts and Clays*, ASCE Journal of Geotechnical Engineering, 1984.

Stephenson, D. *Rockfill Hydraulic Engineering*, Elsevier Scientific Publishing Co, 1979.

U.S. Army Corps of Engineers. *Geophysical Exploration*, EM 1110-1-1802.

U.S. Army Corps of Engineers. *Geotechnical Investigations*, EM 1110-1-1804.

U.S. Bureau of Reclamation. *Earth Manual*

Part 1: Young, R; Howard, A; Kit Fuller, H. *Third Edition*, USBR Earth Sciences and Research Lab, 1999, 356 pp. *Part 2*: Scavuzzo, R. USBR, 1991, 1279 pp.

U.S. Bureau of Reclamation. *Embankment Design Standard #13, Protective Filters*, 1994.

U.S. Bureau of Reclamation. *Engineering Geology Field Manual*, 1998, 500 pp.

10. Seismic Evaluation and Design Earthquake Selection

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

Houston, Sandra; Houston, William; Padilla, Manuel. *Microcomputer-aided Evaluation of Earthquake-induced permanent Slope Displacements*, Elsevier Science Publishing Co., Microcomputers in Civil Engineering 2, 1987.

Kramer, Steven L. *Geotechnical Earthquake Engineering*, Upper Saddle River, NJ: Prentice Hall, 1996, 653 pp.

Re-Evaluation of the Lower San Fernando Dam:

- 1) *Report 1. An Investigation of the February 9, 1971 Slide*. Volume 1. (Castro, G; Keller, TO; Boynton, SS). GEI Consultants, Inc., Winchester, MA. Sep 1989. 108p. Report: GLTR-89.
- 2) *Report 2. Examination of the Post-Earthquake Slide of February 9, 1971*. (Seed, HB; Seed, RB; Harder, LF; Jong, H). H. Bolton Seed, Inc., Orinda, CA. Sep 1989. 274pp. Rept: WES/CR/GL89-2-2.
- 3) *Report 3. The Behavior of Undrained Contractive Sand and Its Effect on Seismic Liquefaction Flow Failures of Earth Structures* (Vasquez-Herrera, A; Dobry, R). Army Engineer Waterways Experiment Station, Vicksburg, MS. Geotechnical Lab. Sept 1989. 546pp. Report: WES/CR-GL-89-2.

Seed, H. B.; Lee, K.L.; Idriss, I. M.; and Makdisi, F.I. *Analysis of the Slides in the San Fernando dams during the Earthquake of Feb. 9, 1971*, Report No. EERC 73-2, University of California Berkley, NTIS no. PB 223 402, 1973.

U.S. Committee on Large Dams. *Seismic Design and Performance of Dams*, 16th Lecture series, July 1996.

U.S. Committee on Large Dams. *Seismicity and Dam Design*, Bulletin 46, 1983.

U.S. Committee on Large Dams. *Updated Guidelines for Selecting Seismic Parameters for Dam Projects*, 1999.

11. Hydrology, Design Flood and PMF

American Society of Civil Engineers. *Evaluation Procedures for Hydrologic Safety of Dams*, 1988.

Federal Emergency Management Agency. *Probable Maximum Precipitation and Probable Maximum Flood Workshop*, 1990.

Hansen, E.M.; Schwarz, F.K.; and Riedel, J.T. *Hydrometeorological Report Series - Probable Maximum Precipitation Estimates*, National Weather Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Silver Spring, MD, 1977.

Maidment, David R. *Handbook of Hydrology*, New York: McGraw-Hill, 1993 (1 v., various pagings).

National Science Foundation. *Investigation of Appropriate Methodologies*, 1996.

Vogel, John. *Hydrologic Reports for NW*.

Water Resource Council. *Statistical Flood Analysis*, Bulletin 17C.

12. Overtopping Evaluation and Protection

Abt, R. and Johnson, R.L. *Riprap Design for Overtopping Flow*, ASCE Journal of Hydraulic Engineering, Vol. 117, No. 8, August, 1991, pp. 959-972.

Gannett Fleming Inc. and Portland Cement Association. *Guide for Developing RCC Specifications and Commentary: Roller-Compacted Concrete for Embankment Armoring and Spillway Projects*, Skokie, IL: Portland Cement Association, 2000, 91 pp.

Ko, H.Y., Dunn, R.J., and Hollingsworth, T. *Study of Embankment Performance During Overtopping-Prototype Modeling and Dimensional Verification*, USACE, Vicksburg, 1985.

Powledge, G.R. and Dooge, R.A. *Overtopping of Small Dams - An Alternative for Dam Safety*, Hydraulics and Hydrology in the Small computer Age, Vol. 2, ASCE Hydraulics Division Specialty Conference, 1985.

Reeves, G.N. *Planned Overtopping of Embankments Using Roller Compacted Concrete*, ASCE Hydraulics Division Specialty Conference, Orlando, FL, August 1985.

13. Seepage and Piping

International Commission on Large Dams. *Embankment dams - Granular filters and drains*, ICOLD Bulletin N° 95, 1994.

Perry, Edward and Al-Hussaini, Mosaid. *Filters and Drains for Earth Dams*, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 59-68.

Sherard, James L.; Dunnigan, Lorn P. and Talbot, James R. *Basic Properties of Sand and Gravel Filters*, ASCE Journal of Geotechnical Engineering, 1984.

Sherard, James L.; Dunnigan, Lorn P. and Talbot, James R. *Filters for Silts and Clays*, ASCE Journal of Geotechnical Engineering, 1984.

Talbot, James R. and Ralston, David C. *Earth Dam Seepage Control*, SCS Experience, Journal of Geotechnical Engineering, Vol. 112, no.10, October, 1986, ASCE.

U.S. Army Corps of Engineers. *Seepage Analysis and Control for Dams*, EM 111-2-1901.

U.S. Bureau of Reclamation. *Embankment Dams, Design Standard No. 13, Chapter 5: Protective Filters*, 1994.

U.S. Committee on Large Dams. *Eleventh Annual USCOLD Lecture: Use of Geosynthetics in Dams*, 1991.

