

Horst, Rachel

From: CEER@brevardfl.gov
Sent: Thursday, January 1, 2026 1:11 PM
To: Horst, Rachel
Subject: A new CEER Recommendation has been submitted as ID #2026001

Recommendation # 2026001

Dear CEER Administrator,

Speak Up Brevard Recommendation ID #2026001 has been submitted. Please login to the CEER Application to start the recommendation evaluation workflow.

Contact Information:

Group/Organization	
Name	Tom Kennelly
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Alternate Email	

Recommendation Information:

Recommendation ID	2026001
Recommendation Title	Implementing a Dynamic Flood Mitigation Strategy Utilizing Canaveral Locks
Areas Affected	Storm water and flooding in northern Brevard
Department Affected	EMERGENCY MANAGEMENT OFFICE
Current problem	Executive Summary: Brevard County frequently experiences flooding events, exacerbated by hurricanes and seasonal rainfall. This proposal recommends a proactive, data-driven strategy involving continuous monitoring of St. Johns River water levels and

strategic opening of the Canaveral Locks to alleviate lagoon flooding, thereby reducing property damage, protecting residents, and improving lagoon health. This will require collaborative effort between the County EOC, the U.S. Army Corps of Engineers (USACE), and Port Canaveral. Background: Recent flooding events, notably in northern Brevard during October 2025, highlighted the vulnerability of roadways and residential properties to lagoon overflow and storm water flooding. Without a coordinated response, damage is costly, disruptive, and can lead to significant resident distress. Proposed Action: Real-Time Monitoring: Establish continuous monitoring of the St. Johns River's Depth of Collection using the provided URL:

<https://secure.sjrwmd.com/aqportal/Data/DataSet/Chart/Location/37375724/DataSet/Depth%20of%20Collection/YS/Interval/Latest>. A trigger level of 1.9 meters will be utilized as a starting point, with consideration for adjusting this threshold based on historical data and hydrological modeling. Lock Operation Protocol: When the Depth of Collection consistently exceeds the trigger level, the following criteria will be used to determine the initiation and duration of Canaveral Locks opening: Ocean Tide: Opening should coincide with the nearing of low tide. Lagoon Water Level: Opening should occur when the lagoon water level is demonstrably higher than the surrounding land. Duration: Lock operation will continue until the lagoon water level significantly decreases (defined by a measurable drop of at least 0.5 meters) and the Depth of Collection falls below the trigger level. Coordination & Communication: The Brevard County Emergency Operations Center (EOC) will serve as the central coordinating body, working directly with USACE and Port Canaveral to establish and execute this protocol. Clear communication channels and established response times are crucial.

Recommendation

Benefits (Expanded & Detailed): Rather than considering raising roads and other areas at great expense to the county eliminate the flooding using first principles thinking - eliminate the excess water Reduced Property Damage: Targeted drainage will minimize damage to roads (like Indian River Drive), homes, and infrastructure. This proactive approach is significantly more cost-effective than reactive flood response. Resident Protection: Provides a tangible mechanism to protect residents from flood damage and displacement, enhancing community resilience. Political Considerations (Reframed): While acknowledging the need for effective governance, this initiative is fundamentally about citizen safety and the responsible use of resources. Transparency and community engagement will be paramount. Lagoon Health Improvement: The process of draining excess freshwater will promote salinity balance within the lagoons, benefiting the delicate ecosystem and reducing the potential for algae blooms. This is a critical component often overlooked. Economic Impact: Reduced property damage translates to lower insurance premiums, less disruption to businesses, and a more stable local economy. Improved Flood Forecasting: Consistent monitoring and data collection will contribute to a more accurate understanding of flood dynamics within the region, informing future mitigation strategies. Potential Issues & Mitigation Strategies: Port Debris & Dredging: This is a valid concern. To mitigate this: Proactive Monitoring: Implement a system for continuous monitoring of the waterway leading to the locks for debris accumulation. Port Responsibilities: Clearly define Port Canaveral's responsibility for debris removal and establish a regular dredging schedule. This is something the Port can do for the citizens. Funding Mechanism: Explore options for dedicated funding for dredging, potentially through a portion of Port revenue. It is important to note that northern Brevard citizens are financially responsible for the Port and can be taxed for Port operations. The Port can give back to the community with this effort. Formal Agreement: Develop a written agreement outlining roles, responsibilities, communication protocols, and decision-making processes. Regular Meetings: Establish a standing committee involving representatives from each agency to discuss operational procedures and address potential challenges. Lock Operational Impacts: Consider potential impacts on maritime traffic and vessel operations. USACE should assess these impacts and implement measures to minimize disruption. Public Awareness: Develop a clear and accessible public awareness campaign to educate residents about the initiative, its purpose, and how it will be implemented. Next Steps: Conduct a hydrological assessment to refine the trigger level and optimize lock operation protocols. Secure formal agreements with USACE and Port Canaveral. Establish a dedicated monitoring system and communication network. Develop a comprehensive public awareness plan including an outreach to northern Brevard citizenry to strongly encourage their Port Commissioner to adopt this plan to help their community.

