REGIONAL PRIORITY PROJECT PRIORITIZATION PROCESS

PROJECT INFORMATION FORM

DOWNLOAD & SAVE THIS DOCUMENT TO YOUR COMPUTER, COMPLETE THE FORM, SAVE, AND EMAIL ATTACHMENT TO FKENNEY@ADDISONCOUNTYEDC.ORG. IF ADDITIONAL SPACE IS REQUIRED FOR ANY RESPONSE OR YOU WANT TO SUBMIT ADDITION DOCUMENTS, CLEARLY LABEL THE DOCUMENTS WITH THE PROJECT NAME & SEND ATTACHMENTS WITH THE FORM.

PROJECT NAME:

Well Source Redundancy Project

TYPE OF PROJECT:

- [x] Infrastructure:
  - [x] Water
  - [ ] Wastewater
  - [ ] Broadband
  - [ ] Transportation
  - [ ] Public Facility
  - [ ] Other
- [ ] General Development:
  - [ ] Industrial
  - [ ] Commercial
  - [ ] Residential
  - [ ] Mixed
- [ ] Site/Facility Development for Specific Business
- [ ] Workforce Development
- [ ] Business Development
- [ ] Other:

PROJECT SPONSOR:

Organization Name	Town of Middlebury
Organization Mailing Address	77 Main Street, Middlebury, Vermont 05753
Organization Email	echerington@townofmiddlebury.org
Organization Phone	(802) 388-4045

Contact info for the person submitting project information:

Name	Emmalee Cherington
Title	DPW- Director of Planning
Mailing Address	77 Main Street, Middlebury, Vermont 05753
Email	echerington@townofmiddlebury.org
Phone	(802) 388-4045

PROJECT PRINCIPAL(S) (if different than above):

Person 1:

Name	
Title	
Organization	
Mailing Address	
Email	
Phone	

Person 2:

Name	
Title	
Organization	
Mailing Address	
Email	
Phone	

PROJECT DESCRIPTION - Provide a brief (2-3 sentence) description of the project. (500 character limit):

The goal of this project is to source and construct an additional well to support the growing demands of the Town. The project would provide redundancy for the water system, minimizing the interruption of water service for consumers in Middlebury and Weybridge.

DETAILED PROJECT DESCRIPTION (5000 Characters):

The Middlebury Water Department Water System (WSID 5004) is supplied by three wells located about 3 miles east of the Town center. The water system is supplied by 3 groundwater wells with a total permitted yield of 2400 gpm. The wells are located on unnamed gravel roads along Case Street (VT Route 116). The primary source of supply is Palmer Springs (Well 2), developed in 1978 with an original design of 1,550 gallons per minute (gpm). Through a network of 54-miles of distribution and transmission mains, water is transported to a 1.5-million-gallon (MG) storage tank on Chipman Hill, originally constructed in 1978. The water system supplies roughly 2400 services, including residential, industrial, and commercial properties in addition to Porter Medical Center and Middlebury College. Current usage ranges from 1.2 to 1.8 million gallons per day (MGD), exceeding capacity regularly.

The source capacity of the Town of Middlebury is derived from Wells 2, 3 and 4 with approved total combined yields of 2,400 gpm. A fourth well (known as Well 1) was developed in 1956 at Palmer Springs. Well 1 was taken out of service in the early 1980's due to contamination and is physically disconnected from the system.

Well 2 is gravel packed, developed in 1978, is located at Palmer Springs, and reaches a depth of 47 feet. Well 2 is the primary source of supply with an original design pumping capacity of 1,500 gpm with an increased approved pumping rate of 1550 gpm after the 2009 installation of CT piping appurtenances. The well casing is 24 inches in diameter. Well 2 utilizes a vertical turbine pump which was replaced in 2023.

Well 3 is located at the Johnson site off Dow Road, developed in 1985, and reaches a depth of 144 feet. Well 3 is a secondary source of supply with an approved design pumping rate of 400 gpm. The well casing is 24 inches in diameter and is a gravel packed well. Well 3 utilizes a vertical turbine pump which was replaced in 2022.

Well 4 is located at the Johnson site off Dow Road, developed in 1997, and reaches a depth of 187 feet. Well 4 is a secondary source of supply with a pump capacity of 450 gpm. The initial drillers yield was 800 gpm; however the well will not produce that much due to cavitation of the existing pumps. Therefore, the reduced capacity is 450 gpm. The well casing is 14 inches in diameter and is a gravel packed well. Well 4 utilizes a vertical turbine pump which is original to the 1997 construction.

The three wells operating for 24 hours could theoretically produce 3,456,000 gpd. However, Wells 3 and 4 cannot be operated continuously for a 24-hour period without adequate time to recharge. If Well 2 operates continuously for a 24-hour period and Well 3 and 4 can alternate on 12-hour periods (meaning Well 2 and Well 3 or 4 would be operating in any 12-hour period), the operational pattern would yield a 24-hour output of 2,844,000 gpd.

