

TEXAS WATER DEVELOPMENT FUND (DFUND)



Water for Texas

**Program
Guidance –
December
2022**

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Acronyms

BAL	Board Action Letter
CCFI	Construction Contract Final Inspection
CE	Categorical Exclusion
COA	Certificate of Approval
DFund	Texas Water Development Fund
EA	Environmental Assessment
ED	Environmental Determination
EIS	Environmental Impact Assessment
EID	Environmental Information Document
EFR	Engineering Feasibility Report
FONSI	Finding of No Significant Impact
NEPA	National Environmental Policy Act
P&S	Plans and Specifications
PDF	Portable Digital Format
ROD	Record of Decision
SOF	Statement of Finding
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TWDB	Texas Water Development Board
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
USI&S	United States Iron and Steel

I. Introduction

[The Texas Water Development Fund \(DFund\) Program](#) was created in 1957, with the passage of the Texas Water Development Board's (TWDB) first constitutional amendment. The program is streamlined to provide financing for various types of infrastructure projects. DFund enables the TWDB to fund projects with multiple eligible components (e.g., water and wastewater), in one loan through the issuance of TWDB general obligation bonds.

Document Summary

This guidance manual provides basic information for Applicants and their consultants to understand how the TWDB DFund Program works, and how to comply with the program's rules and requirements.

This document covers the following subjects, and any applicable procedures, requirements, and resources:

- Pre-application
- Full application
- Loan closing and Release of Funds
- Planning, acquisition, design, bid, and construction phases
- Certificate of Approval (COA) and Project close-out
- Financial Compliance (Final Accounting and Monitoring)
<https://www.twdb.texas.gov/financial/compliance/index.asp>

II. Program Eligibility

Eligible Applicants

Eligible DFund applicants include any political subdivision or nonprofit water supply corporation with a project that is consistent with the most recently adopted [state water plan](#).

Political subdivisions include:

- cities,
- counties,
- districts, and
- river authorities.

Eligible Projects

Water supply projects may include planning, acquisition, design, and construction for:

- water wells,
- retail distribution and wholesale transmission lines,
- system acquisitions,
- pumping facilities,
- storage reservoirs and tanks,
- water treatment plants, and
- purchase of water rights.

Wastewater projects may include planning, design, and construction for:

- sewer treatment plants,
- collection systems,
- system acquisitions,
- nonpoint source pollution abatement, and
- development of new municipal solid waste disposal facilities.

Flood control projects may include structural and nonstructural flood protection improvements such as:

- construction of storm water retention basins,
- enlargement of stream channels,
- modification or reconstruction of bridges,
- acquisition of floodplain land for use in public open space,
- relocation of residents of buildings removed from a floodplain,
- public beach re-nourishment,
- flood warning systems,
- control of coastal erosion, and
- development of flood management plans.

DFund Program Requirements

- Projects must be consistent with the current state water plan
- State-level environmental review
- A [Water Conservation](#) and [Drought Contingency Plan](#) are required for financial assistance greater than \$500,000, as per [31 TAC § 363.15](#).
- Reservoir funding must be segmented or phased; permitting required prior to a construction commitment
- Water loss threshold limits requirements
 - Entity needs to be below its water loss thresholds as determined by TWDB. If not, funds need to be included to mitigate the entity's water loss. If the entity is or has plans to mitigate its loss, it can submit a waiver for consideration by the board per [31 TAC §358.6\(e\)\(f\)](#).

III. Financial Assistance Overview

DFund offers affordable financial assistance as a single loan for eligible projects with multiple components. Grants and principal forgiveness are not available in this program. More information can be found on the DFund webpage at <https://www.twdb.texas.gov/financial/programs/TWDF/index.asp>.

DFund Funding

Due to statutory limitations, only loans are offered through the DFund. The interest rate on a DFund loan varies depending on market conditions. The lending rate scales are set at approximately the TWDB's borrowing cost. The lending rates are intended to provide reasonable rates for TWDB customers while covering the TWDB's cost of funds and risk exposure.

- Long-term fixed interest rates based on the TWDB's cost of funds
- Generally, 20- to 30-year repayment terms
- No pre-established maximum funding limit at this time, however TWDB may set a maximum amount
- Access to loan funding on a periodic basis (please contact us to discuss project timeline and funding availability)

IV. Application Process

The first step in the application process is to schedule a pre-application meeting to discuss the project's eligibility. Requesting a pre-application meeting does not in any way obligate an Applicant to continue the process.

- Schedule Pre-application meeting
- Submit Application
- TWDB reviews for completeness
- TWDB provides notice of application completeness
- TWDB review of application
- TWDB provides recommendations to the Board
- The Board reviews application for approval

Pre-Application Meeting



Due to availability of funds, applicants **must** schedule a pre-application meeting with their [Regional Water Project Development Team](#) who will guide them through the application process. Pre-application teleconferencing is available, and the following individuals should attend:

- A member of the governing body of the Applicant
- The consulting engineer

- The financial advisor
- The bond counsel



NOTE: Intended use of alternative delivery methods **must be discussed with the TWDB at the pre-application meeting, or earlier if possible.** More details are provided in the [Bidding Phase](#) section of this guidance under *Alternative Delivery for Construction Projects*.

Submitting an Application

The financial assistance application can be submitted online using the [Online Application \(OLA\)](#) tool. A Microsoft Word version is also available for submittal via email or mail.

- **On-line Loan Application Submittal**
 - Using the [OLA tool](#), create your login credentials for access to the system, then login to the online application system
 - Most document uploads to the OLA tool must be in portable document format (PDF). Clearly label all attachments with the corresponding document name and entity name.
 - You may save your progress and return as needed until you have completed the application; incomplete applications will not be processed until all required information is provided.
 - Additional contributors may be added to the application.
 - It is imperative that all contributors use consistent language, and only one at a time be working in the OLA system. If multiple users are working on the application at the same time, the TWDB cannot guarantee your data will be saved.
 - Refer to the TWDB [Financial Assistance Application](#) webpage for further guidance.