14. Laws, Regulations, and Guidelines

California Department of Water Resources. *Guidelines for the Design and Construction of Small Embankment Dams*, 1993. On-line document: <http://damsafety.water.ca.gov/guidelines/guidelines.htm>

15. Dam Safety Programs/Management

U.S. Ad Hoc Interagency Committee on Dam Safety. *Federal Guidelines for Dam Safety*, Washington, D. C.: Federal Coordinating Council for Science, Engineering and Technology (FCCSET), June 1979, 39 pp. + appdc.

16. Risk Assessment

Australian National Committee on Large Dams. *Guidelines on Risk Assessment*, 1994 – Reprinted.

Bowles, David S.; Anderson, Loren R. and Glover, Terry F. *Portfolio Risk Assessment: A Basis for Prioritizing and Coordinating Dam Safety Activities*, Association of State Dam Safety Officials Annual Conference Proceedings, Oct. 11-14, 1998, pp. 351-368.

Canadian Dam Association. *Canadian Dam Safety Guidelines*, 1999, 115 pp.

Canadian Dam Association. *Practical Approaches to Dam Risk Management*. Proceedings of the workshop presented at the CDA Sudbury Conference by Des Hartford, BC Hydro, 1999.

Canadian Dam Association. *System Stewardship for Dams and Reservoirs : Risk & Resource Management Toward the 21st Century*, Canadian Dam Association Conference [1st], Canadian Dam Association, Sept. 27-Oct. 1, 1998, vi, 336.

McCann, M.W.; Fanzini, J.B.; Kavazanjian, E. and Shah, H.C. *Preliminary Safety Evaluation of Existing Dams, Vols. I-II*, Stanford University, 1985.

U.S. Army Corps of Engineers. *Socioeconomic Consideration in Dam Safety Risk Analysis*, IWR Report 87-R-7, 1987.

APPENDICES

Tables pp. 25-56

Sources of Materials..... pp. 57-58

ASDSO Model Library

The following table includes both Tier I and Tier II materials. Bold type indicates core library materials (Tier I). Materials that are available through ASDSO are preceded with a check mark (✓). References are classified by one or more of sixteen general categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Abt, R. and Johnson, R.L., <i>Riprap Design for Overtopping Flow</i> , ASCE Journal of Hydraulic Engineering, Vol. 117, No. 8, August, 1991, pp. 959-972												X				
Afshar, A., <i>The Development of Labyrinth Spillway Designs</i> , Water Power and Dam Construction, May 1988								X								
Aisenberg, A.J., et. Al., <i>Design of Small Canal Structures</i> , US Bureau of Reclamation, Denver Co., 1974.								X								
Akmedov. T.K., <i>Calculation of the Depth of Scour in Rock Downstream of a Spillway</i> , Water Power and Dam Construction, December 1988.								X								
Ambursen Hydraulic Construction Company, <i>Ambursen Dams: Selected Articles from the Ambursen Hydraulic Construction Company</i> , 1912						X										
American Iron and Steel Institute, <i>Handbook of Steel Drainage and Highway Construction Products</i> , Second Edition, 1971.								X								
American Concrete Institute Committee 201. Guide for Making a Condition Survey of Concrete in Service, American Concrete Institute, 1984, 14 pp.			X													
American Society of Civil Engineers. <i>Construction Control for Earth and Rockfill Dams</i> , 1999 (Technical engineering and design guides as adapted from the U.S. Army Corps of Engineers; no. 27)						X										
American Society of Civil Engineers. <i>Economical Construction of Concrete Dams</i> , Proceedings of the Engineering Foundation Conference, Pacific Grove, California, May 1972, 558 pp.						X										
American Society of Civil Engineers. <i>Embankment Dams: James L. Sherard Contributions, 1992</i> , pp. 384-402.						X			X							
American Society of Civil Engineers, <i>Evaluation Procedures for Hydrologic Safety of Dams</i> , 1988											X					
American Society of Civil Engineers. <i>Inspection, Maintenance and Rehabilitation of Old Dams</i> , Proceedings of the Engineering Foundation Conference, Pacific Grove, California, September 1973 (946 pp.)			X													
American Society of Civil Engineers. <i>Instrumentation of Embankment Dams and Levees</i> , Technical engineering and design guides as adapted from the U.S. Army Corps of Engineers, No. 26, 1999, 88 pp.					X											
American Society of Civil Engineers. [<i>Risk Guidelines</i>]- not yet published																X

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
American Society of Civil Engineers and U. S. Committee on Large Dams. Joint Committee. <i>Current U. S. Practice in the Design and Construction of Arch Dams, Embankment Dams, Concrete Dams</i> , 1967, 131 pp.						X a										
American Society of Civil Engineers. Soil Mechanics and Foundations Division. <i>Terzaghi Lectures : 1963-1972</i> , New York: American Society of Civil Engineers, 1974 (421 pp.)						X a										
American Society of Civil Engineers. Soil Mechanics and Foundations Division. <i>Terzaghi Lectures : 1974-1982</i> , New York: American Society of Civil Engineers, 1974 (435 pp.)						X a										
American Society for Testing and Materials, <i>ASTM Book of Standards: Cement; Lime; Gypsum, Vol. 4.01, 2001, 638 pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Chemical-Resistant Nonmetallic Materials; Vitrified Clay Pipe, Concrete Pipe, Fiber-Reinforced Cement Products; Mortars and Grouts; Masonry, Vol 4.05, 2001, 1244pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Concrete and Aggregates, Vol 4.02, 2001, 780 pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Plastic Pipe and Building Products, Vol. 8.04, 2001, 1488 pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Road and Paving Materials; Vehicle-Pavement Systems, Vol 4.03, 2001, 1126 pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Soil and Rock (I): D 420 to D 5779, Vol 4.08, 2001, 1658pp.</i>							X									
American Society for Testing and Materials, <i>ASTM Book of Standards: Soil and Rock (II): D5780 - latest; Geosynthetics, Vol 4.09, 2001, 1382 pp.</i>							X									
✓ Association of State Dam Safety Officials. <i>Compendium of State Dam Safety Program Inspection Forms</i> , 1997 (250 pp.)			X													
✓ Association of State Dam Safety Officials. <i>Summary of State Laws & Regulations on Dam Safety, July 2000, 163 pp.</i>														X	X	
✓ Association of State Dam Safety Officials. <i>Woody Vegetation/Animal Impacts on Dams Workshop Manual</i>			X													

