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# *Town of New Gloucester*

385 Intervale Road
New Gloucester, ME 04260

February 2, 2012

Aaron Shapiro
Cumberland County Community Development
142 Federal Street, Suite 102
Portland, Maine 04101

Mr. Shapiro:
New Gloucester is pleased to submit the attached application for the Cumberland County CDBG program. Thank you for your willingness to consider our request. We look forward to resolving the groundwater contamination in our Upper Village, which has both public health and economic development impacts in our community.

The New Gloucester Selectmen officially voted to endorse the submission of this application during their January 18th meeting.

Please feel free to call me, if I can be of further assistance.

Sincerely,

Sumner M. Field III
Town Manager

# Cumberland County Community Development Program
# 2012 CDBG General Program Application
## Community *Cover Page*

**Project Title** Upper Village Public Water

**Lead Community** New Gloucester

**Additional Communities**

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**Contact Information** Name Paul First, Town Planner

Address 385 Intervale Road, New Gloucester, ME 04260

Email pfirst@newgloucester.com Tel 926-4126 ext 4

**Program Category**

Public Infrastructure/Facility X Downtown Revitalization ____

Public Service ____ Housing ____ Economic Development ____

**CDBG "National Objective"**

**Low/Moderate Income:** Area-Wide X Limited Clientele ____

**Direct Benefit:** Presumed Group _____ (Identify Group)

**Slum/Blight:** Area-Wide _____ Spot Basis _____

**Amount of CDBG Funds Requested** $375,000

**Total Estimated Project Cost** $2,837,323

**Name of Authorized Official** Sumner M. Field, Town Manager

**Signature of Authorized Official** Sumner M. Field

## 1.BRIEF SUMMARY OF PROPOSED PROJECT (10 pts) (400 words max)

*What will be built? What will happen? Where will it happen? Who's in charge? Who served?*

The Maine Department of Environmental Protection (MDEP) has identified extensive petroleum contamination of drinking water wells in New Gloucester's Upper Village. Four gasoline station tank failures occurred within an 800' radius between the years 1992 and 1995[1]. Due to a former uncovered sand and salt pile, additional Upper Village wells were contaminated with Sodium (salt) and Chloride during the same period. Public health officials are concerned; according to U.S. EPA, Benzene is a known carcinogen. Groundwater contamination also contributes to a lack of investment in New Gloucester's traditional business district.

A public water system will be built to permanently address the problem. Following four years of hydrogeological investigation and planning by the Town and MDEP, Wright-Pierce Engineering has completed the preliminary engineering design. The water system is depicted in Figure 1**,** and includes:

**Well/Source** – Water will be provided by a well drilled in a high-quality, extensively tested, sand and gravel aquifer on Town-owned property. It has the capacity to serve more than twice the number of homes and businesses located in the project area.

**Water Mains** – 10,150' of 8" water main will serve the contamination area. Contaminated properties will be hooked-up at no cost to owners. Service connections will be provided to the Right-of-Way edge for all other properties to incentivize hook-up. As the majority of costs are associated with the earthwork to install the water mains, they are sized for future expansion and ISO fire flows. Twelve hydrants will be located per ISO requirements.

**Pump Station** – A 14' x 18' pump station with clear well will be built. In addition to two water pumps, it will house chlorine disinfection and radon removal units. The building will be wood-framed on a concrete slab.

**Tank** – Pressure will be provided, and demand buffered by a 120,000 gallon steel glass-fused tank located on Town-owned property behind the Public Works garage, see Figure 1.

The Town of New Gloucester in cooperation with the New Gloucester Water District will be in charge of the project. Construction management, including site supervision and full-time inspection, will be provided by Wright-Pierce Engineering.

The water system will be sized to serve 48 residential and business properties and a 39 unit mobile home park. Sixty-six percent of project households are moderate/low income per survey. The median household income falls below the USDA Rural Development (RD) "poverty" threshold.