The Town has the source capability to meet the MDD for the system based on the existing metered data. However, considering Well 2 is the only well that can reliably operate for a 24- hour period, with Wells 3 and 4 alternating every 12 hours the production and pumping capacity for the system is at approximately 76%. The Water Supply Rule, Appendix A, Section 2.1 requires additional capacity when a system reaches 90% capacity. The Town is proposing to begin the planning and engineering for this project, with the understanding that it is a multi-year pursuit.

PROJECT LOCATION (3000 characters):

Provide the physical location of the project and/or the area to be served by the project

The first phase of the project would be working with an engineer and hydrogeologist to source the location of the additional well. There are several considerations that will be evaluated. The well must have adequate source protection to prevent the risk of contamination. Ideally, a new source would be on an alternate transmission network to the existing source, to provide redundancy but still within proximity to installed water infrastructure.

The surrounding region of Middlebury would be served by the project. Providing a dependable water source helps to support the immediate users, in addition to local businesses, retail stores, restaurants, the Industrial Park, Middlebury College, district schools, etc.

PROJECT PURPOSE AND BENEFITS (3000 Characters):

Describe the purpose and benefits to the region of the project. Describe if/how the project builds capacity within the region for improved economic development or community development, builds capacity in the region for improved economic and community development, and/or advances the goals and objectives of the region's Comprehensive Economic Development Strategy (CEDS) and/or regional plans, and addresses the most pressing needs of the region.

The water system serves the designated downtown area of Middlebury, as well as consumers beyond the immediate downtown area including several services in the adjacent town of Weybridge, Middlebury College, Porter Medical Center and the Industrial Park (including local businesses such as Agri-Mark, AquaVitea and Appalachian Gap Distillery).

One of the limiting growth factors in the Town of Middlebury is the lack of housing available. In the past year, the Town has been working with Summit Properties to approve the construction of a 200+ unit new construction, mixed-income, highly energy efficient community on Seminary Street Extension. The community would have mixed housing types, including subsidized for sale condos/townhomes, modest market rate for sale condos/townhomes, rental units offered at modest market rates, rental units targeting low-income families earning less than 60% of area median income (AMI), and rental units targeting very low-income families earning less than 30% of AMI and homeless and at-risk families and individuals. The development represents an innovative partnership between Summit Properties, Middlebury College, and the Town of Middlebury. This project will add much needed housing at all affordability levels and represents the best opportunity in a generation for smart growth development at scale to make a meaningful impact on Addison County's housing crisis.

The proposed community is targeted to accomplish the Town of Middlebury's housing goals as stated in the 2017 Town Plan, namely: (i) encourage a variety of housing opportunities, (ii) utilize smart growth principles, (iii) encourage modestly priced, well-built, sustainable housing that is affordable for moderate-income buyers, and (iv) make housing more sustainable, healthy, and efficient. The proposed Summit Property Development would increase the demand on the water storage by an estimated 57,180 gallons per day (GPD). An additional water source is imperative to allow developments to be constructed and help relieve the housing pressure in the county.

PROJECT TIMELINE, MILESTONES, AND STATUS (3000 Characters):

Describe the project timeline, the current status, and impediments to proceeding. Include factors such as site control, engineering and design, financing/funding identification and commitment, and permitting. Clearly identify where the project is within the project timeline and what work remains.

In the current FY25 budget, the Town has included $100,000 for source exploration and planning for a new well. The Town has contacted Otter Creek Engineering to start the hydrogeology process. Well source exploration can be time-consuming and costly and therefore it is expected that a new source would be under construction in the FY27 or later range.

PROJECT PRINCIPAL EXPERIENCE/PARTNERSHIPS (3000 Characters):

Describe project principals' experience managing federal or state grants, and/or successfully developed similar business models, their ability to complete the project, and describe any partnerships that will help ensure success.

The well source redundancy project will be managed by the Department of Public Works (DPW) Director of Planning. The Director is responsible for managing all Capital Improvement Projects (CIP) for the town including water, wastewater, stormwater, and highway improvements. The work is generally funded through a variety of revenue sources in addition to the annual CIP budget. For example, funding sources have included: Clean Water and Drinking Water State Revolving Loan funds (CWSRF/DWSRF), Vermont Agency of Transportation Environmental Mitigation Grants, Clean Water Block grants, Transportation Alternatives grants, Northern Borders Regional Commission grants. The Director works closely with the Project Engineer to oversee the proposed construction.

Project engineering and construction oversight will be performed by Otter Creek Engineering.

PROJECT SUPPORT AND REGIONAL NEED (4000 Characters):

Describe how the project is consistent with identified local and regional goals, advances regional needs identified in the region's CEDS and/or regional plans or is supported by reports or public forums. Describe the community support for the project and any community engagement that has occurred. Include reference and link to region's CEDS, the municipal and/or regional plan, and reports, or forums identified. Also describe how the project leverages regional human, social, financial, cultural, and/or physical capital, and supports, compliments, or enhances existing efforts.

The Industrial Park has been recognized as an area for economic development by providing a centralized location that offers expansion for public and private efforts; allowing for retention and attraction, of desirable private industry in Addison County; There are currently several businesses operating in the Industrial Park and surrounding area, including dairy cooperatives, distilleries, medical centers, schools. These businesses provide job security in the region.