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
✓ Association of State Dam Safety Officials and the Federal Emergency Management Agency. <i>Model State Dam Safety Program</i> , FEMA 316, March 1998, 211 pp.															X	
Australian National Committee on Large Dams. <i>Guidelines on Risk Assessment</i> , 1994 - Reprinted																X
Barkau, Robert Leonard. <i>UNET, One-Dimensional Unsteady Flow Through a Full Network of Open Channels : User's Manual – Version 3.1</i> , U.S. Army Corps of Engineers Hydrologic Engineering Center, Davis, CA (1 v., various pagings)								X								
Bodaine, G.L., <i>Measurement of Peak Discharge at Culverts by Indirect Methods</i> , U.S. Geological Survey Publication, <i>Application of Hydraulics</i> , Chapter A3, 1968.								X								
✓ Bowles, David S., Anderson, Loren R. and Glover, Terry F. <i>Portfolio Risk Assessment: A Basis for Prioritizing and Coordinating Dam Safety Activities</i> , Association of State Dam Safety Officials Annual Conference Proceedings, Oct. 11-14, 1998 (pp. 351-368)																X
Bradley, J.N., <i>Discharge Coefficients for Irregular Overfall Spillways</i> , Engineering Monograph No. 9, U.S. Bureau of Reclamation, March 1952.								X								
Brater, E.F., and H.W. King, <i>Handbook of Hydraulics for the Solution of Hydraulic Engineering Problems</i>, New York: McGraw-Hill, Seventh Edition, 1996, 640 pp.								X			X	X				
Brock, Dan S.; Levy, Sidney M. and Sutcliffe, Lystre L. <i>Field Inspection Handbook</i> , New York: McGraw-Hill, 1995 (1 v. – various pagings)			X													
California Department of Water Resources, <i>Guidelines for the Design and Construction of Small Embankment Dams</i> , 1993. On-line document: http://damsafety.water.ca.gov/guidelines/guidelines.htm						X b								X		
Canadian Dam Association. <i>Canadian Dam Safety Guidelines</i> , 1999, 115 pp.	X		X	X		X		X	X	X						X
Canadian Dam Association. <i>Practical Approaches to Dam Risk Management</i> . Proceedings of the workshop presented at the CDA Sudbury Conference by Des Hartford, BC Hydro, 1999.																X
Canadian Dam Association. <i>System Stewardship for Dams and Reservoirs: Risk & Resource Management Toward the 21st Century</i> , Canadian Dam Association Conference [1st], Canadian Dam Association, Sept. 27-Oct. 1, 1998, vi, 336.																X

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Casagrande, Arthur; Hirschfeld, Ronald C. and Bertram, George E. Embankment Dam Engineering: Casagrande Volume. New York: John Wiley, 1973, 465 pp.						X b			X							
Cassidy, J.J. <i>Reservoir Freeboard Design, Fundamental Hydraulics and Hydrology of Dam Design</i> , Short Course - University of Missouri, Rolla, 1981			X			X a										
Cedergren, Harry R., Seepage, Drainage and Flownets, 3rd Edition. New York: John Wiley & Sons, 1997						X b			X	X			X			
Chow, Ven Te, Handbook of Applied Hydrology, New York: McGraw-Hill, 1964											X					
Chow, Ven Te, Open Channel Hydraulics, McGraw-Hill, 1959, 680 pp.								X								
Colorado State University Engineering Research Center (for Terra Aqua Co, Reno, NV). <i>Hydraulic Tests on Reno Mattresses</i>		X						X								
Creager, William P.; Justin, Joel D. and Hinds, Julian. <i>Engineering for Dams</i> , New York: John Wiley and Sons, 1965, 3 vol..	X					X a		X								
Davis, Calvin V. and Sorenson, Kenneth E. Handbook of Applied Hydraulics, New York: McGraw-Hill, 1969 (1 v., various pagings)								X			X	X				
✓ Deere, D.U., <i>Dam Foundations</i> , 1996, ICODS video series									X							
Doubt, P.B., et. al., Hydraulics of Broad-Crested Spillways, Technical Release 39, Soil Conservation Service, U.S. Department of Agriculture, 1968.								X								
Dunncliff, John. <i>Geotechnical Instrumentation for Monitoring Field Performance</i> , Wiley Interscience Publications, 1993, 608 pp.					X											
Elevatorski, Edward A. Hydraulic Energy Dissipators, New York: McGraw Hill, 1959, 214 pp.								X								
Falvey, H.T., <i>Cavitation in Chutes and Spillways</i> , U.S. Bureau of Reclamation Engineering Monograph No. 42, April 1990								X								
✓ Federal Emergency Management Agency, Dam Safety: An Owner's Guidance Manual, FEMA 145, July 1987, 117 pp.	X	X	X	X	X										X	X
✓ Federal Emergency Management Agency, Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners, FEMA 64, 1998, 36 pp.				X										X		

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
✓ Federal Emergency Management Agency, <i>Federal Guidelines for Dam Safety: Hazard Potential Classification Systems for Dams</i> , FEMA 333, 1998, 90 pp.				X										X		
✓ Federal Emergency Management Agency. <i>Glossary of Terms for Dam Safety</i> , FEMA 148, Washington, D. C., February 1988 (18 pp.)	X															
✓ Federal Emergency Management Agency, <i>Probable Maximum Precipitation and Probable Maximum Flood Workshop</i> , 1990											X					
✓ Federal Emergency Management Agency, <i>Selecting and Accommodating Inflow Design Floods for Dams</i> , FEMA 94, 1998											X					
Federal Energy Regulatory Commission, <i>Engineering Guidelines for the Evaluation of Hydropower Projects</i>					X						X			X		
Federal Highway Administration, <i>Hydraulic Charts for the Selection of Highway Culverts</i> , Hydraulic Engineering Circular No. 5, December 1965, 54 pp.								X								
Federal Highway Administration, <i>Hydraulic Design of Energy Dissipators for Culverts and Channels</i> , Hydraulic Circular No. 14, US Dept of Transportation, September 1983, 316 pp.								X								
Federal Highway Administration, <i>Minimizing Embankment Damage During Overtopping Flow</i> , 1988. (See Simons & Li.)		X										X				
Foster, K. Neill and Mills, Eric. <i>Dam Break in Georgia</i> , Camp Hill, Pa.: Horizon House Publishers, 1978 (160 pp.)		X														
Foster, Mark A.; Spannagle, Matt and Fell, Robin. <i>Report on the Analysis of Embankment Dam Incidents</i> , 1998, University of New South Wales (UNICIV Report; No. R-374)		X														
Franz, Delbert D. and Melching, Charles S. <i>Full Equations Utilities (FEQUTL) Model for the Approximation of Hydraulic Characteristics of Open Channels and Control Structures During Unsteady Flow</i> , Water Resources Investigations Report 97-4037, U.S. Geological Survey, 1997. Available online: http://il.water.usgs.gov/proj/feq/fequtl/fequtl.toc_1.html								X								
Fread, Danny L. <i>DAMBRK – Revision 4, National Weather Service, 1998 (manual only)</i> , or Fread, Danny L. and Lewis, J.M. <i>FLDWAV, National Weather Service, 1996 (manual only)</i>				X												

