Entry: 502

A Piece of History Repurposed: Water Tank To Artificial Reef

Started at: 10/13/2021 12:01 PM - Finalized at: 10/22/2021 12:41 PM

Page: NEAA Nomination Form

APPLICATION DEADLINE: Friday, October 22, 2021, 11:59 pm PST

All fields indicated by a red asterisk (*) must be completed

Category

Operations & Environmental Performance

NOMINATING AGENCY'S INFORMATION

Name & Title of Individual Submitting this Application

F. Allan Clum, General Manager

Submitting Agency's Name

Mount Pleasant Waterworks

State (2letters)

SC

Service Area Population of Submitting Agency

90,000

Social Media (Indicate all that applies)

Communications Person's Name & Email, Facebook, Twitter

Communications Contact

Allan Clum

Communications Contact's Email

aclum@mpwonline.com

Facebook

https://www.facebook.com/MPWaterworks (https://www.facebook.com/MPWaterworks)

Twitter

https://twitter.com/MPWaterworks (https://twitter.com/MPWaterworks)

Agency Logo - Hi-Res Picture (jpg; or .png)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/f688f748-b7c5-43f5-a97f-9a90b75f869b?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305992&response-content-disposition=inline%3B%20filename%3D%22MPW_1color_Navy_Lg.jpg%22&response-content-type=image%2Fjpeg&Signature=es69fg0grQOvFbR65VBOvyST0as%3D)

PROJECT / INDIVIDUAL NOMINEE'S INFORMATION

Name of Nominated Project / Program or Nominee (as it will appear on the NEAA award)

A Piece of History Repurposed: Water Tank To Artificial Reef

$\label{thm:mass} \textbf{Has this project / program ever been submitted for NEAA recognition in the past?}$

No

SUPPORTING DOCUMENTATION

Narrative Description: Project / Program or Individual (attach pdf, limited to 4 pages, double-spaced, 12pt)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/c83ce3d5-8601-408d-a72f-38e6e4d75663?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305992&response-content-disposition=inline%3B%20filename%3D%22NACWA%20NEAA%20Application.pdf%22&response-content-type=application%2Fpdf&Signature=W5ZaVbGGuKU42xMa%2BTzNpH3bdcw%3D)

Supplemental Information Included - i.e. images, video, add'l document (Optional)

Yes

Supporting Material (PDF, limited to 4 pages)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/46b673f7-bdb6-44cc-9ac5-4c715ce6e614?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305993&response-content-disposition=inline%3B%20filename%3D%22MixofStructures1.jpg%22&response-content-type=image%2Fjpeg&Signature=ZNsYHwtvoUPgV1jjm9pr2QGXf3Y%3D)

Supporting Material - Video (provide link)

MEMBER SPOTLIGHT

Please attach a third-person article (350-400 words MS doc) - something that a layperson would understand, describing your project / program to be posted on the front page of NACWA's website as part of our "Member Spotlight" section.

Member Spotlight Document (MS Word)

Member Spotlight Hi-Res Picture (jpg; or .png)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/c670e0e0-c00e-4a78-b6db-58ff832c301a?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305993&response-content-disposition=inline%3B%20filename%3D%22MixofStructures1.jpg%22&response-content-type=image%2Fjpeg&Signature=digyQlCzU6JcmkRSZQGiEELzz9Y%3D)

Member Spotlight Hi-Res Picture (.jpg; or .png)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/f9144900-3db0-4058-837d-fce3dca7eb66?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305993&response-content-disposition=inline%3B%20filename%3D%22Six-hour%20sink.JPG%22&response-content-type=image%2Fjpeg&Signature=iodq2go5UBCCqHs6Qtodb2LDFkU%3D)

PROJECT POSTER or PROJECT WEBSITE

Please include a hi-res PDF or website link of your Project to be displayed on NACWA's NEAA website (example of last year's honorees (<a href="https://www.nacwa.org/about-us/awards/national-environmental-achievement-awards/national-environmental-achievement-awards/national-environmental-achievemental-achievement-awards/national-environmental-achievement-awards/national-environmental-achievemental-