Water service disruption is extremely costly to the bottom line of these businesses. Many involved in processing have experienced shut offs that required the manufacturer to dispose of the entire days' production. The impacts expand beyond the immediate business, as the supply chains are interconnected to the broader community, including local farms, businesses, packaging and distribution providers. For example, AquaVitea is a producer of organic kombucha, adding approximately $41,000,000 to the retail economy. In addition to producing, bottling and shipping their products, they have partnered with Urban Moonshine to distill alcohol used in developing tinctures within the plant. Citizen Cider provides cider to AquaVitea, and the two businesses share equipment, ingredients and shipping. Similarly, AquaVitea provides packaging and storage to Whistlepig, and package Barr Hill Gin. These relationships require a consistent, potable water source.

The proposed project will allow for the expansion of businesses and housing developments within the community, providing for both the workforce needed and an increase in employment opportunities. The project demonstrates how an investment provides long-term community support and economic impact as it will help support further development of the Industrial Park in Middlebury, in addition to other local businesses.

The project will also promote job retention at several employers that support the region. Some of the larger employers in Middlebury include:

· Agri-Mark employs over 120 people to make cheese and other products over the course of three shifts. This employment is in addition to the neighboring farms that supply the milk.

· Porter Medical Center employs over 700 people and serves more than 33,000 people in the region. Additionally, Helen Porter Healthcare provides long-term care and employs nearly 250 people.

· Counseling Service of Addison provides outpatient and mental health and substance abuse counseling and employs over 250 people.

· Middlebury College provides employs over 500 individuals (faculty and staff).

A secure water source is imperative for these businesses, medical centers, and educational facilities to thrive in Middlebury.

This project will promote the improvement of households throughout the Town that are dependent on the water system. One of the limiting growth factors in the Town of Middlebury is the lack of housing available. In the past year, the Town has been working with Summit Properties to approve the development of Stonecrop Meadows, a 200+ unit new construction, mixed-income, highly energy efficient community on Seminary Street Extension. The development would have mixed housing types, including subsidized for sale condos/townhomes, modest market rate for sale condos/townhomes, rental units offered at modest market rates, rental units targeting low-income families, and rental units targeting very low-income families and homeless and at-risk families and individuals. The development represents an innovative partnership between Summit Properties, Middlebury College, and the Town of Middlebury. Stonecrop Meadows will add much needed housing at all affordability levels and represents the best opportunity in a generation for smart growth development at scale to make a meaningful impact on Addison County's housing crisis.

PROJECT COST, IDENTIFIED AND COMMITED FUNDS/FINANCING, AND FUNDING GAP:

Provide the total project cost and complete the simple sources and uses chart.

Total Project Cost: $ 2,510,000

Sources:

Source	Amount
SRF Loan Forgiveness	$ 750,000
Total Sources:	$ 750,000

Uses:

Use	Amount
Study/ Preliminary Engineering	$ 85,000
Construction	$ 2,250,000
Construction Engineeringq	$ 125,000
Administrative	$ 50,000
Total Uses:	$ 2,510,000

Funding Gap: $ 1,760,000

Note: Uses must exceed sources or there is no funding gap

Budget Narrative (3000 Characters):

Describe the amount of funds/financing that have been identified and include a clear status of the funds (Received, committed, applied for, identified, etc.) including the dates of receipt, commitment, application, expected distribution, etc. Clearly identify any funding gap. Also, identify the type of resource (cash, grant, loan, sponsor in-kind, third party in-kind, etc.) and describe which resources can serve as a match, noting that, for example, some grant sources do not allow matching federal funding with other federal funds. Clearly identify any funding gap and identify the state or federal resources that you expect might help fill the gap.

The budget of this project is largely driven by the proposed location of the new source well. One option is to drill a well next to Well 2. This alternative would allow the Town to utilize existing infrastructure, reducing cost. There is an increased associated risk however. If Well 2 were to become contaminated (as Well 1 did), the Town would potentially lose two sources in the process. The budget may then require additional infrastructure improvements to locate a well within a different aquifer.

JOB CREATION (4000 Characters):

Provide an estimate of the number of permanent and temporary jobs to be retained and/or created by the project, including the period of time over which new jobs will be created.

The Water department consists of four year-round, full-time employees, supported by the Director of Operations, Director of Planning, the Department of Public Works Office Administrator, and nine individuals from the Highway Department. The Town provides full benefits and a pension to all full-time staff members. The proposed water tank will support the projected growth in the Town of Middlebury both on a commercial and residential level.
The proposed project relates to engineering and construction, temporary positions will be associated with the implementation of the design. Additionally, the project supports the Industrial Park and the larger community of Middlebury. Developers must be guaranteed water to be willing to invest in the creation of affordable housing. Therefore, waterline improvements are crucial for the vitality of the hiring and retention marketplace for Middlebury and Addison County employers. Strong employment opportunities also increases the demands on local housing. Therefore, a reliable water system is necessary to provide a desirable location to live and work.

CLEAR FORM

PRINT FORM