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Gannett Fleming Inc. and Portland Cement Association. <i>Guide for Developing RCC Specifications and Commentary: Roller-Compacted Concrete for Embankment Armoring and Spillway Projects</i> , Skokie, IL: Portland Cement Association, 2000, 91 pp.						X b						X				
Gerard, Robert. <i>River and Lake Ice Processes Relevant to Ice Loads</i> , Design for Ice Forces, ASCE Conference Proceedings, pp. 121-138, March 1983						X a										
Golzé, Alfred R.[Ed.]. <i>Handbook of Dam Engineering</i>, New York: Van Nostrand Reinhold, 1977, 793 pp.	X					X a										
✓ Graham, Wayne, <i>A Procedure for Estimating Loss of Life Due to Dam Failure</i>, 1997 ASDSO Annual Conference, pp. 629-640				X												X
Guggenheim Productions, <i>The Johnstown Flood</i>, Washington, D.C.: Public Broadcasting System, 1991, RT: 26 min.		X														
Hager, W. H, <i>Discharge Characteristics of Gated Standard Spillways</i> , Water Power and Dam Construction, January 1988.								X								
Hansen, E.M., Schwarz, F.K., and Riedel, J.T. <i>Hydrometeorological Report Series - Probable Maximum Precipitation Estimates</i> , National Weather Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Silver Spring, MD, 1977.											X					
Hansen, Kenneth D. and Reinhardt, William G. <i>Roller Compacted Concrete Dams</i> , McGraw-Hill, 1991, 298 pp.						X c										
Houston, Sandra; Houston, William; and Padilla, Manual. <i>Microcomputer-aided Evaluation of Earthquake-induced permanent Slope Displacements</i> , Elsevier Science Publishing Co., Microcomputers in Civil Engineering 2, 1987										X						
Huising, H., <i>Measurement of Peak Discharge at Dams by Indirect Methods</i> , US Geological Survey Publication, <i>Applications of Hydraulics</i> , Chapter A5, Book 3, 1967.								X								
Hynes-Griffin, Mary and Franklin, Arley, <i>Rationalizing the Seismic Coefficient Method</i>, USACE Misc. Paper GL-84 13, 1984										X						
✓ Idriss,I.M., <i>Behavior of Embankment Dams During Earthquakes (part of ICODS video series, to be released in 2001)</i>										X						
International Commission on Large Dams. <i>Embankment dams - Granular filters and drains</i> , ICOLD Bulletin N° 95, 1994.						X b							X			

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
International Commission on Large Dams. <i>Lessons from Dam Incidents, CD-ROM</i> , Paris, 1974-1999 (re-issue of the 1974 book – 1069 pp.)		X														
International Water Power and Dam Construction. <i>Four Major Dam Failures Re-examined</i> , Vol. 37, No. 11, November 1985, p. 33 (Baldwin Hills, Teton, Malpasset, and Vaiont)		X														
Jansen, Robert B. <i>Advanced Dam Engineering for Design, Construction, and Rehabilitation</i> , New York: Van Nostrand Reinhold, 1990, 832 pp.	X															
Jansen, Robert B. <i>Dams and Public Safety</i>, Denver: U.S. Bureau of Reclamation 1983, 332 pp.		X														
Johnson, S.H. and Anderson, D.C., <i>Freeboard Determination and Management in Hazardous Waste Surface Impoundments</i> , Cincinnati, Ohio: U.S. Environmental Protection Agency Hazardous Waste Engineering Research Center, Sept. 1988 (1 v.)			X			X b										
Johnson, Willis F. <i>History of the Johnstown Flood</i> , Philadelphia: Edgewood Publishing Co., 1889 (518 pp.)		X														
Keim, S.R., <i>The Contra Costa Energy Dissipator</i> , Proceedings ASCE Hydraulics Division, March 1962, pp 109-122.								X								
Ko, H.Y., Dunn, R.J., and Hollingsworth, T., <i>Study of Embankment Performance During Overtopping-Prototype Modeling and Dimensional Verification</i> , USACE, Vicksburg, 1985												X				
Koerner, R., <i>Designing with Geosynthetics</i>, Prentice-Hall, Englewood Cliffs, N. J., 1998, 777 pp.						X a							X			
Kramer, Steven L. <i>Geotechnical Earthquake Engineering</i> , Upper Saddle River, NJ: Prentice Hall, 1996 (653 pp.)										X						
Lambe, T. William and Whitman, Robert V. <i>Soil Mechanics</i> , New York: John Wiley and Sons, 1969 (553 pp.)									X							
Legget, Robert F. and Karrow, Paul F. <i>Handbook of Geology in Civil Engineering</i>, McGraw-Hill, 1983									X							
✓ Lowe, John III, <i>Rapid Drawdown Stability/Filters and Sinkholes</i>, 1997, ICODS video series						X a			X							
Maidment, David R. <i>Handbook of Hydrology</i> , New York: McGraw-Hill, 1993 (1 v., various pagings)											X					