## 2. NEED FOR PROPOSED ACTIVITY (20 pts)

*A. Convey magnitude and severity of issue to be addressed (incl. number of people affected)*

MDEP has identified 10 wells contaminated or at risk with petroleum constituents Benzene and/or MTBE[2]. An additional nine wells were identified as contaminated or at risk from Sodium and/or Chloride[3]. Figure 1 shows the contaminated or at risk drinking water wells and all wells with detectable levels of Benzene and/or MTBE.

[1] DEP spills: P-141-1992; P-558-1992; P-652-1994; P-717-1995.
[2] Contaminated: exceeds drinking water standards -- Benzene 4 ug/L; MTBE 35 ug/L
[3] Contaminated: exceeds drinking water standards -- Sodium 100 mg/L; Chloride 250 mg/L

Impacts of the contamination are severe, and include:

- Public health concerns due to high levels of contamination, such as a food service business that has registered MTBE levels six times the drinking water standard. Another residential rental property registers Benzene levels 11 times the drinking water standard. As noted, Benzene is a known carcinogen. MTBE is a suspected Carcinogen.
- Numerous cases of business and residence re-sale and re-finance failures due to water stigma and health concerns. Lending institutions are either unwilling to lend to contaminated properties or unwilling to lend at favorable rates.
- While the Town and MDEP provide temporary filtering for many properties, the filter systems are difficult to maintain, sometimes ineffective and costly. For example, the Anna Hunnewell family replaced its well pump five times in 10 years due to salt corrosion. The well, serving two households, has extreme Sodium and Chloride levels, Chloride 9 times the drinking water standard. Even properties with filter systems have been unable to obtain bank financing.
- The contamination has contributed to blighted conditions that impact all residents and business owners in the Upper Village, our traditional business district. The Upper Village is one of the lowest median household income neighborhoods in New Gloucester. Conditions of blight are apparent, see Figure 2.
- In addition to the petroleum and Sodium contamination issues described above, Memorial School, 86 Intervale Road, has Uranium levels twice the drinking water standard. The school is located 2,000 feet from the nearest planned water main. Once the initial water system is operating, and eligible to receive Drinking Water Program State Revolving Loan Fund (SRF) funds, an SRF consolidation grant will be sought to extend the water main to the school.

*B. Of total number of people, id the number of people from low/moderate income households.*

An income survey of households along the proposed water system was conducted by RCAP Solutions during fall 2011. Seventy-six households were surveyed in accordance with Rural Development and CDBG methodologies. Sixty-six percent of households are low/moderate income. Eighty-five individuals are low/moderate income. A prior CDBG funded survey also confirms CDBG program eligibility. The median household income is $28,840, below the Rural Development “poverty” threshold. Survey results are available upon request.

*C. Describe to what extent the project makes a long term measurable difference in the economic and social health of the region.*

Currently, 19 contaminated or at risk properties are nearly impossible to sell or refinance due to the water contamination issues. With public water the value and marketability of these residential and commercial properties will increase. Re-investment in this group of home and business properties will offer contributory value to neighboring properties and eventually produce a ripple effect. The net result will be an increase in the social and economic health of the entire Upper Village and the Town.

The sheer magnitude of the 20 year old groundwater contamination has held back community economic development. During the past four years the community has pulled together and achieved measureable results, which are evident in the recent referendum vote to create the

Water District and the Town's financial support of the project to-date. Successfully resolving the contamination will be a watershed event and catalyze economic growth.

Sufficient, clean water is a prerequisite for business development. The Upper Village is strategically positioned between the Towns of Auburn and Gray. The 10,000 vehicle trips per day along Route 100 and proven demand for local retail and services will make the Upper Village an attractive location for business development.