It is imperative that all contributors use consistent language, and only one at a time be working in the OLA system. **If multiple users are working on the application at the same time, the TWDB cannot guarantee your data will be saved.**

- **Email\Hardcopy Submittal (Word)***
 - Download the Financial Assistance Application (Word document) from the TWDB [Financial Assistance Application webpage](#).
 - Refer to the TWDB Financial Assistance Application webpage for further guidance
 - Email the completed application and applicable attachments to Financial_Assistance@twdb.texas.gov or,

- For hard copy applications, you must submit one (1) double-sided physical copy, and one (1) indexed electronic copy via electronic storage media (i.e., flash drive or CD), using MS Word, Excel, or Adobe Acrobat.
- Hard copies should be mailed to the address below:

Texas Water Development Board
 ATTN: DFund Application
 P.O. Box 13231
 Austin, Texas 78711-3231

** Not applicable if using OLA for the application submission.*



If at any point you have questions, or need assistance with the application, please contact your [Regional Water Project Development Team](#).

Notice of Complete Application



The Applicant will be notified in writing if their application is administratively complete or incomplete. **If the application is incomplete, any deficiencies must be remedied within fourteen calendar days.**

Financial

➤ Financial Reports

- The TWDB is required to review the Applicant's ability to repay any debt issued. To assure adequate financial capacity, the Applicant must have sufficient rates, charges, and revenues to cover necessary cost, and demonstrate credit worthiness and fiscal condition. The TWDB's review will include, but not limited to, the project budget, current and proposed debt obligations, annual financial reports, and other financial information to assure adequate financial capacity of the Applicant.
- Political subdivisions must have the most recent year-end audited financial statements.
- Nonprofit Water Supply Corporations must provide the most recent fiscal year-end financial statements or Form 990 and the five (5) most recent fiscal years to the TWDB. All Applicants requesting over \$1 million in funding must provide the most recent fiscal year-end audited financial statements.

Engineering

A Preliminary Engineering Feasibility Report, signed, sealed, and dated by a professional engineer registered in the State of Texas, as outlined in the application, is required. During the planning phase of the project, the Applicant must provide a final Engineering Feasibility Report (EFR) in accordance with the relevant guidance for the preparation of EFRs for drinking water projects ([TWDB-0555](#)) and/or wastewater projects ([TWDB-0556](#)).

Environmental

During the application phase, the TWDB Environmental Reviewer will determine which level of environmental review will be required based on the type and scope of the project and the potential for adverse environmental impacts.

This assessment will be made based on information provided in the engineering and environmental sections of the financial assistance application. If additional information is required by the TWDB, a request for supplemental information will be sent to the Applicant or their consultant.

Application and Program Requirements

Before starting the application process, **review** the Financial Assistance Checklist ([TWDB-0148](#)) for a complete list of documents required with the application.

TWDB Forms Applicable to DFund

Forms and guidance materials referenced below can be accessed online through the TWDB [Program Guidance & Manuals \(Guidance and Forms Library\)](#) by using the search box and typing in the form or guidance number needed.

- Resolution from governing body requesting financial assistance ([TWDB-0201A](#)), *
- Applicant Affidavit for Public Entities ([TWDB-0201](#)),*
- Certificate of Secretary ([TWDB-0201B](#)), *
- Planning Information Form for wastewater projects ([WRD-253a](#)) and for drinking water projects ([WRD-253d](#)), and
- Project Cost Estimate Budget ([TWDB-1201](#)) signed and sealed by a professional engineer registered in the State of Texas

**Forms requiring the Applicant's signature*

DFund Program Requirements

- A [Water Conservation Plan](#) and a [Drought Contingency Plan](#) are required for financial assistance greater than \$500,000, in accordance with [31 TAC § 363.15](#).
- [U.S. Iron and Steel](#) requirements, in accordance with [31 TAC § 363.41](#)
- Reservoir funding must be segmented or phased; any permitting is required prior to a construction commitment.
- Review of legislative requirements regarding water loss threshold limits; [Water Code § 16.0121](#)
- Water Use Survey
- Water Loss Audit

Draft Board Memo Review

The Applicant will be provided a draft Board memo and resolution for review. While most of the resolution uses standard language, the Applicant must verify language related to the pledge and any special conditions. TWDB must be notified of any issues with the draft Board memo and resolution within seven calendar days to ensure the commitment is not delayed.

Funding Approval and Financial Assistance Commitment

If the application is recommended for approval by the TWDB, the application is placed on the TWDB Board meeting agenda. If a Board commitment for financial assistance is made, it will expire on the date noted in the commitment.

If you are unable to close your commitment prior to its expiration, you may request an extension of the expiration period [31 TAC Subchapter A § 363.32](#).

- To request an extension, submit a written request at least 45 days prior to the expiration date including the following basic project information:
 - explaining the need/necessity for the request,
 - benefits the extension would provide,
 - current project status,
 - updated project schedule, and
 - a new proposed date for closing.

V. Closing and Release of Funds

Closing

After a financial assistance commitment has been approved by the Board, additional legal, financial, and engineering documentation must be submitted to close the loan and release funds.

Please refer to the Closing a [TWDB Commitment webpage](#) for more information, including helpful pointers on how to navigate the closing process, lists of required documents, and closing timeline tools.

Further explanation on the TWDB requirements for the DFund Program is provided in [31 TAC § 363.42](#) (Loan Closing) and 31 TAC [§ 363.43](#) (Release of Funds).

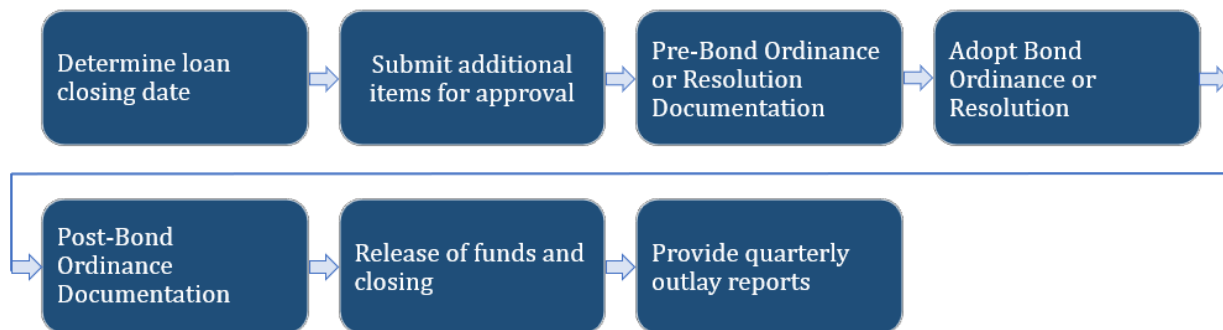


Figure 1: Closing Process

After TWDB Commitment – First Steps



Look for a Board Action Letter (BAL), to be sent via email shortly after Board commitment. This letter summarizes all the pertinent information you will need to close on your loan.