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Makdisi, F. I. and Seed, H. I., <i>A Simplified Procedure for Estimating Earthquake Induced Deformations in Dams and Embankments</i>, EERC 77/19 August 1977										X						
Maynard, S.T., <i>General Spillway Investigation</i> , US Army Corps of Engineers, Waterway Experiment Station, Technical Report HL-85-1, March 1985.								X								
Maynard, S.T. <i>Practical Riprap Design</i> , Miscellaneous Paper H-78-7, Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station Flood Control Structures Research Program, June 1978. (66 pp.)			X			X b										
McCann, M.W.; Fanzini, J.B.; Kavazanjian, E. and Shah, H.C. <i>Preliminary Safety Evaluation of Existing Dams, Vols. I-II</i> , Stanford University, 1985																X
✓ McCook, Danny, <i>Chimney Filters - Design and Construction Considerations</i>, 1997 ASDSO Annual Conference Proceedings, pp. 29-38						X a			X				X			
✓ McCook, Danny and Talbot, James, <i>NRCS Filter Design Criteria: A Step by Step Approach</i>, Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 49-58.						X ab							X			
✓ Mitchell, James K., <i>Ground Improvements for Dam Safety</i>, 1999, ICODS video series									X							
National Academy of Sciences, National Research Council Committee on Safety of Existing Dams. <i>Safety of Existing Dams - Evaluation and Improvement</i> , Washington, D.C: National Academy Press, 1983, 354 pp.	X															
National Research Council, <i>Liquefaction of Soils During Earthquakes</i>, Washington, D.C.: National Academy Press, 1985, 240 pp.										X						
National Science Foundation, <i>Investigation of Appropriate Methodologies</i> , 1996											X					
✓ Peck, Ralph. <i>Seepage and Piping</i>, 1995, ICODS video series													X			
✓ Perry, Edward and Al-Hussaini, Mosaid, <i>Filters and Drains for Earth Dams</i> , Proceedings, ASDSO Annual Conference, Atlanta, Ga., September 1995, pp. 59-68.						X b							X			
Peyras, L., Royet, P. and Degoutte, G., <i>Flow and Energy Dissipation Over Stepped Gabion Weirs</i> , ASCE Journal of Hydraulic Engineering, Vol. 8, No. 5, May 1990								X								
Pinto, N.L., et al, <i>Aeration of High Velocity Flows</i> , Parts 1 and 2, Water Power and Dam Construction, February, March 1982.								X								

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Portland Cement Association, [Collection of Roller-Compacted Concrete Manuals - release pending]						X a										
Powledge, G.R. and Dooge, R.A., <i>Overtopping of Small Dams - An Alternative for Dam Safety</i> , Hydraulics and Hydrology in the Small computer Age, Vol. 2, ASCE Hydraulics Division Specialty Conference, 1985												X				
Quail Creek Dike Failure Independent Review Team (Utah); Utah State Engineer. <i>Investigation of the Cause of Quail Creek Dike Failure</i> . Office of the State Engineer, Salt Lake City, 1989, 155 pp.		X														
<i>Re-Evaluation of the Lower San Fernando Dam:</i> <i>Report 1. An Investigation of the February 9, 1971 Slide</i> . Volume 1. (Castro, G; Keller, TO; Boynton, SS). GEI Consultants, Inc., Winchester, MA. Sep 1989. 108p. Report: GLTR-89- <i>Report 2. Examination of the Post-Earthquake Slide of February 9, 1971</i> . (Seed, HB; Seed, RB; Harder, LF; Jong, H). Seed (H. Bolton), Inc., Orinda, CA. Sep 1989. 274p. Report: WES/CR/GL89-2-2 <i>Report 3. The Behavior of Undrained Contractive Sand and Its Effect on Seismic Liquefaction Flow Failures of Earth Structures</i> (Vasquez-Herrera, A; Dobry, R). Army Engineer Waterways Experiment Station, Vicksburg, MS. Geotechnical Lab. Sep 1989. 546p. Report: WES/CR-GL-89-2		X								X						
Reeves, G.N., <i>Planned Overtopping of Embankments Using Roller Compacted Concrete</i> , ASCE Hydraulics Division Specialty Conference, Orlando, FL, August 1985												X				
Roberson, John, Cassidy, John, and Chaudhry, M. <i>Hydraulic Engineering</i> , Boston: Houghton Mifflin Co., 1988 (662 pp.)	X							X								
Rutschmann, P. & P. Volkart, <i>Spillway Chute Aeration</i> , Water Power & Dam Construction, Jan 1988.								X								
Saville, T. Jr. <i>An Approximation of the Wave Runup Frequency Disribution</i> , Proceedings 8 th Conference on Coastal Engineering, Mexico City, 1962			X			X a										
Schaefer, M.G., <i>Shaft Spillways</i> , Fundamental Hydraulics and Hydrology of Dam Design, University of Missouri Short Course, May 1981, Available through dam Safety Section, Dept. of Ecology, Olympia, Washington.								X								

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seed, H. Bolton; Lee, K. L.; Idriss, I. M. <i>An Analysis of the Sheffield Dam Failure</i> . University of California Berkeley Soil Mechanics and Bituminous Materials Research Laboratory, 1968, 59 pp.		X														
Seed, H. Bolton; Lee, K.L., Idriss, I. M., and Makdisi, F.I.. <i>Analysis of the Slides in the San Fernando dams during the Earthquake of Feb. 9, 1971</i> , Report No. EERC 73-2, University of California Berkley, NTIS no. PB 223 402, 1973										X						
Seed, H. Bolton; Makdisi, Faiz I. and De Alba, Pedro, <i>Performance of Embankment Dams during Earthquakes, 1977, Report No. UCB/EERC-77/20, Earthquake Engineering Research Center College of Engineering University of California - Berkeley</i>										X						
Sherard, James L.; Dunnigan, Lorn P. and Talbot, James R. <i>Basic Properties of Sand and Gravel Filters</i> , ASCE Journal of Geotechnical Engineering, 1984						X a			X				X			
Sherard, James L.; Dunnigan, Lorn P. and Talbot, James R. <i>Filters for Silts and Clays</i> , ASCE Journal of Geotechnical Engineering, 1984						X a			X				X			
Sherard, James L., <i>Hydraulic Fracturing in Embankment Dams</i> , ASCE Journal of Geotechnical Engineering, Vol. 112, no.10, October, 1986									X							
Sherard, James L.; Woodward, Richard J.; Gzienski, Stanley F. and Clevenger, William A. <i>Earth and Earth-Rock Dams: Engineering Problems of Design and Construction</i>. New York: John Wiley and Sons, Inc., 1963, 738 pp.	X					X b	X									
Simiu, E.; Changery, M.J. and Filliben, J.J. <i>Extreme Wind Speeds at 129 Stations in the Contiguous United States</i> , Washington, D.C.: U.S. Department of Commerce, National Bureau of Standards, 1979, 314 pp.			X			X a										
Simons, Li & Associates, <i>Minimizing Embankment Damage During Overtopping Flow</i>, Federal Highway Administration, Report 88-181 and video, November 1988, 228 pp.		X										X				
Singh, Sukhmander [Ed.]. <i>Embankment Dams, James L. Sherard Contributions</i> , American Society of Civil Engineers, 1992, 573 pp.	X															
Smith, J.M. <i>Wind-Wave Generation on Restricted Fetches</i> , Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station Coastal Engineering Research Center, 1991			X			X a										
Sodhi, D.S. and Haynes, F.D., <i>Measurement of Ice Forces on Structures</i> , ASCE Journal of Structural Engineering, pp. 139-155, March 1983.						X a										

