



# Association of State Dam Safety Officials

## Request for Proposal/Qualifications

The Association of State Dam Safety Officials (ASDSO) is soliciting proposals (including statements of qualifications) from engineering consulting firms, research groups, academics, and others who are qualified to develop a Technical Knowledge Base (TKB) Database on dam safety technical topics for state dam safety personnel and other interested ASDSO members.

It is anticipated that this will be a step-wise process with the initial development within a year, for the major topics listed below. Topics should be organized by dam feature and also indexed to the ASDSO Program of Study categories ([link](#)).

## Project Overview

ASDSO has identified the need for a Technical Knowledge Database to share with ASDSO members which provides access to important dam safety documents in one location.

The TKB Database is envisioned to be a Wikimedia (Wiki) formatted database with a primary audience of State Regulators and secondary audience including other members of ASDSO. The Wiki will be scalable and built out in sections. It is anticipated that this would be a resource focused on small to medium sized embankment dams and provide all the resources in one location for all users to access.

The anticipated schedule for the initial development would be less than a year, with on-going maintenance and improvements to follow under separate efforts.

The open-source Wikimedia software has been deployed on this website as an example: [https://jonsweb.net/damwiki/index.php?title=Main\\_Page](https://jonsweb.net/damwiki/index.php?title=Main_Page). It is anticipated that the wiki open source software can be used 'as-is' and that no custom programming or modifications will be required. ASDSO will procure a website URL and will work with the selected contractor to deploy the wiki open source software to the website and grant editorial authority to the contractor.

All references added to the wiki should currently be considered accepted as industry standard practice at this time. No vetting of recently developed approaches is anticipated for this initial development of the TKB.

Note: The wiki has capability of accepting digital files which are stored in the on-line database. It is the intent of the TKB to serve as an historical repository of these documents.

## Scope of Work

The contractor will be responsible for the following items and their expenses. All tasks and procedures will be under the supervision and subject to the approval of ASDSO. The detailed scope of work and schedule will be developed with the successful contractor with a goal of efficiently delivering the project.

1. Develop a complete table of contents for the Wiki - contractor will submit an outline of material covering the major topics listed below including any additional topics or sub-topics they deem appropriate.
  - a. An example outline for the Outlet Works Topic is provided in the Appendix to the TKB Task Force Draft Report (attached)
  - b. Provide Draft Outline for all major topic headings listed below to ASDSO for review
  - c. Incorporate comments from ASDSO prior to proceeding
  - d. Develop basic introduction and overview for each major topic and sub-topics
2. Populate the Wiki by topic with the following items:
  - a. Documents and references that are public domain
  - b. Links to references for purchase for those not currently public domain (e.g.: ASCE Journal Articles, ASTM Standards, etc.).
  - c. Links to case studies on other dam safety related websites
    - DamFailures.org
    - DamOutletWorks.org
  - d. Populate wiki landing page for each reference document with basic information about the document including, but not limited to:
    - Date of Publication
    - Author(s) / Publisher
    - Errata
    - Status (if known. E.G.: currently under revision, anticipated publication date, etc.)
    - Editorial Commentary (if appropriate. E.G.: relation to current industry trends, significant revisions from previous editions, etc.)
    - ASDSO Program of Study category and other Keywords and/or Tags to aid in search-ability
  - e. Other relevant information as appropriate
3. Regular meetings to track progress
  - a. Kick-off Meeting
  - b. Progress meetings via video conference are required on a monthly basis with notes developed and distributed by the contractor distributed for review and comment by ASDSO
    - Progress Update
    - Challenges/Obstacles
    - Next Steps
    - Budget Update
    - Action Items
  - c. Regular (weekly) email contact with the project manager is expected at a minimum
4. Presentation of the Draft TKB to ASDSO
  - a. Formal Presentation of the TKB via video conference
  - b. Allow for a period of review by ASDSO
5. Final revisions to address ASDSO comments
6. Develop a formatting style guide for future phases of development

Initial development should consider include the following major topics:

- Dam
  - Embankment
  - Foundation
  - Filters
  - Drains
  - Zoning
  - Crest
  - Freeboard
  - Erosion Protection
  - Instrumentation
- Outlet Works
  - Intake
  - Control Structure
  - Gates and Valves
  - Conduits
  - Tunnels
  - Outfall
- Spillway
  - Hydraulic Capacity
  - Lining/ Erosion Control
  - Energy Dissipation
- Site
  - Hydrology
  - Seismicity
  - Geology

