10.1 - Implement Your Own Sustainability Action: **Getting Safe Water to Water Disadvantaged Neighborhoods**

1. *Describe your innovative sustainability action*

Through innovation and collaboration, the Town and residents overcame a variety of legal, economic, financial, and political obstacles to bring safe water to 145 households in four neighborhoods affected by climate change and other water safety issues. This was accomplished with creative problem-solving, innovative financing, and extensive community engagement to build support within the neighborhoods and within the larger Guilford community. The success of the project could serve as a template for other neighborhoods, and even other towns when they experience similar problems due to climate change. Construction of the $6.5MM water system is now beginning.

Background

Guilford encompasses nearly 47 square miles but has a dispersed population of under 22,000. Only a small fraction of people living near the Town Center are served by the Connecticut Water Company. A significant portion of Guilford's population lives in a relatively dense neighborhoods along the shore located on small peninsulas off State Route 146. One of the most densely populated of these peninsulas, generally referred to as Mulberry Point, is comprised of four neighborhoods represented by neighborhood associations that own some of the streets within them. They are: Mulberry Point, Tuttle's Point, Long Cove, and Indian Cove. All household depend on individual wells for their water.

Many residents in three of these neighborhoods experienced clean water access problems for many years. In the last 10 years, getting safe water access has grown significantly more difficult. Some households struggle with excessive salt content, or with dangerous bacteria levels, rendering their water unusable. Others are burdened with water shortages or dry wells.

The Problems

An economically diverse community of 145 households are in the most distressed area. Their water problems fall into several related categories:

- *Water Quality*: Testing revealed three types of quality issues: contamination by sea water, biological contamination from septic systems, and extremely hard water from high mineral content caused by seal level rise. In some wells, salt content rose as high as 1000 PPM (a serious threat to residents with hypertension) and similarly high nitrate concentration (a threat to people with a variety of health problems, especially babies).

- *Water Quantity:* Many wells go dry in summer leaving numerous residents without water. Residents were regularly coming to Town Hall to fill buckets with clean water. During storms, this area experiences frequent power outages and flooded access roads, thereby depriving all residents of fresh water.

    - *Ecological Impacts:* Release of bacterial and mineral migration from septic systems was reported, affecting the health of surrounding soils, marshes, and ultimately the Long Island Sound.

- *Economic issues:* Some residents resorted to digging second wells, often without success which proved to be an expensive undertaking. Many were forced to replace their water systems every two years because of extremely hard water. (Some people had such hard water, it killed plants.) Over time, an increasing number of households were left with no choice but to have water trucked in, creating significant hardship. The absence of potable water degraded property values.

    - *Fire Safety:* The Guilford Fire Department expressed concern that the absence of available water along with dense housing in these neighborhoods poses a public safety threat.

- *Building Consensus:* Once an infrastructure solution for solving the problem was identified, residents of one of the neighborhoods resisted participation, some property owners resisted providing easements for the required water main, and rumors spread in the larger community that the project would raise taxes for everyone. This required an implementation strategy that addressed all of the expressed concerns, was equitable in controlling costs to the greatest extent possible for residents, and built consensus and support for implementation.

2. *Describe how you accomplished it.*

Homeowners in affected neighborhoods engaged the participation and support of unaffected property owners (to get voluntary approval for water main easements), numerous departments in the Town government, the Connecticut Water Company, several State agencies and the DPUC, the State legislature, and the entire Guilford community, in developing a strategy to get the problem solved.

Creative Communications
A variety of communication strategies diffused the controversy and built community-wide support for the project. The strategy included many forms of Town government participation and civic engagement throughout the long process. A critical goal was to avoid potentially divisive conflicts over eminent domain by deepening research which resulted in the discovery of alternate paths for the water main without resorting to eminent domain.