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sorenson, R.M., <i>Stepped Spillway Hydraulic Model Investigation</i> , Lehigh University, ASCE Hydraulics Division Specialty Conference								X								
STABL IV, REAM or SWASE slope stability analysis program manuals						X b										
Stenger, Ferdinand. <i>Bibliography of Dam Failures</i> , Denver: U.S. Bureau of Reclamation, 1964		X														
Stephenson, D. <i>Rockfill Hydraulic Engineering</i> , Elsevier Scientific Publishing Co, 1979									X							
STS Consultants, Ltd. Dam Safety Guidebook, Lansing, Michigan, 1985, ~180pp.			X													
Talbot, James R., Ralston, David C., <i>Earth Dam Seepage Control, SCS Experience</i> , American Society of Civil Engineers. Journal of Geotechnical Engineering, Vol. 112, no.10, October, 1986						X b							X			
Terzaghi, Karl, Peck, Ralph, Mesri, Gholamreza , Soil Mechanics and Engineering Practice, 1996									X							
Thom, H.C.S., <i>New Distribution of Extreme Winds in the United States</i> , American Society of Civil Engineers. Journal of the Structural Division, July 1968			X			X a										
✓ Tschantz, Bruce, et al. <i>Bibliography on the Effects of Woody Vegetation on Dams</i> , ASDSO Steering Committee on Plant and Animal Penetration of Earthen Dams, University of Tennessee, September 1999, 18 pp.			X													
Tschebotarioff, Gregory P. Foundations, Retaining and Earth Structures: The Art of Design and Construction and Its Scientific Basis in Soil Mechanics, 1973.									X							
U.S. Ad Hoc Interagency Committee on Dam Safety. <i>Federal Guidelines for Dam Safety</i> , Washington, D. C.: Federal Coordinating Council for Science, Engineering and Technology (FCCSET), June 1979, 39 pp. + appdc.	X														X	
U.S. Army Corps of Engineers, Arch Dam Design, EM 1110-2-2201, 1994, 238 pp.						X d										
U.S. Army Corps of Engineers. <i>Computation of Freeboard Allowances for Waves in Reservoirs</i> , ETL 1110-2-8, Washington, D.C.: Office of the Chief of Engineers, 1966			X			X a										

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U.S. Army Corps of Engineers, <i>Construction Control for Earth and Rock-fill Dams</i>, EM 1110-2-1911, 1995							X									
U.S. Army Corps of Engineers, <i>Deformation Monitoring and Control Surveying (EM 1110-2-1004)</i> , Oct. 1994					X											
U.S. Army Corps of Engineers, <i>Earth and Rockfill Dams – General Design and Construction Considerations</i> , EM 1110-2-2300, January 15, 1989.						X b										
U.S. Army Corps of Engineers, <i>Geophysical Exploration</i> , EM 1110-1-1802									X							
U.S. Army Corps of Engineers, <i>Geotechnical Investigations</i> , EM 1110-1-1804									X							
U.S. Army Corps of Engineers, <i>Gravity Dam Design</i>, EM 1110-2-2200						X c										
U.S. Army Corps of Engineers, <i>Hydraulic Design of Reservoir Outlet Works</i> , EM 1110-2-1602, Washington, D.C., Oct 1982								X								
U.S. Army Corps of Engineers, <i>Hydraulic Design of Spillways, Engineering Manual EM 1110-2-1603</i>, March 1965 (On-line document)								X								
U.S. Army Corps of Engineers. Hydrologic Engineering Center, <i>HEC-1 Flood Hydrograph Package, Version 4.0</i> or <i>HEC-HMS</i> (program and manual), Davis, CA, 1990											X					
U.S. Army Corps of Engineers. Hydrologic Engineering Center, <i>HEC-2 Water Surface Profiles, Version 4.6k</i> or <i>HEC-RAS Program and Manual: Davis, CA., 1990</i> (revised September 1991)								X								
U. S. Army Corps of Engineers, Hydrologic Engineering Center, <i>HMR-52, Probable Maximum Storm (Eastern United States), Users Manual and Software, March 1984, 89 pp.</i> (all HMR manuals appropriate to region)											X					
U.S. Army Corps of Engineers, <i>Ice Engineering, Engineering Manual</i> , EM 1110-2-1612, 1982.						X a										
U.S. Army Corps of Engineers, <i>Seepage Analysis and Control for Dams</i> , EM 1110-2-1901						X a							X			
U.S. Army Corps of Engineers. <i>Shore Protection Manual, 4th Edition</i> , Vicksburg, Ms.: U.S. Army Corps of Engineers Waterways Experiment Station, 1984 (2 v.)			X			X a										
U.S. Army Corps of Engineers. <i>Socioeconomic Consideration in Dam Safety Risk Analysis</i> , IWR Report 87-R-7, 1987																X

