

THE WATCH HILL CONSERVATOR 222 Watch Hill Road Watch Hill, Rhode Island 02891

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THE WATCH HILL CONSERVANCY NEWSLETTER

SPECIAL EDITION: HURRICANE SANDY



222 Watch Hill Road Watch Hill, Rhode Island 02891 (401) 348-6540

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For information about community events, lectures, concerts, nature walks, educational programs for children, and others, see the Conservancy's website below.

www.thewatchhillconservancy.org

Bay Street Infrastructure Project

Ruven Liebhaber, Project Development Manager for the Conservancy's Bay Street Infrastructure Project, reports that there was no damage to the buried utilities in Fort Road or the above-ground transformers and building connections there (Project Phase 1). He was not aware of any damage to the duct bank in Bay Street (Phase 2) and assumes there was none. Above-ground transformers have not yet been con-



structed for Phase 2, nor has any Bay Street utility wiring been placed underground, so that was never an issue.

High water mark at Larkin Square Photo Joan Youngken



NOVEMBER, 2012 WATCH HILL, R.I.

HURRICANE SANDY & WATCH HILL

Chaplin B. Barnes, Executive Director

Sandy, a hybrid storm with both tropical and extra-tropical characteristics, inflicted major damage all around Watch Hill on October 29. Misquamicut was devastated, Stonington Borough was flooded, and trees were downed throughout the area. According to the National Weather Service, Westerly reported the highest sustained winds (68 mph) and the highest gusts (86 mph) anywhere in New England, yet Watch Hill saw considerably less damage than other parts of town.

That said, in Watch Hill, there was dramatic evidence of what a significant storm can do. The dunes under the Yacht Club cabanas were swept across Fort Road and into the harbor. Dunes further out on Napatree were leveled, but not breached. Bay Street and the shops in Larkin Square were flooded. At the Lighthouse, the eastern wall was largely demolished, fencing crumpled, and the road ripped up and buried in boulders. Portions of the dunes on East Beach were overwashed, and Maschaug Pond filled and flowed over and across Ocean View Highway. This special issue of the Conservator includes photos and reports from the several organizations represented on the Board of Directors of the Watch Hill Conservancy. We are grateful to each of them for responding quickly to our request so we could get this information to you in a timely manner.

In Watch Hill, this was not the Big Storm that it was in other parts of our immediate area and certainly not what it was in New York and New Jersey. Nor did it measure up to the two great hurricanes of the 20th century to strike Watch Hill. Unlike the Hurricane of 1938, with sustained winds of more than 125 mph, or Hurricane Carol (1954), with sustained winds of more than 100 mph, Sandy's winds were much lower. On the Misquamicut Club hill on the north side of Ocean View Highway, the boulder marking the high water line of the 1938 hurricane stands some 5-6 feet above the wrack line left by Sandy. And some of us who were here in 1954 remember that Carol, which washed away the Beach Club, swept some five feet through the Yacht Club and about two feet through houses on the river at Breen Road. Sandy swept through the new Yacht Club at less than three feet and only lapped the lawns on Breen Road. Still, the storm surge was impressive and caused considerable damage.



A view of the lagoon. Photo Janice Sassi

With rising sea levels and increasingly frequent storms (both hurricanes and nor'easters) expected in the future, Sandy offers some warnings and shows areas of storm vulnerability.

Watch Hill has been wise not to rebuild in areas subject to past storm devastation, but engineering advances, including increasingly sophisticated septic systems, must not be allowed to lull people into building in flood-prone areas. Such areas should be acquired wherever possible for open space and protected from development. The Napatree barrier beach, where in 1938 thirty-nine houses were washed away and fifteen lives lost, remains in its natural, open state. The only structures rebuilt at its eastern end – the Beach Club and the cabanas – have been constructed above the dunes and with space for surges to sweep under them. The current effort to relocate utilities underground and to eliminate above-ground poles and wires along Bay Street will provide additional protection to the business area. Current dune restoration efforts along all Watch Hill beaches take on an increased urgency. But more can probably be done. Sea walls may need to be re-engineered and made higher, and the parking lots along Bay Street and Fort Road itself may need to be raised and canted seaward. New ecological approaches – perhaps oyster reefs installed in Little Narragansett Bay - may offer not only improved water quality, but also flood-control benefits. Creativity and vigilance are called for in a time of increasing vulnerability to storms and the sea.