Project Poster / Website (indicate at least one)

Project Poster

Project Poster (pdf)

Download File (https://vo-general.s3.amazonaws.com/1791819d-f6fc-46c3-b1b7-a1d38a2bd4d4/c564fb9c-1c76-49a5-8b34-caea2097935e?AWSAccessKeyId=AKIAJ4PRWO26HAX3IOCA&Expires=1723305993&response-content-

disposition=inline%3B%20filename%3D%22Water%20Tank%20Demolition_Print%20Ad_FINAL.pdf%22&response-content-type=application%2Fpdf&Signature=V3d9IhKSqhnWJcuy0agpUo5jEYE%3D)

APPLICATION AUTHORIZATION

Please contact btrombino@nacwa.org? subject=Who%20is%20Our%20NACWA%20Primary%20Contact%20for%20the%20NEAA%20application%3F) if you do not know the name of your NACWA Representative (SUBJECT: Who is Our NACWA Primary Contact for the NEAA application?

Name of Submitting Agency's NACWA Representative

Allan Clum

Title of Submitting Agency's NACWA Representative

General Manager

Email of Submitting Agency's NACWA Representative

allanclum@mpwonline.com

Signature of Submitting Agency's NACWA Representative (pdf/jpg)

Does this Project/Program involve another NACWA Agency?

No

Please review your application prior to finalizing it. All fields with a red asterisk (*) must be completed. If you have any questions in regard to submitting your application, please contact Bredy Trombino (mailto:btrombino@nacwa.org?subject=Application%20Questions%20-%20PreCompletion) at 202.533.1820.

From Delivering Water to Developing Marine Resources: Repurposing a Water Tank as an Artificial Reef

Mount Pleasant Waterworks (MPW) provides water and wastewater services to approximately 90,000 people in the town of Mount Pleasant. Located east of the Charleston Peninsula in South Carolina, the town is surrounded by waterways and rooted in history with the maritime community. When MPW constructed its first 100,000 gallon, 140-foot tall, elevated water tank in the Old Village neighborhood of Mount Pleasant in 1934, community members took pride in the structure and local recreational boaters adopted it as a pre-GPS, navigational aid.

As Mount Pleasant's population grew and water demand increased, the Old Village water tank was decommissioned in the mid-1990s to make way for larger capacity ground storage tanks. Instead of removing what had become viewed as a historic structure, MPW found a new purpose for the tank by entering into a 20-year agreement with cellular service providers to use the tank as a location their antennas. Over the years, MPW periodically conducted structural analysis reports on the tank knowing the harsh coastal environment could exacerbate conditions. In 2018, a report revealed significant structural concerns and highlighted the potential for failure during a high wind event. MPW held a public meeting in 2019 to discuss the findings and present repair or removal options. The decision to remove the tank was finalized in 2020.

Acknowledging the emotional ties many in the community had to the Old Village water tank,

MPW explored opportunities to preserve the memory of the tank while advancing its mission of

protecting the environment and water resources. The answer came by way of its partners at the South Carolina Department of Natural Resources (SCDNR).

SCDNR manages a program to create and monitor artificial reefs off the coast of South Carolina. Artificial reefs are man-made structures that are placed on the sea floor. These structures provide habitat for a variety of sea life and increase biodiversity in an otherwise baren area by providing a spawning ground for fish and marine life. In addition to the environmental benefit, they also create recreational opportunities for diving and fishing.

After initial discussions with SCDNR, the conceptual project built momentum. The Coastal Conservation Association of South Carolina and Sea Hunt Boats, both longtime supporters of artificial reefs in South Carolina, also came onboard as partners.