Respond to the assigned TWDB financial analyst or team manager with a tentative closing schedule containing your preferred loan closing date (Contact information will be included in the BAL.).



Be sure you communicate early and often with your TWDB team, consultants, and community contacts to ensure all parties are on the same page.



Pay close attention to closing deadlines. Timely delivery of documents is critical for maintaining closing dates.

Key Closing Milestones



The **closing date** requested in the application will be used to plan the closing of the Applicant's commitment. The requested date may be revised if desired, with concurrence from the TWDB.

A closing date calculator may be found on the [TWDB's website](#).

1. Submit the following items to the TWDB for approval **at least twenty business days prior to the adoption date** of the bond ordinance or resolution by the Applicant's governing body:
 - Bond Counsel's legal opinion, draft
 - No-Arbitrage (Federal Tax) Certificate, draft
 - No-Litigation Certificate, draft
 - Private Placement Memorandum, draft
 - Proposed bond ordinance or resolution, draft
 - Copies of executed engineering contracts and other draft contracts
 - Any permits the TWDB determines are required prior to closing
 - Sufficiency of funds statement and release of funds request:
 - **Option A:** If the project is funded **100 percent with TWDB funds**, submit a statement that identifies the amount of funds to be released at closing.
 - **Option B:** If the project is funded with a **combination of TWDB funds and other funds**, provide a statement as to the status of securing non-TWDB funds, and identify the amount of TWDB funds to be released at closing. Include a current budget of costs and sources of funds.
 - If the funding request is greater than \$500,000, an approved Water Conservation Plan is required for closing.
2. The Applicant will need to adopt a bond ordinance to approve the conditions of the TWDB financial commitment approximately **twenty business days prior to the Applicant's closing date**.
3. **After the Applicant has adopted a bond ordinance to approve the conditions of the TWDB financial commitment**, they will submit the final closing documents to the TWDB to close the commitment:
 - Bond Ordinance or Resolution adopting the issuance
 - Attorney General Opinion (5 business days prior)
 - Comptroller's Certificate (5 business days prior)
 - Debt Service Schedule
 - Executed Escrow Agreement
 - Financial Advisor's Closing Instructions

- Executed Paying Agent Agreement
- Private Placement Memorandum – with all attachments
- Sufficiency of Funds Statement (if the project is funded by a combination of TWDB funds and other funds)
- The TWDB Vendor Set-Up of Direct Deposit Form
- Blanket Issuer Letter of Representations (BLOR)
- Bond Counsel Opinion
- Wire Transfer Letter
- Financing Agreement
- No Litigation Certificate
- No Arbitrage/Federal Tax Certificate



Note: This guidance outlines the bond issuance process. For other types of financing, please contact the RWPD team for instructions applicable to those methods. This is intended as an example. The applicant should refer to the BAL and Board resolution for any additional items required for the project.

Release of Funds

The DFund Program releases funds as project milestones are achieved. Funds not eligible for release on the closing date will be held in an escrow account until the required project milestones have been completed and approved. **The next section illustrates key project milestones during the planning, design, and construction phases of a project, which are tied to the release of funds.**

Key Project Milestones

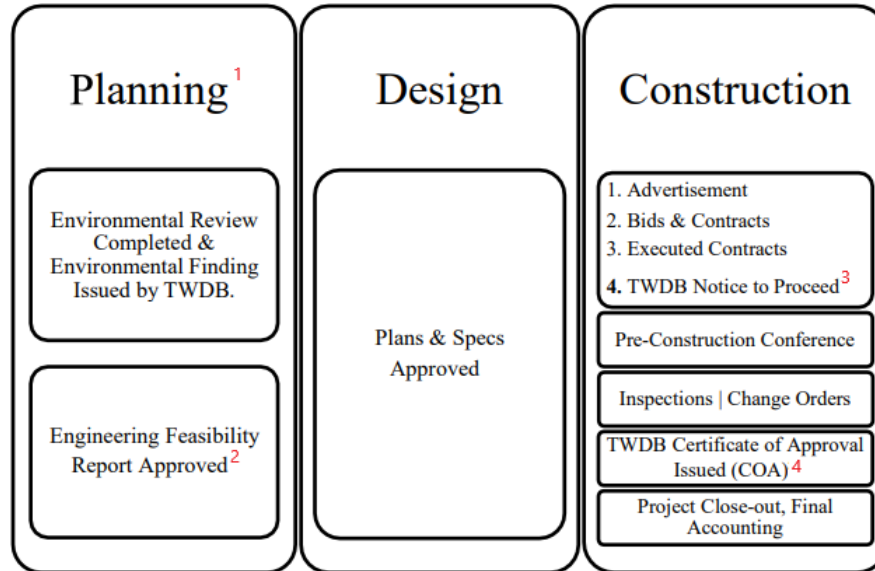


Figure 2: Release of funds milestones

1. **Planning:** Funds for planning and permitting costs are eligible for release once all financing closing documents have been submitted and approved and any special conditions from the TWDB resolution have been met. Executed professional services agreements for the planning phase, if the TWDB is funding those services, and any water supply contracts needed for the project must also be received.
2. **Design:** Funds for design can be released once an environmental review has been issued by the TWDB and an EFR has been completed and approved. Executed engineering contracts for the design phase are also required before release of design funds, if not previously submitted.
3. **Construction:** Construction funds for a contract can be released **after** the issuance of any applicable permits, approval of contract documents, including Plans & Specifications(P&S), and **after** executed construction documents are contingently awarded. Executed engineering contracts for the construction phase are also required before the release of construction funds for engineering tasks, if not previously submitted. If a water rights certification is required for the project, it must also be issued prior to release of funds for construction.
4. **Contract close-out:** Retainage on a construction contract can be released once the TWDB issues a COA.

VI. Planning Phase

The planning phase prepares the framework required for accomplishing the purpose and objectives of the project. During the planning phase, the project's needs are evaluated, and possible solutions are analyzed and ranked, based on local, technical, and economical factors. At the end of the planning phase, a recommendation for the most economically feasible solution to the project's need is documented.

The Planning phase includes TWDB's review and completion of the impact assessment document, and approval of the EFR.

Environmental Review

An environmental review is required for the use of financial assistance as detailed in [31 TAC § 363.14](#), Environmental Assessment.