Watch Hill Lighthouse Keepers Association

Reported by Ann S. Johnson, President

The Watch Hill Lighthouse serves as a beacon not only for navigational purposes but also to and for the community of Watch Hill and all those who appreciate its unbelievable beauty and its vantage point across the waters. The initial news of the damage wrought by the storm affected us deeply and those of us who viewed the destruction first-hand were reminded in most painful ways of the power of the ocean. We are grateful indeed that the buildings themselves sustained only minimal damage, but are greatly concerned by the impact on the property at large. The storm destroyed large sections of the surrounding seawalls, ripped up most of the fence, rendered the road impassable, and tore vast and gaping holes into the earth at critical points. Additionally, the boulders at the Point, which provide some protective deflection of the ocean's energy, have been shifted and in some cases cast into new positions. We are presently assessing the extensive needs we face while simultaneously undertaking immediate steps to secure the property for the safety of the public. Needless to say, our costs are great and while we hope to receive some federal funding, we are realistic in understanding that the expenses may need to be largely if not entirely borne by the WHLKA. We are appreciative indeed of the support already being sent our way and so very thankful that the Lighthouse itself remains steadfast in its central position on the Point and within Watch Hill.







Photo Joan Youngker

Photo ©2012 Katherine Johnson Photograph

MEMBERSHIP FORM

The Watch Hill Conservancy is a nonprofit organization. Your membership supports the protection of the natural and cultural resources of Watch Hill, a variety of programs, and educational publications, including this newsletter.

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Please include names of family members 18 and under. If you are making gifts of memberships, please include the names and addresses of those to receive these gifts.



Napatree Point Conservation Area

Janice Sassi, Manager, Napatree Point Conservation Area

Sandy was hard on Napatree Point, which suffered considerable erosion.

The dune grass and other vegetation which holds Napatree in place were ripped out in many places, allowing surf to erode large sections of land in some areas. In others, we now have beach sand from ocean to bay with nothing to anchor it. Lacking protective dunes and vegetation, Napatree is at risk of being breached. This is a serious concern as winter approaches, as vegetation will not have recovered before the typical winter storms, resulting in more damage than usual.

Ammophila (dune grass) spreads by sending runners beneath the surface sand and from there, new shoots emerge. Should this connection be broken, both plants will die. It will be crucial that the surviving plants repopulate the barren areas.

Where there had been dune fencing on Napatree, the dunes were much larger and although they lost a great deal, they fared better. Interestingly, wider paths that normally receive a great deal of use suffered the most loss of dune as great wide swaths were cut well beyond the borders.

Part of the ocean side near Fort Mansfield now resembles a moonscape. The sand and vegetation is gone, leaving just bare earth and rocks. The path used to access the remains of Fort Mansfield is now sheer cliff.









Top Left: Considerable damage to dunes near Ft. Mansfield. Top Right: While there is significant erosion, the dune suffered less impact from the overwash because of the dune fencing. Middle: Moonscape near Fort Mansfield; no sand or vegetation remains. Above: Dramatic example of how level Napatree has become (looking westward to the Fort). Photos this page Janice Sassi

Watch Hill Fire District

Grant G. Simmons III, Chairman, Park Commission Richard Youngken, Planning Consultant

Eight WHFD properties were affected by Hurricane Sandy. Many received only minor damage, but the Fire District Bathing Beach, Fort Road, and Napatree were severely affected by the storm surge.

At the north parking lot, the storm surge came up through the harbor sea wall and over the top, eroding the newly-spread gravel. The WHFD already had a plan in place to reinforce the sea wall with steel sheet piles in the near future; this damage demonstrates the need to move ahead with this project.

There was little damage to the Village Park from over-wash of the harbor seawall except for a shifting of the gazebo off its foundation. It will be put back on its foundation and the steps will be repaired. The grass was covered with sea water and will need treatment.

At the village docks, fixed docks were submerged by the storm surge. No damage occurred to the dock structures, but all electrical components were submerged and will need to be rinsed with fresh water to prevent corrosion. The wooden trash can boxes were washed away and will need to be replaced.