Examples of outreach and participation:

- Town Selectmen and Board of Finance members met countless times with neighborhood residents
- The Health Director held 24 meetings with neighborhood associations
- A town-wide information meeting and public hearing were held to solicit input and respond to questions about the project
- A town-wide referendum was held to approve the initial bonding
- A Town Meeting was held to approve the additional bonding required when project costs increased
- In conjunction with the Connecticut Water Company, the Town Health Director, who championed the project, distributed a monthly public newsletter explaining the project and step-by-step progress on implementation. These newsletters were an important, effective tool in calming fears about the project.
    - Residents kept abreast of the progress via the Town website, local print and online media, and a community Facebook page.

Creative Financing Solutions

To be feasible, the Town needed to develop a financial plan that would not rely on direct taxpayer subsidy, while immunizing costs to homeowners with a range of abilities to pay. would not burden the Town with costs, but at the same time, would make the costs accessible to homeowners with a range of abilities to pay. The Town went to great lengths to assure the community that taxpayer money would not be relied on for completing the project. Town officials, residents, and our elected state officials worked to secure grants, funding programs, contributions and homeowner assessments to cover all costs.

CT Water Company agreed to finance 50% of the project costs and amortize the costs over 20 years based on the project's projected revenues. However, state regulations limited the amount that could be amortized under existing statutes. Guilford's state senator and state representative worked in the legislature to change the allowable funding cap and to get the DPUC to allow the water company to increase its contribution when the cost of the project rose. As a result, the water company expanded its participation.

The Town ran the bidding to get the lowest price and helped residents reduce their costs by obtaining grants from the State Health Department and bonding authority. The Town used its Triple A bond rating to finance the residents' remaining share, along with the mechanisms to ensure the homeowners payoff of the bond. An additional agreement was made by the Town to help one property owner with a septic problem as a condition of the property owner providing an easement for the water main.

Getting Safe Water Timeline

2000 - Neighbors in affected areas begin to organize. They commissioned a study funded by STEAP.

2012 - Safe water issues had increased to over 145 households. The Town commissioned a new engineering study which concluded an extension of town water main would be the best solution.

2014 - A Special Meeting is held with residents, neighborhood associations and the town. Indian Cove refused to grant a needed easement to continue water main plan.

2015 - Residents petitioned the Town to invoke eminent domain. Eventually, additional information cleared the legal path for the project to move forward without eminent domain.

2017 - The water main extension project was approved at referendum on May 31, with 1,004 yes votes to 122 no votes, at an expected cost of $3.4 million.

2018 - The project hit problems with costs and funding. Low bidder dropped out, project went out to bid a second time, and the project costs jumped to $6.5 million. In Dec., voters approved $3.1 million special appropriation at a town meeting.

2019 - April 12th: Town officials signed the construction contract with the low bidder, True Blue Environmental Services, a construction and environmental services company based in Wallingford, at a total cost of $4,894,710.

May 6th: Mulberry Point Water Main project officially kicked off with a pre-construction meeting between True Blue Environmental Services, First Selectman Matt Hoey and other town officials.

3. *Describe who participated*

Residents of Mulberry Point, Tuttle's Point and Long Cove. Guilford Board of Selectmen, Board of Finance. Guilford residents outside the affected area, CT Water Company, State Rep. Sean Scanlon, First Selectman Matt Hoey, Director of Health, Dennis Johnson, CT legislature, Neighborhood associations from Mulberry Point, Tuttle's Point, and Long Cove.

4. *Describe how it will benefit your municipality*

The project strengthened Guilford's sense of community, forged personal and working relationships, and led to a cooperative spirit and sense of pride in the community. It was also clear that through honest and open communications, trust in the Town government was deepened. From this experience, the Town learned how to approach water issues that will be growing in scope and severity with continued sea level rise.

Connections were made between individuals as well as organizations which will be a framework for dealing with future local issues, serving to increase Guilford's resiliency.

5. *Documentation*

See attached PDF

6. *How did we provide a model for other municipalities ?*

It is probable that water quality and quantity scenarios will arise in other shoreline municipalities due to sea level rise and climate change. Guilford's experience and ultimate solution based on cooperation, communication and creative financing can be a model for other communities. Listening to each other was key to our success. Guilford modeled tactics to diffuse contentious issues which inevitably arose throughout the process. The Town's "Creative Financing" illustrates how to fund equitably for all stakeholders.