State Funding Only - Environmental Review

If DFund financial assistance is used to fund a project without any additional federal funding component, then a state-level environmental finding will be issued. Depending on the complexity of the project and its environmental impacts, projects will be subject to one of the following levels of environmental review:

1. **Determination of No Effect (DNE):** A DNE is an exclusion from a full environmental review and is the state equivalent of a Categorical Exclusion (CE). It is issued by the TWDB when a project funded through DFund meets the eligibility criteria under state funding requirements, based on:
 - a. the eligibility criteria described in [31 TAC § 363.14](#) and
 - b. review of information submitted in the application and the CE/DNE request form ([TWDB-0803](#)).

Process: A CE/DNE request form ([TWDB-0803](#)) may be submitted with the application or prepared during the planning phase of the project after a commitment has been secured. TWDB staff will review the form and may request additional information and/or additional agency coordination.

If the TWDB Environmental Reviewer determines that the proposed project is not eligible for a DNE, then an Environmental Data Form (EDF) is required. See the process for an Environmental Determination in step 2 below.

Once all requirements have been met, the TWDB's Executive Administrator will issue a DNE that will be posted on the TWDB website and emailed to the entity, consultants, and DNE mailing list.

2. **Environmental Determination (ED):** An ED is for projects that may have numerous environmental impacts that cannot be readily avoided, minimized, or mitigated without a full impact assessment. Coordination with regulatory agencies is required. Initial review for an ED is based on review of the Applicant's EDF for state programs, [TWDB-0800](#).

Process: An EDF for state programs, [TWDB-0800](#), may be submitted with the application or prepared during the planning phase of the project after a loan commitment has been secured.

The Applicant must conduct a comprehensive assessment of potential environmental impact and coordinate with regulatory agencies, then prepare and submit an EDF document that TWDB staff will review.

Once all requirements have been met, the TWDB Executive Administrator will issue an ED that will be posted on the TWDB website and mailed out to the entity, consultants, and ED mailing list.

Memorandum to File (MTF): A MTF is an environmental finding issued by the TWDB to correct, clarify, modify, or adopt a previous environmental finding issued by the TWDB, or another agency, based on:

- a. a review of a previous environmental finding for the proposed project or
- b. a review of proposed project modifications for consistency with a previous environmental finding.

Federal Funding Component Level Environmental Review

If DFund financial assistance is used to fund a project **in conjunction with a federal-level funding component**, then the TWDB will preferably adopt the federal funding agency's environmental finding. If DFund financial assistance will be combined with **federal funding from the TWDB**, then a NEPA-level environmental review will be required.

At the culmination of the environmental review process for projects with a federal-level funding component, the TWDB will issue one of the following environmental findings:

1. **Categorical Exclusion (CE):** A CE is an exclusion from a full environmental review, based on:
 - a. the eligibility criteria described in [31 TAC § 363.14](#) as supplemented by federal requirements and
 - b. review of information submitted by the Applicant in the application and any requested information.

Process: If a project is potentially eligible for a CE, the Applicant must fill out and submit the [CE request form \(TWDB-0803\)](#) and include any additional information required to make a determination. The Applicant must provide all requested information to the TWDB in a timely manner.

Once a CE is issued, it will be posted on the TWDB website, and the TWDB Environmental Reviewer will notify the Applicant that they must publish notification of the CE issuance in a local newspaper with general circulation in the project area.

The Environmental Reviewer will provide language as it must appear in the newspaper.

2. **Finding of No Significant Impact (FONSI):** A FONSI is a full federal environmental review, based on:
 - a. review of the Applicant's Environmental Information Document ([TWDB-0801](#)), other requested information, and
 - b. the Executive Administrator's environmental assessment (EA).

Process: A FONSI is a legal document supported by an EA. The EA is prepared by the TWDB but is based primarily on the EID submitted by the Applicant.

Once a FONSI is issued, it is subject to a 30-day public comment period.

3. **Record of Decision (ROD):** A ROD is an environmental review required for projects that have significant adverse environmental impacts based on review of an Environmental Impact Statement (EIS) prepared by the Applicant's third-party contractor.

Process: Typically, EIS-level projects are elevated to this level of review by a regulatory agency during the permitting process, (e.g., U.S. Army Corps of Engineers).

The TWDB will then evaluate the ROD issued by the lead regulatory agency and adopt the finding.

4. **Statement of Findings (SOF):** An SOF is an environmental finding issued by the TWDB to correct, clarify, modify, or adopt a previous environmental finding issued by the TWDB or another agency based on:
 - a. review of a previous environmental finding for the proposed project or
 - b. review of proposed project modifications for consistency with a previous environmental finding.

Key Policies and Procedures

- The environmental review must be completed prior to the approval of the EFR and release of funds for acquisition, design, and/or construction phases.
- If an existing environmental finding has been issued by another federal or state agency for the project and it meets DFund Program requirements, it may be adopted by the TWDB. Discuss with the TWDB Environmental Reviewer as early as possible.

- At all times throughout the design, construction, and operation of the project, the Applicant shall comply with the findings and special environmental conditions resulting from the environmental review.
- Environmental findings that are five years old or older must be reevaluated by the TWDB to determine whether to conduct a supplemental review, or to affirm the original finding, for any project element that has not yet been implemented.



NOTE: Any project changes after the issuance of an environmental finding may require more review. Notify the TWDB Environmental Reviewer **immediately** if changes are needed.

If construction begins before the environmental review is complete, **your project may become ineligible for DFund funding.**

Segmented Environmental Review

It is not preferable to segment an environmental review. If the Applicant would like to request a segmented environmental review, they must provide to the TWDB Environmental Reviewer a written justification, including a description of the entire proposed project, a description of the proposed project component to receive a segmented review, the need for the segmented review explaining why the proposed project component should be segmented from the environmental review of the overall proposed project, how the proposed project component constitutes a single and complete project that could be constructed absent the construction of other proposed project components, and how the proposed project component does not depend on other proposed project components.

The TWDB Environmental Reviewer will review the Applicant's request and determine whether it is reasonable to conduct a segmented environmental review. If the TWDB Environmental Reviewer determines that it is reasonable to segment an environmental review, more than one environmental finding will be issued for the proposed project.

Engineering Feasibility Report (EFR)

Refer to the guidance for the preparation of EFRs (drinking water projects, [TWDB-0555](#)) for details on the information required in the EFR. The EFR sent to the TWDB Project Engineer/Reviewer must be submitted as a PDF, with searchable text, and must be signed, sealed, and dated by a professional engineer registered in the State of Texas as per [31 TAC § 363.13](#).