*D. Construction related activities: convey how the project relates to the community's long-range planning and capital improvement needs.*

New Gloucester's Comprehensive Plan designates the Upper Village as a "Village Growth Area," "…a place where people live, work, play, go to school, do errands and limited shopping." Public water will enable the density required to fulfill this vision. The New Gloucester Land Management Planning Committee has nearly completed an Upper Village master plan, which will be incorporated in upcoming revisions to our Comprehensive Plan. The master plan seeks to transform the core village area into a pedestrian friendly New England village, featuring a village green bordered by dense mixed-use business and residential development. Traffic calming to provide pedestrian connectivity across Route 100 is a key element of the master plan. The Upper Village is already a Transfer of Development Rights (TDR) receiving area.

While the Upper Village master plan may take considerable time to fully implement, clean, safe drinking water is the first step.

Blessed with an historic Lower Village, Sabbathday Lake Shaker Village, and many pastoral farms, New Gloucester offers tremendous quality of place. Developing a water system, gives New Gloucester the infrastructure to begin concentrating growth and addressing rural sprawl.

**3. MANAGEMENT OF PROPOSED ACTIVITY (10 pts)**

*A. Who will fund the grant funded project and how they will manage it?*

Maine DEP is committed to funding $379,827 for project construction, as outlined in their commitment letter dated January 24, 2012. In addition, they are committed to paying the hook-up costs of the 10 properties contaminated or at risk of contamination from Benzene and/or MTBE. MDEP co-funded project start-up costs and will continue to provide their expertise during construction.

The New Gloucester Water District has submitted a loan and grant application to USDA Rural Development (RD). RD provides a low-interest loan and grant combination for eligible projects. The New Gloucester project is income qualified for the highest ratio of grant to loan. Income survey has determined that the project area meets the RD "poverty" threshold. The attached budget conservatively assumes 55 percent grant and 45 percent loan. The project's final ratio of grant to loan will be known by mid-July 2012. The total amount of the RD request is $1,896,771. The Town of New Gloucester will provide sufficient funding to the Water District to retire the RD loan, and pay the cost of hooking-up the nine Sodium contaminated or at risk properties, as the Town contribution toward addressing Sodium contaminated wells

After accounting for MDEP, RD, and Town funding, there remains a $375,000 funding gap. The Town of New Gloucester respectfully requests a $375,000 grant from Cumberland County CDBG to bridge this gap and help bring safe, clean drinking water to the Upper Village. While

this is a large portion of the annual CDBG program budget, the project addresses critical public health and economic development needs.

The Town of New Gloucester and Water District Board of Trustees and will be in charge of the project. Day-to-day management will be provided by the New Gloucester Planning Department, with construction management, including site supervision and full-time inspection, provided by Wright-Pierce. The Town of New Gloucester accepts fiduciary responsibility for CDBG funds.

*B. Explain the experience of the applicant in undertaking projects of similar complexity.*

- New Gloucester chaired the committee charged with creating the Mid-Maine Waste Action Corporation, a cooperatively owned regional waste to energy utility located in Auburn. The same individuals are leading efforts to develop the Upper Village Water System.
- Wright-Pierce Engineering will engineer the project and manage construction. They are one of the most qualified water system engineering firms in the State. Drumlin Environmental provides a high level of hydrogeology expertise, clients include Poland Spring.
- The Water District Board, now in the process of being appointed, will include professionals with engineering, legal, and business expertise. Professional experience of the Town Planner includes leading and coordinating large capital campaigns and federal contract procurements.

*C. Demonstrate that an ongoing commitment exists to continue the maintenance and operation of the activity or facility.*

Prior to operation the entire system will be reviewed and licensed by the Maine Drinking Water Program. Once operating, the Drinking Water Program will conduct periodic compliance review and inspections. Day-to-day water system operations will be contracted to a licensed system operator, such as Water Quality and Compliance Services or Maine Rural Water Association (MRWA). System operator responsibilities will include disinfection, water testing, hydrant flushing, meter reading, and billing. All operations will be overseen by the Water District Board of Trustees. Based on income/expense estimates and rate analysis, Water District income from approximately 35 hook-ups, municipal fire protection charges, and bulk water sales to the Wayfarer Village, a 39 unit mobile park, will fund system annual operating costs.

