

**2026 Department of War Environmental Awards**

**Natural Resources Conservation - Individual**

**Marine Corps Air Station**

**Cherry Point, North Carolina**

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By Direction of the Commanding Officer

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**Introduction:**

The Marine Corps Air Station Cherry Point (MCAS Cherry Point) Complex is home to approximately 5,973 active-duty military personnel, 1,746 reserve/guard, and 5,422 civilian personnel. MCAS Cherry Point functions as a leader in aviation support facilities and services in the Department of War (DoW) and is home to the Commanding General, 2d Marine Aircraft Wing. The MCAS Cherry Point Complex is comprised of nine widely dispersed properties located in Craven, Carteret, Jones, and Pamlico counties in eastern North Carolina, including several outlying airfields and bombing targets. These properties occur on approximately 26,073 acres of land and 18,000 acres of water and are strategically located to meet operational and training requirements of the United States Marine Corps (USMC).

MCAS Cherry Point provides a variety of environmental conditions and ecosystems for Marine training and maintaining combat-ready troops for expeditionary deployment. This objective is met in a way that provides for sustainable and healthy ecosystems, complies with all applicable environmental laws and regulations, and provides for no net loss in the capability of military lands to support the military mission.

As the Natural Resources Manager, Jessica Guilianelli serves to ensure the military mission is prioritized and natural resources are conserved to the maximum extent practicable, while supporting the overall mission. This includes protecting government lands from natural hazards and ensuring that training and operations are not affected by those hazards.

**Background:**

Natural Resources at MCAS Cherry Point are managed in accordance with an Integrated Natural Resources Management Plan (INRMP) which was most recently revised and signed in August 2024. The plan was developed in cooperation with the U.S. Fish and Wildlife Service (USFWS) and the North Carolina Wildlife Resources Commission (NCWRC) and was reviewed annually through the achievement period. The primary goal of the plan is to support the military mission while conserving natural resources. It outlines goals and objectives that outline the balance between military mission and natural resources management.

Jessica's primary function as the Natural Resources Manager is the implementation of the INRMP and engagement with stakeholders regarding that implementation. She coordinates regularly with partners including annual reporting, working groups, requests for assistance, and providing information when requested or when new information is received. Due to Jessica's

communication with those partners, they have been made aware of the USMC's commitment to conservation.

### **Summary of Accomplishments:**

During the rating period, the culmination of years of tireless efforts by Jessica Guilianelli came to fruition as a 12,100-linear-foot (2.3 mile) granite sill was installed along MCAS Cherry Point's Neuse River shoreline. The three-mile shoreline was severely degraded, due to years of storms and flood waters eroding the shoreline, most evident at the intersection of natural shoreline with existing bulkheads. In some locations, over 100 feet of shoreline recession had



A granite sill installed to reduce wave energies and prevent future erosion was constructed on MCAS Cherry Point's shoreline. Over 130,000 native marsh grasses were planted to stabilize the site and restore the ecosystem.

been observed since 1997. Large amounts of sediment had been washed away by the Neuse River, including those that supported the adjacent forests. Many of those trees had fallen into the water and further destabilized the slopes.

In order to slow the rate of erosion and protect existing infrastructure after Hurricane Florence, a project was developed to implement a hybrid, low maintenance solution to the problem. While this type of project was frequently approved in coastal environments, the efficacy on a river front was not well documented, so the project faced skepticism and doubt. Permitting then became a hurdle, due to

the innovative nature of the work; however, Mrs. Guilianelli was persistent and determined. When challenged, Jessica reached out to her partners for support and technical expertise and ensured that all permits were received, and the project could proceed.

When funds were lost due to the prolonged permitting timeline, Mrs. Guilianelli was able to petition Headquarters USMC for funding to support the critical project, which closely aligned military readiness, installation resilience, and ecosystem restoration. The funding ensured that the grant funding that had been previously received in collaboration with partners and the DoW Readiness and Environmental Protection Integration Program was not lost.

Concluding construction in September 2025, the massive 2.3-mile-long project spans over 75% of the Nuese River shoreline, between Hancock and Slocum Creeks. The project included the installation of over 130,000 native marsh plants to reduce wave energy, restore degraded habitat, and help stabilize the shoreline. The project protects vital operational spaces, recreational trails, Marine Corps Community Services facilities, housing, and critical utilities infrastructure, increasing the resilience of the installation in an area that is subject to frequent storms and flooding events.



Sediment is seen accumulating behind the granite sill almost immediately after construction. Over time, this shoreline protection will restore government lands that were lost to erosion.

