

AGENDA ITEM SUMMARY

July 2, 2019

City Council

STAFF

Link Mueller, Utilities Special Projects Manager
Carol Webb, Deputy Director, Utilities
Eric Potyondy, Legal

SUBJECT

Second Reading of Ordinance No. 075, 2019, Making Appropriations and Authorizing Transfers of Appropriations for the Drake Water Reclamation Facility Sidestream Treatment Project and Related Art in Public Places.

EXECUTIVE SUMMARY

This Ordinance, unanimously adopted on First Reading on June 4, 2019, appropriates additional funding for the Drake Water Reclamation Facility (DWRf) Sidestream Treatment Project. This request is necessary to complete the permit-required project within the required timeframe to meet DWRf's National Pollution Discharge Elimination System (NPDES) phosphorus compliance schedule deadline of December 31, 2020. Successful operation of this infrastructure will also earn regulatory credits to delay future capital project expenses by upwards of 10 years.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on Second Reading.

ATTACHMENTS

1. First Reading Agenda Item Summary, June 4, 2019 (w/o attachments) (PDF)
2. Ordinance No. 075, 2019 (PDF)

AGENDA ITEM SUMMARY

June 4, 2019

City Council

STAFF

Link Mueller, Utilities Special Projects Manager
Carol Webb, Deputy Director, Utilities
Eric Potyondy, Legal

SUBJECT

First Reading of Ordinance No. 075, 2019, Making Appropriations and Authorizing Transfers of Appropriations for the Drake Water Reclamation Facility Sidestream Treatment Project and Related Art in Public Places.

EXECUTIVE SUMMARY

The purpose of this item is to request an appropriation for additional funding for the Drake Water Reclamation Facility (DWRf) Sidestream Treatment Project. This request is necessary to complete the permit-required project within the required timeframe to meet DWRf's National Pollution Discharge Elimination System (NPDES) phosphorus compliance schedule deadline of December 31, 2020. Successful operation of this infrastructure will also earn regulatory credits to delay future capital project expenses by upwards of 10 years.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BACKGROUND / DISCUSSION

The purpose of this agenda item is to request an appropriation of \$1.1 million for additional funding for the Drake Water Reclamation Facility (DWRf) Sidestream Treatment Project. The current project budget is \$4.3 million. The additional \$1.1 million appropriation will increase the project budget to \$5.4 million. The cost estimate at 60% project design, completed in January 2019, for the Sidestream Treatment project is greater than the approved budget.

Key Project Drivers

The Sidestream Treatment Project is necessary for DWRf to meet future nutrient water quality regulations by the Colorado Department of Public Health and Environment (CDPHE). The DWRf NPDES permit includes a phosphorus compliance schedule to ensure the City is successful in meeting the required phosphorus limits by January 1, 2021. The Sidestream Treatment Project is a necessary addition required for DWRf to meet these proposed phosphorus standards.

Nutrient removal projects have been identified as part of the Utility's Capital Improvement Planning (CIP) and Master Planning efforts for the last ten years. The current CIP-identified Nutrient Removal Projects required to meet future nutrient limits by the Environmental Protection Agency (EPA) and CDPHE and have future potential costs of approximately \$70 million by 2028. The Wastewater Utility has been actively planning to minimize this cost as much as possible through participation in the CDPHE Nutrient Incentive Program and the American Water Works Association Clean Water Partnership. Participation in these programs could provide the City both schedule and financial relief of up to 10 years.

Rationale for Appropriation Request

A conceptual class 5 cost estimate of \$4.3 million was developed for the 2017-2018 BFO cycle based upon capacity, modeling, analogous projects and the available sidestream treatment technologies. As stated in the BFO offer, the design was based on a conceptual design and a complete design could result in an increase or decrease of the cost to meet the design deliverables. As design progressed, additional detail, including equipment selection, and other specifications resulted in increased project costs. A contingency in the additional budget request has been included, appropriate for the current level of design. The following three major factors impacted the budget requiring this appropriation request:

1. A new sludge feed pump station was required in addition to other improvements increasing construction costs approximately \$625,000. It had been anticipated, but not feasible, that the existing sludge pumps could be used. Thus, staff has now determined that their use is not feasible.
2. Completion of the 60% design cost estimate (class 2) revealed an error in the original BFO class 5 estimate allowing the original BFO request to be approximately \$325,000 under-funded. In the future, BFO offer estimates, including backup documentation, will be provided to management staff for review.
3. The retirement of the Utilities' lead programming engineer impacted the ability to self-perform all the process programming, integration, and operator interface requirements of the plants. Additional support from the equipment manufacturers and consulting engineers is required for process programming and integration costing approximately \$150,000.

For the 2019-2020 BFO budget cycle, staff initiated a process where larger projects will start with a "design only" phase so that better construction estimates can be obtained prior to appropriation. This practice will address the budgeting issues that occurred for this project.

The current DWRP NPDES permit requires the City to comply with nutrient regulations by January 1, 2021. The permit's compliance schedule also indicates the construction must begin by December 31, 2019. It is critical to begin construction as soon as possible in 2019 in order to give facility staff adequate time to optimize the system to comply with required nutrient limits by the January 1, 2021 deadline.

ENVIRONMENTAL IMPACTS

In March 2013, CDPHE promulgated Regulation #85, requiring Publicly Owned Treatment Works (POTWs) with greater than 2 million gallons per day capacity to meet more stringent effluent water quality standards. The regulation mandates that existing POTWs limit their effluent discharge on a monthly median value of Total Phosphorus to 1.0 mg/L and Total Inorganic Nitrogen (TIN) of 15 mg/L. DWRP currently meets the TIN limit, but the improvements installed with the Sidestream Treatment Project are necessary to help meet the Total Phosphorus limit.

While phosphorus and nitrogen are building blocks of organic life, high concentrations in lakes, reservoirs, and receiving waters can lead to lower dissolved oxygen levels, poison aquatic life, and eutrophication. POTWs are only one of three major sources of nutrient contamination of receiving waters (urban and agricultural non-point source run-off being the other two) but are the easiest to regulate being a point source contributor.

ALTERNATIVE ANALYSIS

As project design evolved and the need for additional funding became apparent, the project team evaluated the following project alternatives:

1. Value engineering. The project team, including City staff, the general contractor, and the design engineer evaluated construction and design variables that could be eliminated and/or reduced and still deliver an effective project. While numerous items were removed or revised, this evaluation was not successful in bringing the overall project costs down to within the available budget.
2. Not complete the project. This alternative would jeopardize not only immediate regulatory compliance performance but future nutrient compliance issues as well.

3. Request \$1.1M as an off-cycle appropriation request. This is the preferred and recommended alternative by City staff. This alternative is also recommended by the City's Water Board.

CITY FINANCIAL IMPACTS

This Ordinance appropriates \$1,111,000 of Wastewater Fund Reserves for the DWRF Sidestream Treatment Project (which includes \$11,000 for Art in Public Places). Adequate funds exist in the Wastewater Fund reserves to cover this request for additional appropriations. In the latest 10-year Wastewater Capital Improvement Program (CIP), \$80-\$100 million of capital improvements were identified and this is a relatively small increase. A rate increase beyond what is already planned will not be required as a result of this request.

BOARD / COMMISSION RECOMMENDATION

At its April 18, 2019, meeting, the Water Board voted unanimously to recommend approval of the appropriation. **(Attachment 2)**

At its May 20, 2019, meeting, the Council Finance Committee supported the additional appropriation. **(Attachment 3)**

ATTACHMENTS

1. 2017-2018 BFO Offer (PDF)
2. Water Board minutes, April 18, 2019 (draft) (PDF)
3. Council Finance Committee minutes, May 20, 2019 (draft) (PDF)

ORDINANCE NO. 075, 2019
OF THE COUNCIL OF THE CITY OF FORT COLLINS
MAKING APPROPRIATIONS AND AUTHORIZING TRANSFERS OF
APPROPRIATIONS FOR THE DRAKE WATER RECLAMATION FACILITY
SIDESTREAM TREATMENT PROJECT AND RELATED ART IN PUBLIC PLACES