Attachments

NotRenderingCorrectlyInIE.docx
TEST.txt



BOARD OF COUNTY COMMISSIONERS

TO: Jim Liesenfelt, County Manager
THRU: Tad Calkins, Assistant County Manager
FROM: Amanda Elmore, Deputy Director, Natural Resources Management Dept.
SUBJECT: Citizen Efficiency and Effectiveness Recommendation (CEER) #2026001

CEER #2026001, titled Implementing a Dynamic Flood Mitigation Strategy Utilizing Canaveral Locks, was received by the County from Tom Kennelly.

Citizen Statement:

Executive Summary: Brevard County frequently experiences flooding events, exacerbated by hurricanes and seasonal rainfall. This proposal recommends a proactive, data-driven strategy involving continuous monitoring of St. Johns River water levels and strategic opening of the Canaveral Locks to alleviate lagoon flooding, thereby reducing property damage, protecting residents, and improving lagoon health. This will require collaborative effort between the County EOC, the U.S. Army Corps of Engineers (USACE), and Port Canaveral.

Background: Recent flooding events, notably in northern Brevard during October 2025, highlighted the vulnerability of roadways and residential properties to lagoon overflow and storm water flooding. Without a coordinated response, damage is costly, disruptive, and can lead to significant resident distress.

Proposed Action:

Real-Time Monitoring: Establish continuous monitoring of the St. Johns River's Depth of Collection using the provided URL:
<https://secure.sjrwmd.com/aqportal/Data/DataSet/Chart/Location/37375724/DataSet/Depth%20of%20Collection/YSI/Interval/Latest>. A trigger level of 1.9 meters will be utilized as a starting point, with consideration for adjusting this threshold based on historical data and hydrological modeling.

Lock Operation Protocol: When the Depth of Collection consistently exceeds the trigger level, the following criteria will be used to determine the initiation and duration of Canaveral Locks opening:

Ocean Tide: Opening should coincide with the nearing of low tide.

Lagoon Water Level: Opening should occur when the lagoon water level is demonstrably higher than the surrounding land.

Duration: Lock operation will continue until the lagoon water level significantly decreases (defined by a measurable drop of at least 0.5 meters) and the Depth of Collection falls below the trigger level.

Coordination & Communication: The Brevard County Emergency Operations Center (EOC) will serve as the central coordinating body, working directly with USACE and Port Canaveral to establish and execute this protocol. Clear communication channels and established response times are crucial.

Citizen Recommendation:

Benefits (Expanded & Detailed):

Rather than considering raising roads and other areas at great expense to the county eliminate the flooding using first principles thinking - eliminate the excess water

Reduced Property Damage: Targeted drainage will minimize damage to roads (like Indian River Drive), homes, and infrastructure. This proactive approach is significantly more cost-effective than reactive flood response.