Jessica demonstrated exceptional perseverance and unwavering dedication as she persistently supported the Nature Based Solution, which is the largest ever constructed by the DoW, the largest in the State of North Carolina, and the second largest on the East Coast. The innovative project has paved the way for other installations to use the lessons learned as a model for their own projects to ensure military readiness and the resilience of our coastal lands. Over time, the sill will not only protect existing government property, but it will also reduce maintenance costs for existing bulkheads, and it will gradually restore the land that was lost over time to erosion. She has already been able to leverage the project to increase knowledge of the monitoring of these hybrid solutions by utilizing LiDAR technology for more efficient data collection that will be transferable to other installations.

Due to her extensive involvement in the implementation of innovative solutions, Jessica was one of 50 individuals invited to represent the DoW by participating in a collaborative workshop event with the USFWS. The DoW/USFWS Conservation and Climate Summit resulted in significant progress towards streamlining the use of Nature Based Solutions to increase resilience on DoW and USFWS lands to ensure military readiness is maintained as a priority in the process. Her participation ensured that future guidance/policy issued by USFWS will take into account firsthand lessons learned and practical implementation expectations from installation input and experience.

Jessica was requested to speak on her implementation experience in front of a variety of audiences, including the Southeast Regional Partnership for Planning and Sustainability Coastal Resilience and Regional Adaptation Working Group. This presentation highlighted how MCAS Cherry Point was able to leverage partnerships to complete the innovative project. Jessica was nominated by MCICOM to serve as a presenter at the National Military Fish and Wildlife

Association annual training as a subject matter expert with a presentation titled: *Reducing Natural Hazards for DoD Installations: Lessons Learned from MCAS Cherry Point*. Jessica was also requested by the Professional Engineers of North Carolina to provide training for Professional Engineers requiring Professional Development Hours on multiple occasions.

In September 2025, Jessica was recognized by Marine Corps Installations East with a Certificate of Commendation for duties performed during the Commanding General’s Biennial Inspection. Ms. Guilianelli “demonstrated a high degree of leadership, bearing, and professionalism” during said inspection. Her “exceptional contributions, initiative, and loyal devotion to duty” were highlighted as contributing to the successful management of environmental programs and successful marks in the inspection.



Jessica Guilianelli is shown presenting lessons learned from the implementation of the nature-based solution to the Professional Engineers of North Carolina during their summer meeting.



Jessica Guilianelli was presented a Certificate of Commendation from the MCIEast Commanding General for “exceptional contributions, initiative, and loyal devotion to duty.”

Jessica’s accomplishments were not only recognized by the USMC, but also by local partners, as the North Carolina Coastal Federation presented her with a 2025 Pelican Award in September 2025. The Pelican Awards annually recognize exceptional contributions of individuals and organizations for protecting and restoring the North Carolina coast. Jessica was presented the Central Region Pelican Award for “Supporting, Promoting, and Advancing the Use of Living Shorelines” which highlighted how she “was instrumental in securing funding, permits, and partnerships, including collaboration with the (North Carolina Coastal) Federation to construct 2,029 feet of the living shoreline using grants from the North Carolina Land and Water Fund and the DoW Readiness and Environmental Protection Integration Program, administered by the National Fish and Wildlife Foundation. Jessica’s innovative and mission-focused leadership has positioned the military base as a model for sustainable shoreline management.”



Jessica Guilianelli was recognized by the North Carolina Coastal Federation with a 2025 Pelican Award for “Supporting, Promoting, and Advancing the Use of Living Shorelines.”

Jessica was instrumental in the acquisition and site approval for a citizen science monitoring program on the installation using Chronolog stations. The monitoring of changes in the environment can often be an expensive, labor intensive, and time-consuming process. In order to better quantify ecological benefits from the sill over time, the citizen science tool was a perfect fit for this location due to the shoreline’s proximity to newly established and heavily unutilized recreational trails and waterfront parks. Jessica’s innovative approach to monitoring will provide low-cost, crowd-sourced data that spans all seasons and days of the week, including storms that may occur during the weekend when the Natural Resources staff is not present. Each station includes a bracket, mounted onto a post, which ensures consistent formatting and orientation for all photos taken. After email submittal, photos are combined into time-lapsed videos for each station. The opportunities for outreach associated with these stations are endless and have already begun with



One of the Chronolog monitoring stations that were established to improve efficiency for monitoring the shoreline project and to provide outreach opportunities for the Environmental Affairs Department.

the development of educational signage to be installed. The time-lapsed videos are readily available on a public website (<https://www.chronolog.io/project/CHP>) and can be easily accessed by regulators and interested Marines and Sailors, alike. Having this extent of photo documentation will allow for change over time to be easily identified.

Mrs. Guilianelli's innovative and mission-focused leadership has positioned MCAS Cherry Point as a model for sustainable shoreline management and coastal resilience in support of the ultimate mission, which supports the continued training of the warfighter. The accomplishments above were all completed while short-staffed, filling multiple positions, and adjusting to a new organizational structure within the department. Her exceptional efforts and representation of the USMC make her deserving of special recognition.