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U.S. Army Corps of Engineers, Seattle District. <i>Unpublished Data on the Magnitude-Frequency-Duration of Observed Winds at Selected Stations in Washington</i> , 1987			X			X a										
U.S. Bureau of Reclamation. <i>Concrete Dams: Case Histories of Failures and Nonfailures with Back Calculations</i> , USBR DSO-98-005, Denver, 1998		X														
U.S. Bureau of Reclamation, <i>Concrete Dams Instrumentation Manual</i>					X											
U.S. Bureau of Reclamation, <i>Concrete Repair Manual</i> , 1997			X													
U.S. Bureau of Reclamation, <i>Concrete Manual - 8th Edition</i> [revised], U.S. Government Printing Office, 1988, 627 pp. and <i>Concrete Manual, 9th Edition, Part 2</i> , U.S. Government Printing Office, 1992, 900 pp.			X			X c	X									
U.S. Bureau of Reclamation, <i>Criteria and Guidelines for Evacuating Reservoir Storage Reservoirs and Sizing Low-level Outlet Works</i> , ACER Technical memorandum No. 3, 1982								X								
U.S. Bureau of Reclamation , <i>Design of Arch Dams</i>, 1995, 915 pp.						X d										
U.S. Bureau of Reclamation, <i>Design of Gravity Dams</i>, 1995, 556 pp.						X c										
U.S. Bureau of Reclamation. <i>Design of Small Dams, 3rd Edition</i>, 1987, 860 pp.	X					X a	X	X								
U.S. Bureau of Reclamation, <i>Earth Manual Part 1</i> : Young, R; Howard, A; Kit Fuller, H. <i>Third Edition</i> , USBR Earth Sciences and Research Lab. 1999, 356 pp. Part 2: Scavuzzo, R. USBR, 1991, 1279 pp.							X		X							
U.S. Bureau of Reclamation, <i>Embankment Dams Instrumentation Manual</i>, 1995, 268 pp.					X											
U.S. Bureau of Reclamation , <i>Embankment Design Standards No. 13, Protective Filters</i> , 1994						X b			X				X			
U.S. Bureau of Reclamation. <i>Engineering Geology Field Manual</i> , 1998, 500 pp.									X							
U.S. Bureau of Reclamation. <i>Glossary of Terms</i>. Available on-line http://www.usbr.gov/cdams/glossary.html	X															
U.S. Bureau of Reclamation. <i>Guidelines to Decision Analysis</i>, ACER Technical Memorandum No. 7, Denver, 1986, 223 pp.																X

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U.S. Bureau of Reclamation, <i>Hydraulic Design of Stilling Basins and Energy Dissipators</i> , Engineering Monograph No. 25, US Dept of Interior, Denver CO, 1974								X								
U.S. Bureau of Reclamation, <i>Safety Evaluation of Existing Dams (SEED Manual)</i>, 1992. 178 pp.	X	X	X	X	X										X	
U.S. Bureau of Reclamation. <i>Training Aids for Dam Safety</i>, Denver, 1988	X		X	X	X	X	X	X	X		X	X	X		X	
U. S. Bureau of Reclamation. Division of Water Operation and Maintenance, Engineering and Research Center, Denver. <i>Water Operation and Maintenance, Bulletin No. 97: Equipment for the Prevention, Control and Disposal of Weeds on Irrigation Projects</i> , September 1976 (260 pp.)			X													
U. S. Bureau of Reclamation Technical Service Center. <i>Standing Operating Procedures Guide for Dams, Reservoirs and Power Facilities</i> , Denver, August 1996.			X													
U.S. Committee on Large Dams. <i>Eighteenth Annual USCOLD Lecture: Managing the Risks of Dam Project Development, Safety and Operation</i>, 1998																X
U.S. Committee on Large Dams. <i>Eleventh Annual USCOLD Lecture: Use of Geosynthetics in Dams</i> , 1991.													X			
U.S. Committee on Large Dams. <i>General Considerations Applicable to Performance Monitoring of Dams</i> , December 1986.					X											
U.S. Committee on Large Dams. <i>Lessons from Dam Incidents</i>, New York: American Society of Civil Engineers, 1975, 387 pp.		X														
U.S. Committee on Large Dams, <i>Seismic Design and Performance of Dams</i> , 16 th Lecture series, July 1996										X						
U.S. Committee on Large Dams, <i>Seismicity and Dam Design</i> , Bulletin 46, 1983						X				X						
U.S. Committee on Large Dams, <i>Updated Guidelines for Selecting Seismic Parameters for Dam Projects</i> , 1999						X				X						

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U.S. Department of Agriculture. Natural Resources Conservation Service/Soil Conservation Service, National Engineering Handbook #4 (Available on-line: Part 633, Chapter 26 - Gradation Design of Sand/Gravel Filters; Part 651 - Agricultural Waste Management Field Handbook; Section 20 - Specifications for Construction Contracts)						X ab		X			X		X			
U.S. Department of Agriculture, Soil Conservation Service, <i>Gated Outlet Appurtenances, Earth Dams</i> , Technical Release No. 46, USDA, 1969								X								
U.S. Department of Agriculture, Soil Conservation Service, <i>A Guide for Design and Layout of Earth Emergency Spillways as Part of Emergency Spillway Systems for Earth Dams</i> , USDA Technical Release No. 52, Feb. 1973								X								
U. S. Department of Agriculture, Soil Conservation Service. Operations and Maintenance Alternatives for Removing Trees from Dams, Technical Note 705, Fort Worth, Texas: South Technical Service Center, April 1981, 8 pp.			X													
U.S. Department of Agriculture, Soil Conservation Service, <i>Riprap Lined Plunge Pool for Cantilever Outlet</i> , Design Note No. 6, Dept. of Agriculture, Washington, DC, 1986.								X								
U. S. Department of Commerce, NOAA and U. S. Department of Army, Corps of Engineers, Hydrometeorological Report No. 51 (HMR-51), Probable Maximum Precipitation Estimates, United States East of the 105th Meridian, Washington, D. C., June 1978, 87 pp. (HMR reports appropriate to region)											X					
U. S. Department of the Interior, Mining Enforcement and Safety Administration (MESA), Prepared by D'Appolonia Consulting Engineers, Inc., Engineering and Design Manual, Coal Refuse Disposal Facilities, U. S. GPO: 1975, O-579-601, 9 chapters.						X b										
U. S. Department of the Interior, Teton Dam Failure Review Group. <i>Failure of Teton Dam, Final Report</i> , Washington, D. C.: Government Printing Office, January 1980 (800 pp.)		X														
U.S. House of Representatives, 95th Congress, Subcommittee of the Committee on Government Operations, <i>Dam Safety Hearings, March 15, 17 and June 30, 1977</i> , Washington, D.C.: Government Printing Office, 1977, 618 pp.		X														