Resident Protection: Provides a tangible mechanism to protect residents from flood damage and displacement, enhancing community resilience.

Political Considerations (Reframed): While acknowledging the need for effective governance, this initiative is fundamentally about citizen safety and the responsible use of resources. Transparency and community engagement will be paramount.

Lagoon Health Improvement: The process of draining excess freshwater will promote salinity balance within the lagoons, benefiting the delicate ecosystem and reducing the potential for algae blooms. This is a critical component often overlooked.

Economic Impact: Reduced property damage translates to lower insurance premiums, less disruption to businesses, and a more stable local economy.

Improved Flood Forecasting: Consistent monitoring and data collection will contribute to a more accurate understanding of flood dynamics within the region, informing future mitigation strategies.

Potential Issues & Mitigation Strategies:

Port Debris & Dredging: This is a valid concern. To mitigate this:

Proactive Monitoring: Implement a system for continuous monitoring of the waterway leading to the locks for debris accumulation.

Port Responsibilities: Clearly define Port Canaveral's responsibility for debris removal and establish a regular dredging schedule. This is something the Port can do for the citizens.

Funding Mechanism: Explore options for dedicated funding for dredging, potentially through a portion of Port revenue. It is important to note that northern Brevard citizens are financially responsible for the Port and can be taxed for Port operations. The Port can give back to the community with this effort.

Formal Agreement: Develop a written agreement outlining roles, responsibilities, communication protocols, and decision-making processes.

Regular Meetings: Establish a standing committee involving representatives from each agency to discuss operational procedures and address potential challenges.

Lock Operational Impacts: Consider potential impacts on maritime traffic and vessel operations. USACE should assess these impacts and implement measures to minimize disruption.

Public Awareness: Develop a clear and accessible public awareness campaign to educate residents about the initiative, its purpose, and how it will be implemented.

Next Steps:

Conduct a hydrological assessment to refine the trigger level and optimize lock operation protocols.

Secure formal agreements with USACE and Port Canaveral.

Establish a dedicated monitoring system and communication network.

Develop a comprehensive public awareness plan including an outreach to northern Brevard citizenry to strongly encourage their Port Commissioner to adopt this plan to help their community.

Staff Analysis:

It is understandable why some may view opening the Canaveral Lock (lock) to reduce water levels in the Indian River Lagoon (IRL) as a viable flood mitigation strategy. However, the lock is owned and operated by the U.S. Army Corps of Engineers (USACE) and is, therefore, not under County jurisdiction. The USACE has confirmed that the lock is operated solely for navigational purposes due to prior damage resulting from its use for flood control.

Following Tropical Storm Fay, which produced up to 27 inches of rainfall and significantly elevated IRL water levels, the lock was opened for approximately one week to relieve flooding. During that time, substantial sand, silt, and debris migrated into the Port, damaging the lock and creating extensive operational issues. This ultimately required a costly, multi-year dredging and repair effort within the Port basin. The Trident submarine channel was also obstructed, raising military readiness concerns. As a result, the USACE does not support opening the lock for water level management on either a routine or event-driven basis. Maintaining reliable Port operations is critical to Brevard County, the U.S. Navy, Coast Guard, Air Force, rocket booster recovery, and cruise ship operations, particularly during and after major storm events.

Lastly, the control structures that can regulate flow to the IRL from the St Johns River (SJR) are all located south of the Melbourne Causeway and are under St. Johns River Water Management District (SJRWMD) control. In addition, the SJRWMD is already implementing real time flood mitigation controls on their operable structures in the SJR upper basin. Controlled systems to divert flow from the SJR to the IRL north of Cocoa do not currently exist and would be highly unlikely to be permitted regardless of lock operations.

Staff Recommended Action:

It is recommended that the Board of County Commissioners reject CEER #2026001, as the matter is outside the Board's jurisdiction and it does not enhance the effectiveness or efficiency of County government as required by Section 2.9.10 of the Brevard County Home Rule Charter.