The south parking lot at Larkin Square and the Watch Hill Yacht Club (WHYC) was also awash in seawater that had overwhelmed the harbor seawall, but there was no significant damage to the newly-paved parking area or the harbor wall.

At Fort Road, the dune under the WHYC cabanas was completely washed out by the storm surge, spreading sand (between 4 or 5 feet) and debris across Fort Road, over the harbor seawall, and into the harbor. Plans include moving the sand back under and seaward of the cabanas to recreate the protective dune, and dredging the sand from the harbor.

The pavilion at the Bathing Beach was damaged by the storm surge: eroded footings, displaced pilings, and shifted floor supports have jeopardized structural integrity. The building will need structural work and some reconstruction, including replacement of the access ramp. A considerable amount of beach sand washed into the Larkin Square interior parking lot. This sand will be moved back to replenish the beach.

At the Merry-Go-Round, the roof, supporting columns, and mechanical systems all survived the storm intact.

The storm surge over-washed large portions of Napatree and flooded the Lagoon. Wide sections of sand loss and erosion took place in zones where there were walkway crossovers from bayside to oceanside. No inspection of Fort Mansfield has been made to date.





www.thewatchhillconservancy.org

A Statement from Charles S. Whitman III, Moderator of the Watch Hill Fire District

"We were lucky not to have been hit as hard by this storm as other places, and our sympathies go out to all the communities around us, particularly Misquamicut and Stonington, which suffered major damage. We intend to repair what we can as quickly as possible.

"The District Council joins me in thanking our volunteer Fire Department members, many of whom left their families to spend the entire night of the storm and even longer in Watch Hill, cooperating with Westerly police in patrolling the village, turning off propane tanks, and effecting a rescue from the lighthouse, in addition to assisting with the clearance of downed trees from roads and driveways while the power was off. We are truly fortunate to have such civicminded and effective individuals serving as members of our Department."

Fort Road. Photo Janice Sassi

Misquamicut Club

Reported by Roswell M. Curtis III, President

There was virtually no damage to the structures at either the Golf or Beach Club, or on the upper portion of the golf course.

At the Golf Club, the lower seven holes on the golf course sustained the most damage. The dunes protecting the ponds are completely gone. There is only a slight rise from the normal high water mark to the ocean edge of the pond along the length of our property. The upper portion of the twelfth tee was destroyed and the lower portion was buried in 4' of sand. The dike was breached only in one small area at the front of the 13th green, but otherwise held firm. Water flooded virtually the entire lower 7 holes, nearly reaching the 1938 Hurricane water mark and leaving a significant amount of debris on the course. The 13th green was particularly coated with debris and muck.

At the Beach Club, the clubhouse design functioned exactly as intended and funneled the ocean underneath the building. A great deal of sand was carried from the beach to the parking lot, and we suffered some erosion near the flagpole, but the remediation effort will be small. The beach grass that has been encroaching on the beach area helped to reduce erosion.

Bill Morton, Dean Bozek, and the Green team have already made significant progress in the remediation effort. The water level in the ponds is being reduced through several drainage approaches. Much of the debris has been removed along with the slime coating on the 13th green. Fresh water treatments, using gypsum to reduce the effects of the salinity, are underway. While there is no way at this time to know how much of the turf will ultimately be rescued, the team is doing everything possible to restore the course.

It should be noted that the system of ponds and dikes mostly worked as designed and implemented as part of the Meadows project to absorb as much of the punishment as possible, and then drain the course relatively quickly. If this was in fact a 100year type storm, all in all, the design and the course held up well to a very severe test. Work will begin to restore the dunes and shore up the dike very soon.



Top: Misquamicut Club Beach Club. Bottom: View from the 11th tee. Photos Phil Koretski



Watch Hill Yacht Club

Reported by Darryl Forrester, Manager

On Sunday, Oct. 28, it was clear that we would be experiencing high winds and a possible storm surge from Sandy on Monday, Oct. 29. With a core of WHYC staff, we began removing files, computers, supplies, etc. from the ground floor and storing them on the second floor. Some kitchen equipment, removable drawers, and launch office tools were removed or placed as high up as possible on the ground floor. All boats were removed to local boatyards and many were stored on trailers.

Our webcam Weather Station stopped functioning at 3:20 p.m. on Monday, thus signaling the loss of power and Internet service. All employees were asked to stay away from the club until they were notified by cell phone.