The EFR should also include the following (as applicable):

- **United States Iron and Steel requirements** ([TWDB-1105](#))

- Revised **project schedule**
- Revised **project budget** ([TWDB-1201](#))
- List and status of any **anticipated permits** and the permitting agency



An EFR approval letter cannot be issued by the TWDB Project Reviewer/Engineer until the Environmental Review Process is complete.

Anticipated or Required Permits

The Applicant or consulting engineer should apply early and secure all permits that may be required for the project. Action should be taken as soon as practicable prior to completion of the P&S and advertising for construction bids.



If a floodplain permit is required, P&S approval will not be granted until the Applicant has obtained a floodplain development permit from the local floodplain administrator. In addition, for wastewater treatment projects, P&S approval will not be granted until the Texas Commission on Environmental Quality (TCEQ) has issued a discharge permit.

Land Acquisition, Buffer Zones, Right-of-Way, and Easements

Land acquisition, buffer zones, right-of-way, and easement needs should be discussed in the EFR and addressed early in the planning phase to avoid redesign of the project. The Applicant should perform an initial site assessment to verify that hazardous waste contamination of the site has not occurred.

VII. Design Phase

Before starting design, Applicants and their consultants should take steps to verify all planning phase requirements have been met. Funds associated with design phase work will not be eligible for release until planning is complete and approved.

Detailed P&S will be developed during the design phase. The TWDB or, if applicable, the TCEQ will provide technical review and approval of the design.

Advertisement, bid, and draft contract documents **must also** be included in the bound P&S and submitted for review and approval by the TWDB during the design phase. The engineer must submit a [Plans and Specifications Submittal Form](#) (TWDB-0300) along with the bound P&S. The [form](#) is available through the TWDB's [Guidance and Forms Library](#) webpage.

TWDB will review the P&S:

- (1) to ensure consistency with the approved engineering feasibility report and with approved environmental planning documents;
- (2) to ensure the proposed construction drawings and specifications provide adequate information so that a contractor can bid and construct the project without additional details or directions;
- (3) to ensure compliance with Commission rules at Title 30 Texas Administrative Code Chapter 290 relating to Public Drinking Water, Title 30 Texas Administrative Code Chapter 217 relating to Domestic Wastewater Systems, and other applicable state and federal laws and rules;
- (4) to ensure the contract documents notify the contractor about the Board's authority to audit project files and inspect during construction; and
- (5) to ensure compliance with other requirements as provided in guidance forms and documents, including any additional documentation required by the Board's resolution.



Note: Other approvals. The Applicant must obtain the approval of the plans and specifications from any other local, state, and federal agencies having jurisdiction over the project. The executive administrator's approval is not an assumption of the Applicant's liability or responsibility to conform to all requirements of applicable laws relating to design, construction, operation, or performance of the project.

Any federal, state, or local permits must be obtained prior to approval of P&S, including:

1. Railroad crossing;
2. TxDOT permits;
3. Irrigation district permits;
4. Floodplain permits;
5. TCEQ wastewater discharge permit;

If the project includes requests for exceptions or variances to the Design criteria, TCEQ's approval is required.



NOTE: The Applicant shall not proceed to advertising for bids on the project without express written approval of the solicitation documents by the executive administrator. If the applicant proceeds to advertising without approval, it may affect eligibility for funding.

Design Criteria

The project's design must comply with all requirements set in the TCEQ's design criteria - [30 TAC Chapter 290](#) for water projects, and [30 TAC Chapter 217](#) for wastewater projects. The project's design engineer is required to prepare and submit P&S for review.

Plan and Specification Technical Review

TCEQ Review

For certain water projects funded by the TWDB, technical review of P&S is done by the TCEQ.

- New surface water treatment plants (WTP), including pilot and concentration-time studies
- Existing surface WTPs involving process-related improvements or increase in capacity
- New well projects
- Existing well projects, including increase in capacity or process-related improvements
- New raw water intakes, including pumping facilities at the intake location
- Any project involving treatment, such as membranes, ion exchange, UV disinfection, etc.
- New interconnections
- New construction or improvements to disinfection and other treatment projects
- New ground storage tanks (GST), or improvements to existing GSTs, when the source of water is surface water and GSTs are a clear well



For certain projects funded by the TWDB, technical review authority for P&S is delegated to the TCEQ. **Please contact your TWDB Project Engineer/Reviewer and the TCEQ early to determine which agency has technical review authority for your specific project.**



Where TCEQ review is required, **we highly encourage you** to coordinate with the TCEQ as early as possible during the project development process to ensure all required pilot testing, reports, permits, etc., are addressed with the TCEQ in a timely manner.

Memorandum of Understanding between TWDB and the TCEQ: [30 TAC chapter 354](#): for Water Supply Projects funded by the TWDB, review of P&S is covered under Memorandum of Understanding (MOU) between the Texas Water Development Board and the Texas Commission on Environmental Quality executed as of July 1, 2015.



Any variances to the TCEQ rules must be submitted to and approved by the TCEQ regardless of whether the review of the P&S is done by the TCEQ or the TWDB.

Along with the P&S submitted for review, the project's design engineer shall submit the following documents:

- **All projects:**
 - Completed [Plans and Specifications Submittal Form](#) (TWDB-0300 noting where in the plans, specifications, or contract documents the required language, document, or form is found. The design engineer may choose to bookmark the project's contract documents; however, the checklist must still be submitted with the P&S for the submittal to be considered complete.
- **For water projects for which the TCEQ retains review authority:**
 - Copy of TCEQ P&S approval letter
 - Copy of any exception or conditional approval
- **For water projects for which the TWDB is the review authority:**
 - Complete, signed, and sealed Engineering Design Report ([30 TAC § 290.39\(e\)](#))
 - Complete [P&S checklists](#) in accordance with TCEQ requirements
 - Copy of any correspondence with TCEQ, including review comments and approval letter(s)
 - If the project involves a GST and the tank also functions as a clear well at a surface WTP, provide confirmation that the TCEQ has reviewed and approved the facility for contact time.
- **For wastewater projects:**
 - Certification from the design engineer that the P&S have been designed in conformance with the TCEQ rules applicable to the project
 - If a variance to the rules was requested, provide copy of the TCEQ's variance approval.
 - For wastewater treatment plants (WWTP), provide a copy of the TCEQ discharge permit. **P&S for WWTPs will not be approved without a discharge permit from the TCEQ.**
 - Provide a [Summary Transmittal Letter](#) in accordance with [30 TAC § 217.6\(d\)](#).
 - A complete Final Engineering Report [[30 TAC § 217.6\(g\)\(2\)](#) and [30 TAC § 217.10](#)]

All P&S submitted to the TWDB for review must be sealed, signed, and dated by a professional engineer registered in the State of Texas.

