



STAFF REPORT

AGENDA ITEM #: 23-11
COUNCIL MTG OF: January 17, 2023
FROM: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
OFFERED BY: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
PREPARED BY: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
SUBJECT: Receipt of Additional ARPA funds for 2022 Water System Improvements Project:
Rand-Shepard-Hill Water Extension

PURPOSE

The purpose of this document is to seek Council authorization to accept an additional \$2,000 in ARPA funds for a project approved by the Council in 2022 to extend the municipal water system, to interconnect the Rand-Shepard Hill, Barkland Acres and Morningside Drive community water systems.

TOWN ADMINISTRATOR COMMENTS:

The Town Council received a presentation from staff on April 19 on the priorities of the Water Division and projects necessary to provide clean drinking water to Derry residences. The Town Council recognized the timeliness to approve this project, given the amount of grant funding available and the low SRF loan interest cost. This Resolution would allow the Town to recover an additional \$2,000 in grant funds.

BACKGROUND:

RAND-SHEPARD HILL: Derry owns and operates the Rand-Shepard Hill (RSH) community water system (CWS) which consists of 63 single family homes located off Route 102 near the Chester town line. RSH's well #1 has been offline since 2017 due to iron levels significantly exceeding EPA's Secondary Maximum Contaminant Limit (SMCL) of 0.05 mg/l. Also, manganese levels have consistently exceeded EPA's SMCL of 0.05 mg/L and NH DES's proposed mandatory public notification limit of 0.10 mg/l.

The RSH CWS also has significant supply deficiencies, which were exacerbated by taking well #1 out of service. It is standard practice to truck in water to fill the RSH CWS storage tanks during times of drought when irrigation is most prevalent. NH DES Regulations stipulate that the water supply capacity be not less than 2X the average daily demand. For the RSH CWS this should be 40 to 50 gallons per minute (GPM), however, their summer yield is only about 20 GPM.

BARKLAND ACRES: On 11/10/2020 the Town Council discussed the petition by the Barkland Acres Association (BAA), who own and operate the Barkland Acres CWS off Tsienneto Rd., to acquire and operate their water system. The Barkland CWS services 28 single family homes off Tsienneto Road. Their water supply (bedrock wells) exceeds NH DES's MCL for arsenic and they are under an administrative order to either install treatment or interconnect with the Derry public system. It was the consensus of the Council that they would be amenable to acquiring the system provided it was improved to meet Town standards including replacing the water mains and services and interconnecting the system with the Derry core water system. The costs for such improvements would, in part, be assessed to the BAA residents.

MORNINGSIDE DRIVE: The Morningside Drive CWS, which is privately owned and operated by the Morningside Drive Condominium Assn., consists of 32 residential customers located at Morningside Drive, Tsienneto Road and Fieldstone Drive. The system was constructed in 1976 and expanded in 1999. The system has historically been prone to leaks. The Morningside Dr. Association petitioned the Town to take over the water system in 1990, 2000 and again in 2010, however, due to the cost to bring the system to Town standards, the proposal was not accepted. Recent water quality testing now shows that the Morningside CWS exceeds NH DES's MCL for per- and polyfluoroalkyl substances (PFAS); specifically, the MCL for Perfluorooctanoic Acid (PFOA) of 12 ppt. The system must either provide treatment or interconnect with the Derry public water system.

DISCUSSION:

As EPA and NH DES continue to issue more strict water quality standards, small well systems such as RSH, Barkland Acres and Morningside Drive will need to install costly sophisticated water treatment systems or find alternate sources of drinking water.

Due to both the historical water quality and supply issues at RSH, it is recommended that this CWS be interconnected with Derry's core water system. This is consistent with the Derry Water System Master Plan. Other options including hydrofracturing and drilling additional wells were assessed, however, there is no assurance that additional supply would be realized or if water quality would not be further deteriorated. Past experience with these options did not produce the desired results.

On September 14, 2021, the Town received a formal letter of intent from the BAA to sell their water system to the Town of Derry and agreeing to a 25% cost share of the required improvements and interconnection. The proposed project would include 1,050 feet of new main to interconnect the Barkland system to the Rand-Shepard Hill extension plus the replacement of 2,400 feet of the BAA's existing undersized plastic pipe.

The Morningside Drive Association has applied for NH DES funding assistance to improve their infrastructure and to interconnect with the proposed Derry system extension on Tsienneto Road to address the PFAS issue. They are eligible for funding under the State's PFAS Remediation Program. NH DES prefers the interconnection over installing treatment. This interconnection is consistent with the Derry Water System Master Plan. The intent is not for the Town to acquire the system.

It should also be noted that the Exit 4A project requires significant improvements to Tsienneto Road from the By-Pass 28 to Chester Road. Any proposal to install water along Tsienneto Road must be completed prior to this work which is proposed to begin in 2025. This would mean a 2023-2024 water construction schedule.

The overall project would include 14,470 feet of new water mains and expand fire protection to the north-central part of Town.

FISCAL IMPACT

The Town Council under Resolution #2022-078 approved a \$6.11M project, of which a \$1.22M ARPA Grant was to be applied against the project appropriation. The Town has been notified by NHDES that the actual grant amount is \$1.222M, a \$2,000 increase in grant funds. Acceptance of these funds will result in the Town borrowing \$2,000 less through the State's Revolving Loan Fund.

RECOMMENDED ACTION BY COUNCIL

Please see Resolution #2023-009



RESOLUTION

Number 2023-009

To Accept an ARPA Grant for Water Quality Improvements

WHEREAS, Section 9.15 of the Town Charter authorizes the Town Council to accept grant funding; and

WHEREAS, the Town Council previously adopted Resolution #2022-078 which appropriated \$6,110,000 for water improvements and further authorized acceptance of \$1,220,000 in ARPA funds from the NH Department of Environmental Services to be applied against this appropriation; and;

WHEREAS, NHDES notified the Town that the ARPA grant will total \$1,222,000;

NOW, THEREFORE, BE IT RESOLVED IN COUNCIL that the Town Administrator is hereby authorized to apply, accept and expend up to an additional Two Thousand Dollars (\$2,000) in ARPA funds from NHDES to be applied against the appropriation authorized under Resolution #2022-078.

This Resolution shall take effect immediately upon its passage.

Adopted: January 17, 2023

Attest:

Joshua Bourdon, Council Chair

Date: _____

Cristina Guilford, Town Clerk

Date: _____

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