The massive structure, that would become known as the Mount Pleasant Waterworks Old

Village Tank Reef, was made up of a 250-foot retired barge, 12 shipping container boxes, and

the Old Village water tank. The items were welded together and include cave-like passages and

other unique spaces to benefit a variety of marine life and enhance the diving experience. A

life-sized concrete replica of a great white shark was also created to provide an additional point

of interest for divers. The reef was submerged 60 feet and approximately 10 miles offshore

where it will be easily accessible by the public.

MPW was honored to partner on this project and to have the Old Village water tank repurposed. With the community's support, the tank will provide environmental and recreational benefits for generations to come. MPW plans to host a community fishing

tournament at the artificial reef site each year. The time will also be used to teach the importance of protecting the environment and our natural resources as well as the value of clean water.



Repurposing History for New Life:

Repurposing an Elevated Water Tank for Environmental Enhancement

Mount Pleasant Waterworks (MPW) provides water and wastewater service to over 90,000 people in the Town of Mount Pleasant. Being rooted in history, the coastal town of Mount Pleasant, South Carolina, is located east of the Charleston Peninsula, and has ties to the maritime industry, the Revolutionary and Civil Wars, and African American settlement communities. In 1934 MPW constructed an elevated water tank in the Old Village neighborhood to improve water system pressure and enhance the quality of life. For almost 90 years the 100,000-gallon tank stood approximately 140 feet tall and served as critical infrastructure for the growing town of Mount Pleasant.

As Mount Pleasant's population grew and water demand increased, the Old Village water tank was decommissioned in the mid-1990s to make way for larger capacity ground storage tanks. Instead of removing what many residents viewed as a historic structure, MPW found a new purpose for the tank by contracting with cellular service providers to use the tank as a location for their antennas. However, in 2018 a structural analysis report revealed significant structural concerns highlighting the potential for failure during a high wind event.

Acknowledging the emotional ties the community had to the Old Village water tank, MPW explored opportunities to preserve the memory of the tank while advancing its mission of protecting the environment and water resources. Another consideration in the removal of the tank was finding a cost-effective solution to meet our mission. Fortunately, the answer came by way of an innovative partnership with the South Carolina Department of Natural Resources (SCDNR).

In September 2021 the Mount Pleasant Old Village Water Tank Artificial Reef was completed. The reef consists of a 250-foot retired barge, 12 shipping container boxes, and the Old Village water tank. The items were welded together to include cave-like passages and other unique spaces to benefit a variety of marine life and enrich the diving experience. Additionally, a life-sized concrete replica of a great white

shark was constructed to provide an additional point of interest for divers. The reef was submerged in 60 feet of water approximately 10 miles offshore where it is easily accessible to the public. In the near future, MPW plans to host a community fishing tournament at the artificial reef site. The tournament will be promoted in our community and serve as an opportunity to teach the importance of protecting the environment and our natural resources as well as the value of clean water.

Mount Pleasant Waterworks was honored to partner on this project. Our mission with the water tank has truly come full circle.









IT'S TIME TO SAY GOODBYE TO THE OLD VILLAGE ELEVATED WATER TANK

Dear Mount Pleasant Waterworks customers,

Next month, we will remove the elevated water storage tank from the grounds of our King Street water plant located in the Old Village. The 87-year-old tank has not been used for water storage since the early 1990s. Instead, the aging structure has served solely as a location for wireless provider antennas.

The decision to remove the tank was not taken lightly. While considered an icon to many, the elevated tank is simply no longer structurally safe for our employees to maintain or the wireless carriers to access equipment.

A temporary tower will be built at the site to ensure cellular services are not interrupted. The tower will be in place for 120 days as the wireless providers work with the Town of Mount Pleasant to secure a permanent location.

Whether by foot or by car, we encourage those who are interested to swing by to say goodbye in the coming days. More details will follow as demolition details are verified.

1619 Rifle Range Road | Mt. Pleasant, SC 29464 | 843-884-9626

www.mountpleasantwaterworks.com