The Town of New Gloucester will provide the support needed to help ensure the Water District's success. The Town is committed to permanently resolving the Sodium contamination issue, and has spent more than $150,000 to-date on project expenses. MDEP has made similar levels of expenditures to-date. They have statutory requirements ensuring their continued involvement. The Town has also engaged the services of MRWA, who has helped with the creation of 10 new water systems to address groundwater contamination in Maine.

**4. READY TO PROCEED (10 pts)**

*Describe the steps that have been completed or must be completed for construction to start.*

- *Evaluate Alternatives & Source Identification* – During spring 2011 Drumlin Environmental concluded a feasibility study of water system alternatives. The lowest cost alternative, a local drinking water source, was identified and fully tested for capacity and water quality.
- *Preliminary Engineering and Costing* – Wright-Pierce Engineering completed preliminary engineering and costing for the project during fall 2011. The preliminary cost estimate was

developed based upon: quotations from vendors and material suppliers; estimates from similar projects; and an extensive library of normalized historic project cost data.

- *Create the District* **–** Following passage of LD1703, An Act to Create the New Gloucester Water District, and a local referendum, the Water District was created.
- *Funding Procurement* **–** As detailed in question three and the attached budget, a funding commitment has been secured from MDEP. An income qualified grant and loan application has been submitted to RD. The municipal contribution will be to retire the loan debt.
- *Well and Wellhead Management Plan Approval* – The drinking water source has received preliminary approval from the Drinking Water Program. The wellhead management plan is approaching completion by Drumlin Environmental and the Drinking Water Program.
- *Final Engineering* – Final engineering and project bidding planned for summer and fall 2012.
- *Construction Permits* – Permits will be required from MDoT to construct the project along Route 100 and Bald Hill Road.

The project is well positioned to break ground during spring 2013 and will be completed by fall 2013. Sufficient time is available to complete the remaining tasks, and an abundance of contractors will be available to competitively bid the project.

**8. Need for CDBG Program Funds (15 pts)**

*A. Why are CDBG funds critical for the commencement and ultimate success of the project?*

Further project funding options have been exhausted. MDEP has committed to the maximum extent allowable by law. MDEP negotiations included the Department Commissioner and legislators. The Drinking Water Program has determined that the project cannot be funded by Drinking Water State Revolving Loan Fund (SRF), due to program rules restricting funding to established water systems. The MDoT has denied the project funding based on the age of the sodium contamination and absence of a definitive link to MDoT.

Given the small size of the water system and incomes, the Water District will not be in a position to service loan debt. Rates must be affordable and revenue reserved for annual operating expenses.

*B. Have you, or will you, seek funds from other sources? If so, what are those funding sources?*

As mentioned the project has exhausted its further funding options, including discussions with MDEP, the Drinking Water Program, and MDoT. Town staff, officials, and volunteers have expended tremendous effort over the past four years to line-up funding from MDEP and Rural Development – we are ready to proceed but for CDBG funds.

*C. What is the impact if CDBG funds are not received or if only partial CDBG funds?*

If no CDBG funds are received, the project cannot be built. If partial CDBG funding is received the feasibility of proceeding with the project will be evaluated depending on the amount received. The project is designed around the lowest cost alternative that addresses the petroleum and Sodium contamination and meets the needs of the community.