WHEREAS, the City is pursuing the Drake Water Reclamation Facility Sidestream Treatment Project (“Project”) in order to meet anticipated future water quality standards under regulations promulgated by the Water Quality Control Commission of the Colorado Department of Public Health and Environment; and

WHEREAS, a conceptual cost estimate of \$4.3 million for the Project was developed for the 2017-2018 Budgeting for Outcomes cycle based on capacity, modeling, analogous projects, and available sidestream treatment technologies; and

WHEREAS, the total cost for the Project has since increased as design progressed, requiring an additional appropriation in order to complete the Project; and

WHEREAS, there are unappropriated prior year reserves in the Wastewater Fund that are available to be appropriated for the Project; and

WHEREAS, Article V, Section 9 of the City Charter permits the City Council to appropriate by ordinance at any time during the fiscal year such funds for expenditure as may be available from reserves accumulated in prior years, notwithstanding that such reserves were not previously appropriated; and

WHEREAS, the City Manager has recommended the appropriation described herein and determined that funds for this appropriation are available and previously unappropriated from the Wastewater Fund and that this appropriation will not cause the total amount appropriated in the Wastewater Fund to exceed the current estimate of actual and anticipated revenues to be received in that fund during any fiscal year; and

WHEREAS, Article V, Section 10 of the City Charter authorizes the City Council to transfer by ordinance any unexpended and unencumbered appropriated amount or portion thereof from one fund or capital project to another fund or capital project, provided that the purpose for which the transferred funds are to be expended remains unchanged; the purpose for which the funds were initially appropriated no longer exists; or the proposed transfer is from a fund or capital project in which the amount appropriated exceeds the amount needed to accomplish the purpose specified in the appropriation ordinance; and

WHEREAS, this Project involves construction estimated to cost more than \$250,000, as such, Section 23-304 of the City Code requires one percent of these qualified appropriations to be transferred to the Cultural Services and Facilities Fund for a contribution to the Art in Public Places program; and

WHEREAS, in accordance with Article V, Section 10 of the City Charter, the appropriation of reserves for the Project from the Wastewater Fund and the transfer of a portion of those unexpended and unencumbered appropriated funds to the Art in Public Places program established by City Code Section 23-304(a) will be used for Wastewater purposes and improvements in connection with the Project.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS as follows:

Section 1. That the City Council hereby makes and adopts the determinations and findings contained in the recitals set forth above.

Section 2. That there is hereby appropriated for expenditure from prior year reserves in the Wastewater Fund the sum of ONE MILLION ONE HUNDRED ELEVEN THOUSAND DOLLARS (\$1,111,000) for the Drake Water Reclamation Facility Sidestream Treatment Project as follows:

| | |
|---|-------------------|
| Drake Water Reclamation Facility Sidestream Treatment Project | \$1,100,000 |
| Art in Public Places Project (Artwork) | 8,580 |
| Art in Public Places Project (transfer to Cultural Services Fund for APP Operations) | 2,200 |
| Art in Public Places Project (transfer to Cultural Services Fund for APP Maintenance) | 220 |
| TOTAL | <hr/> \$1,111,000 |

Section 3. That the unexpended appropriated amount of TWO THOUSAND TWO HUNDRED DOLLARS (\$2,200) in the Wastewater Fund is authorized for transfer to the Cultural Services and Facilities Fund and appropriated therein for the Art in Public Places Program Operations.

Section 4. That the unexpended appropriated amount of TWO HUNDRED TWENTY DOLLARS (\$220) in the Wastewater Fund is authorized for transfer to the Cultural Services and Facilities Fund and appropriated therein for the Art in Public Places Program Maintenance.

Introduced, considered favorably on first reading, and ordered published this 4th day of June, A.D. 2019, and to be presented for final passage on the 2nd day of July, A.D. 2019.

Mayor Pro Tem

ATTEST:

City Clerk

Passed and adopted on final reading on the 2nd day of July, A.D. 2019.

Mayor

ATTEST:

City Clerk