The Wiki will be organized around the above topics, dam features and technical disciplines as described above, while also being indexed to the ASDSO "Program of Study" categories:

- Awareness
- Construction Management
- Dam Safety Program Management
- Emergency Action Planning and Management
- Environmental including Dam Removal and Tailings Dams
- Failure Inspection
- Geotechnical
- Hydrology and Hydraulics
- Inspection
- Operation and Maintenance
- Risk Analysis and Risk Informed Decision Making
- Seismic
- Site Security
- Structural

An example organization structure is recommended in the TKB Task Force Report Appendix.

ASDSO will provide the developer with the opportunity to participate in presentations to roll out TKB to ASDSO membership through either an Annual Conference Presentation or Webinar

## Anticipated Sources of Material

There is a wide variety of material available to compile into the TKB. A partial list is provided here as a starting point, but is not intended to be all-inclusive.

- ASDSO Sites
- DamFailures.org
- DamOutletWorks.org
- Suggested References for State Dam Safety Program of Study
- Other Dam Safety/Civil Engineering Organizations
  - USSD
  - ICOLD
  - ASCE
- Corporate sites
  - ACI
  - ASTM
- National Standards
  - FEMA
  - ICODS
  - NDSRB
- Federal Agencies
  - USACE
  - FERC
  - DHS, CISA
  - Reclamation
  - NRCS
  - TVA
  - USGS
  - NWS

## Wiki Disclaimer

Similar to the Dam Safety Journal, the Wiki TKB should include a standard disclaimer about its use to limit liability of the organization. An example from the ASDSO Journal of Dam Safety is provided below which could easily be adapted for the TKB:

"The material presented in this ASDSO publication has been prepared in accordance with generally recognized engineering principles and practices and is for general information only. This information should not be used without first securing competent advice with respect to its suitability for any general or specific application. The contents of this publication are not intended to be and should not be construed to be a standard of the Association of State Dam Safety Officials (ASDSO) and are not intended for use as a reference in purchase specifications, contracts, regulations, statutes, or any other legal

document.

No reference made in this publication to any specific method, product, process, or service constitutes or implies an endorsement, recommendation, or warranty thereof by ASDSO.

ASDSO makes no representation or warranty of any kind, whether express or implied, concerning the accuracy, completeness, suitability or utility of any information, apparatus, product, or process discussed in this publication, and assumes no liability therefore. Anyone utilizing this information assumes all liability arising from such use, including but not limited to infringement of any patent or patents."

## **Format of Technical Proposal**

Required Elements: Please include the following in the proposal

- Project Approach – Limited to 5 pages
- Qualifications for the Project Manager, Wiki Database developers and Subject Matter Experts (SME) used in this effort including resumes. – Resumes for each individual should be limited to 2 pages
- A general range of available dates for performance and completion of sections of the Wiki TKB
- Cost

It is suggested that more than one SME in each topic area is included on the team.

Please Note: Any proposals marketing the specific services or products of private companies will be disqualified. No individual or company marketing will be accepted as part of the TKB wiki.

## **Project Cost:**

The cost of development of the TKB should be broken down on a per topic basis for each of the major topics listed above. At the sole discretion of ASDSO, a phased approach may be undertaken to develop select topics a la carte for the initial development of the TKB based on cost. Separate contracts may be issued for development of topics not developed initially at a later date. ASDSO will provide acknowledgement of Developers on the "About" page of the TKB.

## **Scoring**

Proposals will be scored and ranked based on the following weighting

- Project Approach                    30%
- Subject Matter Expertise        40%
- Cost                                        30%

**Schedule:**

Advertisement	May 4, 2021
Deadline for Questions	June 2, 2021
Responses to Questions Published	June 30, 2021
Proposals Due	August 27, 2021, 5:00pm EDT

**Direct Questions and Proposals via email to:**

Katelyn Riley, [kriley@damsafety.org](mailto:kriley@damsafety.org)

**References:**

- Technical Knowledge Base Task Force Draft Report to the ASDSO Board of Directors (January 8, 2021 Draft)
- ASDSO Program of Study ([Link](#))