# Abridged Application

*Due by midnight on February 1, 2022*
*Submit via Email:* SWIFT@twdb.texas.gov
*Apply Online:* https://ola.twdb.texas.gov

By submitting this abridged application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete abridged application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the abridged application without review.

## GENERAL INFORMATION

| Entity Name | County | Regional Water Planning Area |
|---|---|---|
| City of Dallas – Dallas Water Utilities | Dallas | C - Region C |

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| **Contact** Who should TWDB contact with questions during the review of this submission? | **Name** | Matthew Penk, P.E. |
| | **Title** | Assistant Director |
| | **Phone** | 214-671-9560 |
| | **Email** | matthew.penk@dallascityhall.com |

## PROJECT DESCRIPTION

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|---|---|---|
| **Project Name** As it appears in the **2022 State Water Plan** | Elm Fork Filter Complex – Phase 2 Infrastructure to Treat & Deliver to Customers | |
| **Where can the project be found in the 2021 Regional Water Plan?** TWDB Staff will utilize information from both the State and Regional water plans to identify and review the project. | **The project is described on page #:** | 5D - 10 |
| | **The capital cost is listed on page #:** | 5D - 10 |

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| **Phase(s) Applied For** | ☐ Planning ☐ Acquisition ☐ Design ☒ Construction |
| **Population Served When Fully Operational** | 2,561,490 |

## DESCRIPTION OF PROPOSED PROJECT COMPONENTS

Please be sure this description includes all major project components and clearly states what the project seeks to accomplish. A high level of detail is not necessary at this stage–such information is collected later in the application process–but the description should make clear that the proposed work is the same as identified in the regional water plan.

DWU's Elm Fork Water Treatment Plant Filter Complex - Phase 2 project will complete the construction of the new BAF Filter Complex and integrate it into the plant's treatment process. This project will replace the plant's existing filters which currently require upgrades, show deficiencies, and faces treatment challenges as more stringent water quality requirements are being considered by United States Environmental Protection Agency (USEPA) and Texas Commission on Environmental Quality (TCEQ).

The project would:

- Allow biological filtration to occur, thus reducing assimilable organic carbon (AOC) levels entering the distribution system and creating more biologically stable finished waters
- Improve total organic carbon (TOC) removal and increase turbidity removal
- Reduce nitrification and hence lower risk for problems at water treatment plants (WTPs) and in the distribution system
- Lower disinfection byproducts (DBPs) and improve Stage 2 compliance with a 20% margin of safety across system
- Produce more consistent and stable water between the city's other WTPs

The project scope includes:

- Installing process mechanical equipment within the Filter Complex building constructed under Phase 1 of the project, to target particle removal and assimilable organic carbon (AOC) removal for improved chemical and biological stability of the finished water. Equipment to be installed includes valves, filter underdrains, filter media, backwash troughs, filter aid polymer system, filter enhancement phosphate system, post-filter pH adjustment system.
- A new non-chloraminated backwash system using two elevated storage tanks, three blowers for air scour to optimize and manage backwashing of the biological filters, and four backwash pumps to fill the elevated storage tanks.
- Relocation of primary chlorine and ammonia feed locations post-BAF to provide sufficient chlorine contact time for subsequent formation of chloramines.
- Integrating settled water, filtered water, filter-to-waste, and spend filter backwash water to/from the new Filter Complex to existing facilities.

| Emergency<br>Select all that apply | ☐ Applicant/entity's water supply will last less than 180 days.<br>☐ Applicant has received or applied for Federal emergency funding.<br>☒ None of the above. |
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| Agricultural Efficiency Project? | | |
|---|---|---|
| ☐ Yes ☒ No | | |
| **If "Yes," agricultural efficiency improvement achieved by implementing the project:**<br>Please provide an attachment showing the basis for your calculation. | ☐ <1%<br>☐ 1%-1.9%<br>☐ 2%-5.9%<br>☐ 6%-9.9% | ☐ 10%-13.9%<br>☐ 14%-17.9%<br>☐ ≥18% |

| Household Cost Factor<br>Household Cost Factor calculated by dividing the service area's average residential water bill by its annual median household income. For regional projects, these should represent the combined service areas of all participating entities. | | | |
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| **Estimated average annual residential water bill:** | $120.00 | **Annual Median Household Income:** | $34,479.00 |

| The proposed project addresses: | ☐ Conservation | ☐ Water Loss | ☒ N/A |
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**Volume of Water Produced/Conserved (in Acre/Feet per Year)**

Please provide the total water supply project yield of the entire project on an annual basis in acre-feet per year, for each planning decade. A water volume in the 2040 decade, for example, is assumed to come online in or prior to the year 2040 but is a snapshot annual volume for that decade; it is not a sum of the annual use in the decade.

| 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|---|---|---|---|---|
| 275,297 | 292,402 | 326,909 | 361,492 | 389,250 | 402,811 |

| Readiness to Proceed<br>Select all that apply | ☒ Preliminary planning or design work (30% of total project) has been completed or is not required.<br>☒ Applicant is prepared to begin implementation or construction within 18 months of application deadline.<br>☒ Applicant has acquired all water rights associated with the proposed project, or none will be required. |
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## ESTIMATED COSTS

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| **Low-interest Loan** | $ 127,400,000.00 |
| **Deferred Loan** | $ |
| **Board Participation** | $ |
| **Local Contribution** | $ |
| **Other:** | $ |
| **Total Estimated Project Costs** | $ 127,400,000.00 |

| Anticipated Commitments<br>Please attach proposed schedule for multi-year commitments. | ☒ One-Time Commitment | ☐ Multi-Year Commitments |
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| Anticipated Debt Service Structure<br>Please attach explanation if requesting non-level debt service. | ☒ Level | ☐ Other Request |
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## LIST OF WATER SYSTEMS SERVED BY THE PROPOSED PROJECT

| NAME | PWS ID |
|---|---|
| Dallas | 0570004 |
| Carrollton | 0570034 |
| Coppell | 0570040 |
| Dallas/Ft. Worth International Airport | 0570136 |
| Farmers Branch | 0570047 |
| Flower Mound | 0610023 |
| Grand Prairie | 0570048 |
| Irving | 0570050 |
| Lewisville | 0610004 |
| The Colony | 0610081 |
| Addison | 0570031 |
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## ATTACHMENTS CHECKLIST

☐ Methodology for determining agricultural conservation savings (if applicable)

☐ Proposed multi-year commitment schedule (if applicable)

☐ Proposed debt service structure (if applicable)

## SUBMITTAL

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| **Instructions** | To submit your Abridged Application via email, please send this form to SWIFT@twdb.texas.gov. |
| | To submit your Abridged Application using TWDB's Online Loan Application tool, please visit https://ola.twdb.texas.gov. |

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| **TWDB Contact Information** | If you would like to schedule a meeting to discuss your project with TWDB staff, please contact the Regional Project Development Team for your region: http://www.twdb.texas.gov/financial/programs/swift/regional_project_teams.asp. |
| | For general SWIFT program inquiries, please email SWIFT@twdb.texas.gov. |