- For initial review, please submit:
 - one (1) high-resolution, searchable PDF electronic set of P&S documents and
 - one (1) or more hard copies, *only if requested by the TWDB Project Engineer/Reviewer.*

- After initial review comments are provided from the TWDB and addressed by the design engineer. Please submit revised P&S for approval including
 - a transmittal letter addressing each comment, including explanations, the location of the revision (if any), or an explanation of why the revision is not necessary and
 - one (1) high resolution, searchable PDF copy of the revised P&S for approval.

Design Phase Submittals



The following items must be submitted to and approved by the TWDB Project Engineer/Reviewer during the design phase:

- Plans and Specifications Submittal Form ([TWDB-0300](#))
- Complete P&S (advertisement, bid, and draft contract documents)
- P&S must be signed by and sealed by a Professional engineer, registered in the State of Texas (Texas Board of Engineers Rules 137.33 and 137.77).
- Sufficiency of Funds Statement, if applicable
- Site Certificate ([ED-101](#)), signed by the Applicant's representative
- Geotechnical report, if available
- Site map showing sanitary control easements, if applicable



NOTE: Special board resolution or environmental finding conditions satisfied for the design phase.



NOTE: TWDB may not fund testing, remediation, removal, disposal, or related work for contaminated or potentially contaminated material. However, the Entity should ensure that such materials are tested, removed, and disposed of in accordance with applicable state and federal laws.

Important Plans and Specification Reminders



➤ **The TWDB supplemental contract conditions for projects funded through TWDB state programs ([TWDB-0552](#))**, contains three sections:

- Section I includes instructions to Applicants.
- Section II includes language required in the “Instructions to Bidders” section of the construction contract documents.
- Section III includes all supplemental contract conditions and **must be included in its entirety in the contract documents.**

➤ **P&S must include**

- all documents required in the supplemental contract conditions,
- mitigation measures and special conditions identified in the environmental review, and
- conditions identified in the required permits.



IMMEDIATELY notify the TWDB Project Engineer/Reviewer and Environmental Reviewer if modifications have been made to the project scope, EFR(s), and/or P&S.

Amendments to the EFR(s) may require revisions to the environmental finding(s). Any significant changes to the project scope occurring after loan commitment may require Board approval.

VIII. Bidding Phase

Competitive bidding is a widely used method of obtaining and selecting contractors for construction projects. Typically, the use of competitive bidding is mandated by law or regulation. The Applicant and its consulting engineer must comply with [Subchapter B, Chapter 252 of the Local Government Code](#) and any other applicable statutes. Applicants should consult their legal counsel regarding any project procurement laws they may need to comply with.

In general, the bid phase includes the following steps:

- Advertising
- Pre-bid conference
- Bid opening and bid evaluation
- Bid documents and TWDB approval to award contract
- Pre-Construction Conference
- Contract Award and issuance of Notice to Proceed

Alternative Delivery for Construction Projects



Intended use of alternative delivery methods **must be discussed with the TWDB at the pre-application meeting, or earlier if possible.**

Design-build, construction manager at risk, and other alternative methods of project delivery are eligible approaches that can be used in accordance with programmatic requirements, as outlined in the Alternative Delivery Guidance ([TWDB-0570](#)), and is consistent with the requirements in [Texas Gov't Code 2269](#). If necessary, the TWDB will provide written guidance regarding modifications of the review, approval, and release of funds processes for alternative delivery projects based on the type of financial assistance and method of alternative delivery.



Approval of P&S from the TWDB Project Engineer/Reviewer shall be obtained prior to advertising bids.

Advertising

Authorization to bid is based on the TWDB review of the following documentation:

- TWDB approval of P&S
- Acquisition of all property needed for the project (TWDB Site Certificate Form, [ED-101](#))
- All permits, licenses, and other legal authorizations required by federal, state, and local agencies

Instructions to Bidders

The Instructions to Bidders (or Invitation to Bid) should summarize key information about the project. Its purpose is to attract bidders, announce the bidding schedule for the project, and provide sufficient information to enable prospective bidders to determine whether they should obtain copies of the bidding documents.

For detailed information on language to be used in the Invitation to Bid, see the TWDB supplemental contract conditions for projects funded through state programs ([TWDB-0552](#)).

Pre-Bid Conference

Pre-bid conferences help to familiarize prospective bidders with the project site and scope of the work.



The TWDB Project Engineer/Reviewer **should be notified concurrent with bidders** of the date, time, and location of the pre-bid conference.

It is advisable that **no oral statements** be made at the conference that cannot be appropriately reduced to written form in subsequent addenda.

Addenda

Bidders must acknowledge receipt of all addenda with their bids to ensure that all bidders are bidding on the same effort. Addenda should be issued in an expeditious manner to all Instructions to Bidders document holders of record. The addenda should be submitted to the TWDB at the same time as issuance to bidders.

Bid Opening and Bidder Evaluation

Procedures to follow at the bid opening should be established ahead of time and included in the Instructions to Bidders.



The TWDB Project Engineer/Reviewer **should be notified at the same time as bidders** of the date, time, and location of the bid opening.

After the bids have been opened and tabulated, the Applicant and consulting engineer **should evaluate the bids and bidders** according to the criteria and process outlined in the bid documents for determining responsiveness and responsibility of the bidder.

Bidding Documents and TWDB Approval to Award Contract

The TWDB Project Engineer/Reviewer should receive the following information and documents **as soon as possible after bid opening and before execution** of the construction contract:

- Construction Award Submittal Form ([TWDB-0400](#))*
- Bid tabulation
- Bid proposal of apparent low bidder with bid bond
- Advertisement and affidavit of advertisement
- Consulting engineer's recommendation to Applicant for award
- Explanation for any rejected bids or other bidding irregularities
- Construction inspection proposal
- Site Certificate ([ED-101](#))
- Vendor Compliance with Reciprocity on Non-Resident Bidder ([TWDB-0459](#))
- Any addenda not previously submitted

**Alternative delivery projects should submit Alternative Delivery Work Package Award Submittal Form ([TWDB-0400A](#))*

After receiving and reviewing the information identified as bid document submittals, the TWDB Project Engineer/Reviewer will authorize the Applicant to contingently award the construction contract.



Prior to award of a contract, all required bid documents must have TWDB approval.