On Tuesday, Oct. 30, Tom Donoghue and I were able to access the WHYC by boat, but were cautioned by National Guardsmen that we were really not allowed, so we took a quick look to survey the damage.

At the Yacht Club-upstairs-everything is as we left it, windows, doors, all intact. On the ground floor-not so good; 30" of water in the ground floor, and in the kitchen, one of the refrigerators floated up, then fell onto its back. A westward-facing storage locker was breached, breaking away drywall and possibly allowing water to enter the club at a higher velocity.

On Wednesday, we were allowed in by National Guard troops and began assessing the damage. We called our insurance company, and were given the goahead to do whatever we could to prevent further damage.

We contracted with a national company to clean and remove the residual salt, sand, seaweed, and especially the grease that had been spread throughout from the broken grease trap in the kitchen. Most importantly, we had them sanitize all areas to prevent mold & bacteria from forming. We then sent equipment and supplies to a temporary storage area. All equipment that was destroyed was photographed and will be catalogued.

We are now awaiting the return of electric power and internet. Following will be assessments of our various systems: sprinkler, fire alarm, septic, computer, kitchen cooking, and telephone.

We are hopeful and anticipate being back in business by the end of November.

Commodore Richard J. Ahearn added that "if the Cabanas had not been rebuilt, the old ones would be sitting in the harbor and there wouldn't be a shred of evidence that they ever existed. It is also a fair certainty that the Misquamicut Club would now be on an island. Despite the amount of dune we lost, the new piles still extend anywhere from 16-20 feet below the current sand level, which helped to stabilize that entire section of beach, preventing a breach."



Reported by Peter J. Brockmann

East Beach in Watch Hill, in some places, lost as much as 8 feet of sand. A post-Sandy tour was like touring an archaeological site: posts, poles, boulders, and other objects that have not been seen in decades were revealed. Seven foot boundary markers now stand tall on the beach between the Ocean House and the wall. The storm surge and waves ripped posts and heavy roping from the Ocean House beach and deposited the entire mess about 20 yards up the Bluff Avenue right of way, making the path all but impassable. Generations of snow fencing posts have sprouted - a testament not only to the amount of sand lost, but also to the efficacy of the sand-capturing ability of the fencing installed by the East Beach Association for the past 40 years. An incredible amount of debris washed in, from innumerable pieces of plastic to tires, enormous logs and, in one spot, sheets of bath tile presumably washed in from Misquamicut.

The question for many beachfront property owners now is whether to bring in sand to help rebuild the lost dunes, or simply let nature take its course. Final decisions are expected over the next several days. The EBA, which lost every bit of snow fencing that existed on the beach, expects to begin installation of new fencing as early as next weekend [November 10]. Meanwhile, word quickly spread via Facebook and various email lists that we were organizing a beach cleanup for this past Sunday, November 4. The weather was spectacular, and about 30 volunteers, including some who had never before been on our beach, just about filled a 40-yard dumpster. Another volunteer cleanup day is planned.

Ocean House and Weekapaug Inn

Daniel A. Hostettler, President & Managing Director, Ocean House and Weekapaug Inn Antonia Korosec, Innkeeper & General Manager, Weekapaug Inn

While there can be no doubt that the coastline around us has had dramatic changes in the past several days, we are pleased to report that both At the Ocean House, we have completed removal of debris and, while we lost the deck surrounding Dune Cottage as well as the smaller ancil-

properties sustained minimal damage to their facilities and were back up and fully operational as of Thursday, November 1st. lary storage buildings, the main portion of Dune Cottage has sustained minimal damage. Repairs and construction of a new deck are already underway. One small return of this storm is that our beach actually widened due to the erosion of the dunes.

At the Weekapaug Inn, we sustained minor damage to the new landscaping, but other than that, the Inn came away completely unscathed and we are very grateful. Our beach - which has no buildings - was remade in a major way but is still intact. Our naturalist has explored the length of it and reports a fascinating and oddly beautiful landscape that will make for fascinating guided walks in the days, weeks, and months to come. The Inn's swimming beach is also wider than it was and looks great for beaching next summer.



Removing sand from near the Merry-Go-Round, Photo Joan Youngker





om Misquamicut to East beach. Photo Charles Fisher