

Oyster Reef Restoration with Parsons Seafood, Tuckerton NJ (Great Bay)



Mike Joannides Jr. (left) and Dale Parsons Jr. (right) use high pressure hoses to move the recycled shell off the barge and onto the lease bottom.

[Ocean County Soil Conservation District's Sustainable Practice's for Aquaculture Resources Conservation](#) project (SPARC) continues efforts to provide technical assistance to aquaculture farmers in the Barnegat and Great Bay watersheds to further develop the conservation practices of the [NJ NRCS Aquaculture Initiative](#). Under the direction of District Director, Christine Raabe, earlier this year, Kristin Adams, Ocean County Soil Conservation District (OCSCD) Erosion Control Specialist, joined Dale Parsons Jr., owner of Parsons Seafood and Parsons Mariculture in Tuckerton, NJ as he and his crew deployed recycled oyster, surf clam and whelk shell on one of his shellfish leases in the Great Bay. Dale is a participating producer in the USDA Natural Resources Conservation Service's

(NRCS) [Environmental Quality Incentives Program](#) (EQIP). This program provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water quality, reduced soil erosion and sedimentation and improved or created wildlife habitat.



Mike Joannides Jr. (left) and Anthony Riccardo (right) tie up one of the Carolina Skiff boats to the barge.



Dale Parsons Jr. operates one of two Carolina Skiff boats used to push the barge to the lease site.

After the recycled oyster, surf clam and whelk shell is loaded onto the barge using an excavator, the barge is then pushed to the lease site using two Carolina Skiff boats. The best conditions for doing so include a high tide and minimal wind. Once the lease site is reached, high pressure hoses are hooked up to pumps within the boats.

Dale Parsons Jr. (left) and Steve Bongard (right) discuss the morning's operation.



Dale and his crew, Mike Joannides Jr., Steve Bongard and Anthony Riccardo are pictured below implementing a conservation practice called Restoration of Rare or Declining Natural Communities for Oyster Bed Restoration or Enhancement/Replenishment, in which a 2-inch layer of shell is deployed on Dale's leases. The high pressure hoses are used to physically move all of the recycled shell off of the barge and into the bay, where it will settle to the bottom and create an oyster reef. The whole operation, including the massive barge and two Carolina Skiffs, must be constantly moving around the 1.5 acre lease, working with the tide and wind to allow for an even coverage of shell on the lease bottom.



Dale Parsons Jr. and Mike Joannides Jr. use high pressure hoses to move the recycled shell off the barge and onto the lease bottom.





Mike Joannides Jr. (left) and Dale Parsons Jr. (right) use high pressure hoses to move the recycled shell off the barge and onto the lease bottom. (top, middle & bottom right)



The restored oyster bed will support oyster growth and reproduction, provide habitat for other aquatic species and enhance water quality through oyster water filtration and the removal of nutrients and suspended sediments.

From left to right: Steve Bongard, Anthony Riccardo, Dale Parsons Jr. and Mike Joannides Jr. recap the morning's work. (bottom left)





Oyster larvae that has set on recycled surf clam and whelk shell.

Pictured above is live oyster larvae which has set onto recycled shell (spat-on shell) in large setting tanks with a continuous flow of bay water. A layer of spat-on-shell will later be placed on top of the oyster reef to promote natural reproduction of oysters.

Through the District's partnership with NRCS, the Aquaculture Initiative and the [Sustainable Practices for Aquaculture Resources Conservation](#) (SPARC) project; with funding provided by the [National Association of Conservation Districts' Technical Assistance grants](#), Kristin assisted with the conservation plan for Dale's EQIP application as well as the certification process as the conservation practice was being implemented. The District looks forward to working with NRCS and local aquaculture producers such as Dale in the future as we continue to expand opportunities for shellfish producers and improve the health of the Barnegat and Great Bay estuaries and ecosystems. For more information about SPARC, please visit [OCSCD's website](#). (photos and text by Kristin Adams, PSM, Erosion Control Specialist, Ocean County Soil Conservation District)

Dale Parsons Jr. and Kristin Adams discuss the process of oyster larvae setting on recycled shell in the setting tanks pictured.