Contract Award Document Submittals

The Applicant or consulting engineer should submit the following documents as soon as possible after contract award and **prior to issuance of a Notice to Proceed to the Contractor.**



Fully executed and bound construction contract documents submitted electronically to the TWDB for review must include the following submittals:

- Executed Construction Submittal Form ([TWDB-0500](#))
- Executed contract agreement signed by all appropriate parties and notarized, if applicable.
- Specifications **as approved by the TWDB** with executed bid proposal
- Payment, performance, and other bonds with power of attorney
- Contractor's proof of insurance certificate
- Executed Contractor's Act of Assurance ([ED-103](#))
- Executed Contractor's Act of Assurance Resolution ([ED-104](#))
- Sufficiency of funds letter (if applicable and not previously submitted)
- A schedule with anticipated construction start and end dates for the contract



Water Rights Certification issued by the TWDB Executive Administrator, if required, the Applicant should double check that all blanks in the executed contract agreement are filled, and the dollar amounts match the approved bid documents.

After approval of contingently executed contract documents, the TWDB Project Engineer/Reviewer will issue a letter concurring with the issuance of a Notice to Proceed with construction. At this time, construction phase funds associated with the approved construction contract are eligible for release.

IX. Construction Phase

Prior to issuing a Notice to Proceed to the Contractor, and before initiating construction, the Applicant should take steps to verify that all prerequisites are in place to ensure construction is performed in accordance with the approved contract documents.

The following construction-phase topics are discussed in detail in the TWDB supplemental contract conditions for projects funded through state programs ([TWDB-0552](#)) to help with this goal.

Preconstruction Conference



A preconstruction conference should be scheduled prior to issuance of a Notice to Proceed and attended by the owner, consulting engineer, contractor, and TWDB Project Engineer/Reviewer.

The purpose of this meeting is to establish a working understanding among the parties as to the work to be accomplished and discuss project schedules, milestones, procedures, program requirements, etc., for each construction contract.

Applicant Inspection

The Applicant shall provide adequate inspection of the project under the supervision of a licensed registered professional engineer. The engineer must provide assurance that the work is being performed in a satisfactory manner; in accordance with the approved P&S, other engineering design, and permits (including approved alterations and provisions for environmental mitigative measures); and in accordance with sound construction principles and practices.

- Please review the Guidelines for Inspector Qualifications ([ED-005](#)) for more information.
- The Applicant should require that a thorough daily log of activities be maintained.
- The Applicant is responsible for ensuring that all required testing is conducted, observed, and documented.

Contractor Claims

Awareness, documentation, and communication will aid in prevention and resolution of contractor claims. Board funding may not be eligible for increased costs due to claims.

TWDB Construction Site Visits

The TWDB may conduct site visits regarding construction and audit activities of any DFund project, at any time, and shall be provided access to the project site and any project materials, records, or reports.

- The TWDB Project Engineer/Reviewer will schedule periodic project site visits, issue inspection reports, and make them available to the Applicant and their consulting engineer.
- Inspection reports and observation visits do not relieve the Applicant of the responsibility to provide qualified on-site inspections and engineering reviews to determine the acceptability of work in progress.
- The Applicant is responsible for corrective actions regarding any items found to be noncompliant with DFund funding agreements during site visits or record review.

Change Orders

The construction contract is between the Applicant and the Contractor, and any change orders signed by these two parties become part of that contract regardless of TWDB funding eligibility or participation. Change orders are to be submitted electronically to the TWDB Project Engineer/Reviewer for review and approval.

TWDB Staff reviews and approves change orders for

- eligibility of funding,
- conformance with design criteria,
- avoidance of environmental impacts and consistency with the environmental finding,
- a change in project scope that may require action by the TWDB, and
- a change that may require action by the TCEQ.



Update all project stakeholders of any changes, concerns, or delays promptly. To ensure eligibility, please send change orders **immediately** to the TWDB for review and approval. **Substantial changes to the project scope or increases to the initial TWDB commitment amount will require Board authorization.**

Retainage

Generally, a minimum of five percent retainage is required by law on all public works contracts ([10 Texas Governmental Code F §2252.032](#)). The amount, deposit, and investment requirements for retainage are unique to each construction project. If there is any uncertainty regarding specific situations, the Applicant's legal counsel should be consulted.

- Retainage must not be released or reduced below five percent without the consent of the TWDB.
- A Certificate of Approval (COA) will be issued by the TWDB after each contract is finalized and close-out documentation has been provided to the TWDB Project Engineer/Reviewer.
- The COA authorizes the Applicant to release the retainage to the Contractor.

Documents Required for Issuance of COA



To close the contract and authorize release of final retainage, the TWDB must conduct a construction contract final inspection (CCFI). The following information and documents must also be submitted to the TWDB Project Engineer/Reviewer for review:

- A copy of the Contractor's final payment request
- Any outstanding change orders not approved by the TWDB to date, adjustment of quantities, or a statement that there are no further change orders
- An affidavit by the Contractor that all bills have been paid
- Certification by the consulting engineer that the contract has been completed and the work was constructed in accordance with the approved P&S
- Acceptance of the work under this contract by the owner in the form of a letter signed by the owner's representative
- Notification of the beginning date of the warranty period for the contract
- Confirmation that the owner has received as-built drawings from the Contractor
- Certificate of Compliance with U.S. Iron and Steel Requirements ([TWDB-1105-A](#))



Once a CCFI has been conducted and approved, and all the documents listed above have been submitted to the TWDB Project Engineer/Reviewer, the TWDB will issue a COA, allowing the release of retainage to the Contractor. **Retainage must not be released or reduced below 5 percent without the consent of the TWDB.**

Project Closeout Requirements



- COAs for all contracts issued.
- Final payment released.
- If Planning, Acquisition, and Design only (PAD) project, all portions of PAD phases have been completed and deliverables have been submitted.

Note: A Certificate of Approval (COA) is for a Construction Contract. There could be multiple COA's issued in a project. The Project Close-out is for the entire project.

Project Records

The Applicant should keep an organized system of documentation for the project. Refer to Project Files & Construction Records ([WRD-017](#)) for guidance.

Operation & Maintenance (O&M) Manuals

Preparation of an O&M manual is encouraged and is an eligible use of TWDB funds. We suggest the final O&M manual be submitted to the Applicant before construction is 85 percent complete so that the manual will be available during start-up. For guidance, see O&M Manual - Recommendations ([ED-006](#)).