Categories:

1. General Handbooks, Reference Manuals, Textbooks
2. Dam Performance, Incidents, and Historic Failures (Includes Case Histories, Analyses/Statistical Evaluations, Lessons Learned, Legal Cases, Hearings, Books)
3. Inspections, Operating Procedures and Maintenance
4. Hazard Classification, Inundation Studies, and Emergency Preparedness
5. Monitoring, Instrumentation, and Surveillance
6. Dam Design and Analysis (a) General (b) Earthen Dams and Tailings Dams (c) Concrete Gravity Dams (d) Arch and Buttress Dams
7. Construction Inspection and Materials Testing
8. Spillway Capacity Evaluation, Modification, and Hydraulics
9. Site Exploration, Foundations, Geology, Geotechnical
10. Seismic Evaluation and Design Earthquake Selection
11. Hydrology, Design Flood and PMF
12. Overtopping Evaluation and Protection
13. Seepage and Piping
14. Laws, Regulations, and Guidelines
15. Dam Safety Programs/Management
16. Risk Assessment

Bold type = Tier I materials

✓ = Available through ASDSO

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U. S. House of Representatives, 95th Congress, Subcommittee of the Committee on Government Operations, <i>Teton Dam Disaster: Hearings, August 5, 6, and 31, 1976</i> , Washington, D.C.: Government Printing Office, 1976, 678 pp.		X														
URS Greiner Woodward Clyde and Portland Cement Association. <i>Roller-Compacted Concrete Quality Control Manual</i> , Skokie, IL: Portland Cement Association, 2000, 58 pp.						X a										
Vogel, John. <i>Hydrologic Reports for NW</i>											X					
✓ Von Thun, Lawrence; <i>Understanding Piping and Seepage Failure – the No. 1 Dam Safety Problem in the West</i> , ASDSO West Regional Conference, 1996, pp. 3-21.													X			
✓ Von Thun, Lawrence; Bowles, David and McCann, Martin. <i>Workshop on Risk Assessment</i> , ASDSO Technical Seminar, Oct. 1999, 325 pp.																X
Wagner, W.E. <i>Morning Glory Shaft Spillways: Determination of Pressure-Controlled Profiles</i> , Transactions, American Society of Civil Engineers, Vol. 121, 1956, p. 345.								X								
Water Resource Council , <i>Statistical Flood Analysis</i> , Bulletin 17C											X					
Web site: National Performance of Dams http://npdp.stanford.edu		X														
Web site: Washington State Guidelines (good model) http://www.wa.gov/ecology/wr/dams/guidelines_part_1.pdf														X	X	
Wiley, A.J.; et al.. <i>Causes Leading to the Failure of the Saint Francis Dam</i> , March 24, 1928		X														
Young, M.F., <i>Feasibility Study of a Stepped Spillway</i> , American Society of Civil Engineers. Hydraulics Division Specialty Conference, Jackson, MS, August 1982								X								

Obtaining These Materials

General Sources

Most items in print can be purchased from on-line booksellers, such as Barnes and Noble and Amazon.

Items that can be obtained through ASDSO, including most materials produced by the Federal Emergency Management Agency (FEMA) and the Interagency Committee on Dam Safety (ICODS) are preceded with a ✓ in the tables on pp. 24-55.

Out-of-Print Materials

Out-of-print materials can often be obtained through on-line book sellers. Some sites specialize in locating out-of-print materials, but this service is also provided by Barnes and Noble, Amazon and others. E-bay (<http://www.ebay.com>) is another source for out-of-print materials.

Specific Sources

Materials that are unavailable through major booksellers are often available from the original source. Contact information for many of the publishers of items in this list appears on the following page.

American Concrete Institute

PO Box 9094
Farmington Hills, MI 48333
Phone: 248-848-3800; Fax: 248-848-3801
Web site: <http://www.aci-int.org>

American Society for Testing and Materials

ASTM, 100 Barr Harbor Drive
West Conshohocken,
Pennsylvania, USA 19428-2959
Phone: 610-832-9585; Fax: 610-832-9555
E-mail: service@astm.org
Web site: <http://www.astm.org/>

American Society of Civil Engineers

1801 Alexander Bell Drive
Reston, Virginia 20191-4400
Phone: 800-548-2723, 703-295-6300
Web site: <http://www.asce.org>

Association of State Dam Safety Officials

450 Old Vine Street, 2nd Floor
Lexington, KY 40507-1544
Phone: 859-257-5140; Fax: 859-323-1958
E-mail: info@damsafety.org
Web site: <http://www.damsafety.org>.

Canadian Dam Association

P.O. Box 4490, South Edmonton Postal Station
Edmonton, Alberta T6E 4X7
E-mail: publications@cda.ca
Web site: <http://www.cda.ca/>

International Commission on Large Dams (ICOLD)

151. boulevard Haussmann
75008 Paris, France

Fax: (33-1) 40.42.60.71
Web site: <http://www.icold-cigb.org>

National Academy Press

2101 Constitution Avenue, NW
Lockbox 285
Washington, DC 20055
Phone: 888-624-8373 or 202-334-3313
Fax: 202-334-2451
E-mail: zjones@nas.edu
Web site: <http://www.nap.edu/>

Portland Cement Association

5420 Old Orchard Road
Skokie, Illinois 60077
Phone: 847.966.6200; Fax: 847.966.8389 •
E-mail: info@portcement.org
Web site: <http://www.portcement.org/>

U.S. Government Publications:

The National Technical Information Service

5285 Port Royal Road
Springfield, VA, 22161, USA.
Phone: 800-553-NTIS, 703-605-6000
Fax: 703-321-8547
E-mail: orders@ntis.fedworld.gov
Web site: <http://www.ntis.org>

U.S. Society on Dams (formerly U.S. Committee on Large Dams)

Larry Stephens, Executive Director
1616 Seventeenth Street, Suite 483
Denver, Colorado 80202
Phone: 303-628-5430; Fax: 303-628-5431
e-mail: stephens@ussdams.org
Web site: <http://www.ussdams.org/>