**5. Implementation Schedule (10 pts)**

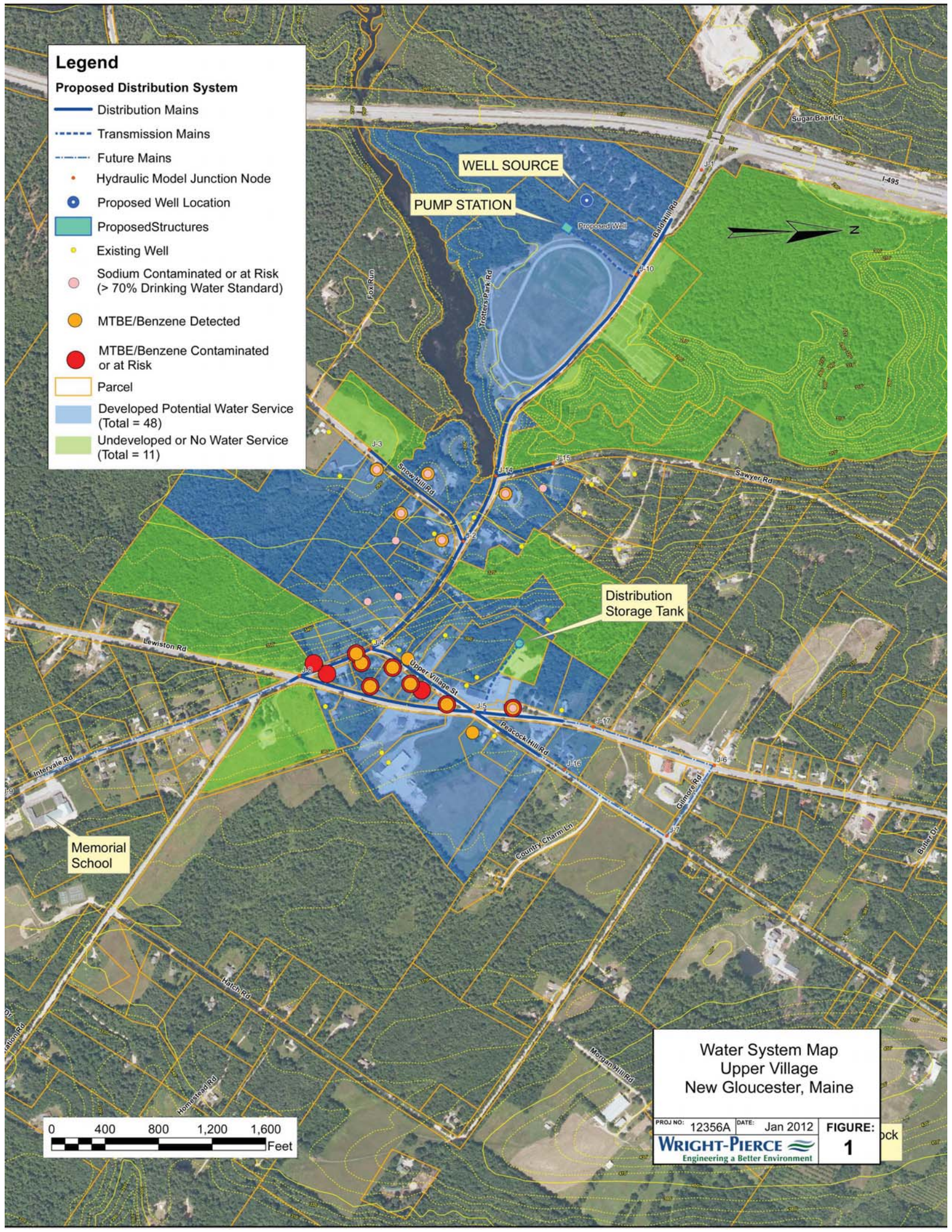
## Project Implementation Schedule

| **Activity** | Q#0 A-J 2012 | Q#1 J-S 2012 | Q#2 O-D 2012 | Q#3 J-M 2013 | Q#4 A-J 2013 | Q#5 J-S 2013 | Q#6 O-D 2013 | Q#7 J-M 2014 | Q#8 A-J 2014 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| RD Environmental Review & PDR | X | | | | | | | | |
| Final Town Commitment | X | | | | | | | | |
| CDBG Environmental Review & Contract | | X | | | | | | | |
| Final Engineering Contract | | X | | | | | | | |
| Final Engineering | | | X | | | | | | |
| Bidding | | | X | | | | | | |
| DoT & DEP Permits | | | X | | | | | | |
| Contracts | | | | X | | | | | |
| Construction | | | | | X | X | X | | X |
| Rates Approval PUC | | | | | | X | | | |
| Reporting | | | X | X | X | X | X | X | X |
| Project Completed: | | | | | | | | | X |