Operations

The following are staffing guidelines for the project:

- Hire and train operating personnel who will run the facility. They should be available during the later stages of construction and start-up, and if possible, they should have some input into the O&M manual.
- Operating personnel should visit the project during construction. Caution them to give no direction to the Contractor; however, their comments and suggestions should be forwarded to the consulting engineer for consideration.
- Provide operator training prior to acceptance of the facility, including review of the O&M manual and, if possible, on-site training by supplier's representatives during start-up.
- Staffing should be in accordance with the O&M manual.

TWDB Reporting

- **Status Reports:** The Applicant may be asked to provide a project status report by the TWDB project engineer/reviewer.

Post Construction

The TWDB has an interest in the continuing performance of the project components for the life of the loan.

Water Conservation Plan/Water Loss Audit

Water Conservation Plan

For projects requesting financial assistance greater than \$500,000, a water conservation plan is required to be submitted with its application. The water conservation plan must include five-year and ten-year targets for Total GPCD, Residential GPCD and for water loss expressed in GPCD. The water conservation plan must be less than five years old. The water conservation plan shall include an evaluation of the applicant's water and wastewater system and customer water use characteristics to identify water conservation opportunities and shall set goals to be accomplished by water conservation measures. The water conservation plan shall provide information in response to minimum requirements as per TAC §363.15. If the plan does not provide information for each minimum requirement, the applicant shall include in the plan an explanation of why the requirement is not applicable.

Recipients of financial assistance from TWDB will maintain an approved water conservation plan and program until all financial obligations to the state have been discharged and shall file an annual report on the entities progress in implementing each of the minimum requirements in its water conservation plan until all financial obligations to the state have been discharged.

Water Loss Audit

A retail public utility coming in for financial assistance needs to have submitted its most recently required water loss audit. If the utility fails to submit a water loss audit or that fails to correct a water loss audit that is not administratively complete within the timeframe provided it is ineligible for financial assistance.

A retail public utility coming in for financial assistance for a water supply project, and water loss meets or exceeds the threshold for that utility as established by TWDB, the utility must use a portion of that financial assistance from the board to mitigate the utility's water loss. On the request of the utility, the board may waive the requirements of this subsection if the board finds that the utility is satisfactorily mitigating the utility's system water loss. The request for waiver should be addressed to the executive administrator and include information about the utility's current or planned activities to mitigate their water loss and their source of funding for that mitigation.

Monitoring

For loans under the DFund Program, the Financial Compliance Staff of the TWDB is responsible for monitoring the Applicant's financial stability and compliance, from the first receipt of funds until final repayment of the debt. Compliance staff is available by phone to assist all borrowers and can arrange a visit to the Applicant's location to assist in financial compliance matters.

Financial Compliance's goal is to provide the TWDB with reasonable assurance that all loan recipients continue with agreed upon terms of any debt agreement and continue to have the ability to repay debt in a timely and agreed upon manner.

Loan Monitoring

Financial Compliance monitors loan activities, including reviews of audited financial statements of every entity in the TWDB's portfolio. In addition, Financial Compliance can arrange on-site assistance if appropriate.

Project Monitoring

Project monitoring activities include reviews of final accountings, which are a summary of the sources and uses of funds usually provided at the completion of a project.

Appendix A: Forms and Guidance Manuals

- Alternative Delivery Work Package Award Submittal Form ([TWDB-0400A](#))
- Application Affidavit ([TWDB-0201](#))
- Application filing and Authorized Representative Resolution ([TWDB-0201A](#))
- Application Resolution – Certificate of Secretary ([TWDB-0201B](#))
- Construction Award Submittal Form ([TWDB-0400](#))
- Contractor’s Act of Assurance ([ED-103](#))
- Contractor’s Act of Assurance Resolution ([ED-104](#))
- Engineering Feasibility Report (EFR) Guidance,
 - Wastewater ([TWDB-0556](#))
 - Water ([TWDB-0555](#))
- Engineering Planning Submittal Form ([TWDB-0200](#))
- Executed Construction Submittal Form ([TWDB-0500](#))
- Financial Assistance Application Checklist for Public Entities/Political Subdivisions ([TWDB-0148](#))
- Ground Water Affidavit Form ([TWDB-208B](#))
- Guidelines for Inspector Qualifications ([ED-005](#))
- Plans and Specifications Submittal Form ([TWDB-0300](#))
- Plans and Specifications Review Checklist ([Engineering Checklist](#))
- Planning Information Form
 - wastewater ([WRD-253a](#))
 - water ([WRD-253d](#))
- Project Budget Form ([TWDB-1201](#))
- Project Map Example ([TWDB-1800](#))
- Site Certificate Form ([ED-101](#))
- Surface Water Affidavit Form ([WRD-208a](#))
- Texas Water Development Board Supplemental Contract Conditions and Instructions for Construction Services for Projects Funded through State Programs ([TWDB-0552](#))
- United States Iron and Steel Certificate of Compliance Form ([TWDB-1105-A](#))
- United States Iron and Steel Guidance for Projects Funded Through State Programs ([TWDB-1105](#))
- Vendor Compliance with Reciprocity on Non-resident Bidders Form ([TWDB-0459](#))
- Water Conservation Plan Goals Table Form ([TWDB-1964](#))
- Water Conservation Plan Guidance Checklist ([TWDB-1968](#))
- Water Conservation Utility Profile Form-(Retail) ([TWDB-1965-R](#))
- Water Conservation Utility Profile Form-(Wholesale) ([TWDB-1965-W](#))

Appendix B: Links and Resources

TWDB Texas Water Development Fund (DFund) Resources

The following links provide information on the DFund Program, additional guidance manuals, and DFund-related resources:

- [The TWDB DFund Webpage](#)
- [TWDB Administrative Rules \(adopted per TAC\)](#)
- [Program Guidance and Manuals/Forms](#)
- [United States Iron and Steel](#)
- [Regional Water Project Development Teams](#)

Application Resources

- Instructions on how to apply and Application for Financial Assistance
<https://www.twdb.texas.gov/financial/applications/index.asp>
- [Frequently Asked Questions on General Application Submittals](#)
- [TWDB Online Loan Application \(OLA\) Login](#)

Water Planning Resources

- [State Water Plan](#)
- [Regional Water Planning Rules & Statutes](#)
- [Data, Apps, and Maps/GIS](#)
- [Regional Water Planning](#)
- [Water Use Survey](#)
- [TWDB Water Supply and Infrastructure Staff](#)

Water Conservation Resources

- [Water Conservation Plan and Reports TAC §363.15](#)
- [Water Loss Audits TAC §358.6](#)

Financial Resources

- [TWDB Interest Rates](#)
- [Closing a TWDB Commitment](#)