**6. Budget (10 pts)**

| Cost Category | CDBG Funds | Rural Development (RD) Grant[4] | Rural Development (RD) Loan (Municipal Funds) | DEP Funds | Total[5] |
|---|---|---|---|---|---|
| *Engineering* | | | | | |
| Project Engineering | | | $35,250 | $62,500 | $97,750 |
| Construction Bidding | | | $3,250 | $2,500 | $5,750 |
| | | | | | |
| *Permits* | | | | | |
| MDEP | | | $5,750 | | $5,750 |
| MDOT | | | $23,000 | | $23,000 |
| MDWP | | | $5,750 | | $5,750 |
| | | | | | |
| *Construction* | | | | | |
| Pump Station & Well | | | $255,373 | $167,827 | $423,200 |
| Distribution System | | $838,179 | $227,899 | $147,000 | $1,213,078 |
| Gravity Tank | $375,000 | | $147,560 | | $522,560 |
| Right-of-Way Service Connections | | $122,820 | | | $122,820 |
| Private Property Service Connections | | | $92,863 | $92,862 | $185,725 |
| | | | | | |
| *Project Management* | | | | | |
| On-site Inspector | | $25,300 | $20,700 | | $46,000 |
| Construction Management | | $22,138 | $18,113 | | $40,251 |
| Administration – Water District & Town | | $15,813 | $12,938 | | $28,751 |
| | | | | | |
| *Legal* | | $18,975 | $15,525 | | $34,500 |
| | | | | | |
| *Interim Financing* | | | $82,438 | | $82,438 |
| | | | | | |
| **TOTAL** | $375,000 | $1,043,225 | $946,409 | $472,689 | **$2,837,323** |

[4] The project meets the RD "poverty" threshold for the highest allowable level of grant versus loan. Budget conservatively assumes 55% grant and 45% loan.
[5] Total costs from Wright-Pierce Preliminary Engineering Report, December 2011. Fifteen percent contingency included.


Legend
Proposed Distribution System
Distribution Mains
Transmission Mains
Future Mains
Hydraulic Model Junction Node
Proposed Well Location
ProposedStructures
Existing Well
Sodium Contaminated or at Risk (> 70% Drinking Water Standard)
MTBE/Benzene Detected
MTBE/Benzene Contaminated or at Risk
Parcel
Developed Potential Water Service (Total = 48)
Undeveloped or No Water Service (Total = 11)
WELL SOURCE
PUMP STATION
Proposed Well
Distribution Storage Tank
Memorial School
Sugar Bear Ln
I-495
Bald Hill Rd
Fox Run
Trotters Park Rd
Snow Hill Rd
Sawyer Rd
Lewiston Rd
Upper Village St
Peacock Hill Rd
Intervale Rd
Gilmore Rd
Country Charm Ln
Butler Dr
Hatch Rd
Morgan Hill Rd
Homestead Rd
J-1
J-2
J-3
J-4
J-5
J-6
J-7
J-8
J-9
J-10
J-14
J-15
J-16
J-17
N
0 400 800 1,200 1,600 Feet
Water System Map
Upper Village
New Gloucester, Maine
PROJ NO: 12356A
DATE: Jan 2012
FIGURE: 1
WRIGHT-PIERCE
Engineering a Better Environment

# Figure 2: Project Area Images

Formerly Cloutier's Market. Spill location.
Located on Route 100

Snow Hill Road mobile home.

Rear of historic Upper Village Street home from Route 100.

Formerly Samson's Service Station. Spill location.
Located on Route 100.