Table of the Five Pre-Screening Criteria used to Evaluate the Six Estuarine Zones along with Pre-Screening Recommendation by Designation Leadership Team (DLT).

Pre-Screening Criteria #1 Unique Coastal Setting	Pre-Screening Criteria #2 State-Owned Lands	Pre-Screening Criteria #3 Land Integrity	Pre-Screening Criteria #4 Change in Habitat Diversity	Pre-Screening Criteria #5 Hydrologic Manipulations	Pre-Screening Recommendation by DLT
1. Are there potential core areas (state-owned lands and waters) in this Estuarine Zone that represent unique habitats, coastal processes and salinity gradients of a delta estuary in comparison to the other NERR sites in Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13). Unique environmental representativeness is important to the research and education mission of a NERR. Description: Current distribution of habitat types, based on 2017 Coastal Master Plan initial condition vegetation, was used to define salinity zones in each Estuarine Zone. Habitat types are shown in outlined areas of state-owned land in red.	2. Is there currently sufficient area of state-owned lands within this Estuarine Zone conducive to developing LaNERR Candidate Sites that meet National Estuarine Reserve System objectives? Description: Majority of publicly-owned land used as core areas within a candidate site cannot be federal lands. Further, the state must demonstrate adequate management control for core areas to be designated as a NERR. NOAA requires that state lands be available in the initial designation of a NERR site since the agreement is a NOAA-state MOU.	3. Is the integrity of the wetlands that may serve as potential core (state-owned land) and buffer areas that provide the unique features of the NERR (see criterion #1) maintained in perpetuity within this Estuarine Zone, which would allow for development of facilities and programs (research & education)? Description: Land change was measured by comparing the 2017 Coastal Master Plan initial condition vegetation to the year 50 projected vegetation under the medium scenario with implementation of the plan. A reduction of 50% in wetland area from initial to projected was considered sufficient to question the integrity of a zone.	4. Do the wetlands that would serve as potential core (state-owned land) and buffer areas currently support a diversity of habitats along a salinity gradient representative of a delta estuary. Do these wetland areas maintain a diversity of habitats in perpetuity (maintain integrity) within this Estuarine Zone over the next 50 years? Description: Changes that demonstrate Significant Habitat Diversity change represent conflict with foreseeable program development in research & education to meet the mission of a NERR. Change in habitat diversity was measured by comparing the 2017 Coastal Master Plan initial condition vegetation to the year 50 projected vegetation under the medium scenario with implementation of the plan. Insignificant change (fresh or saline habitat change <-25%). Moderate change (fresh or saline habitat change -25 to -65%). Significant change (fresh or saline habitat change > -65%.	5. Do existing or anticipated operations of water control structures and levees (including marsh impoundments) by federal and state authorities with sole purpose of manipulating hydrology in coastal basins for either flood control, marsh management, or coastal restoration have the potential to impact the integrity of potential core or buffer areas thus causing potential conflicts between LaNERR objectives (environmental representativeness, research & education)?	The following columns contain summary statements and recommendations for each Estuarine Zone prepared by the Designation Leadership Team.

Criterion #1 and Evaluation of each Estuarine Zone.

Estuarine Zone	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Zone
Pre-Screening Criteria	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation
1. Are there potential core areas (state-owned lands and waters) in this Estuarine Zone that represent unique habitats, coastal processes and salinity gradients of a delta estuary in comparison to the other NERR sites in Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13). Unique environmental representativeness is important to the research and education mission of a NERR. Description: Current distribution of habitat types, based on 2017 Coastal Master Plan initial condition vegetation, was used to define salinity zones in each Estuarine Zone. Habitat types are shown in outlined areas of state-owned land in red.	<u>Insignificant Unique Setting:</u> The coastal setting represented by state-owned lands of this Estuarine Zone is not unique to other NERR sites in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates dominance by brackish and salt zones. The chenier ridges, if they can be included in state-owned lands, are considered a unique habitat of delta estuary.	<u>Significant Unique Setting:</u> The coastal setting of this Estuarine Zone is unique in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates dominance by tidal freshwater but with both forested wetlands and brackish marshes. The development of candidate sites for LaNERR in this Estuarine Zone would provide unique habitats, coastal processes and salinity gradients that could be used for program development (research & education).	<u>Insignificant Unique Setting:</u> The coastal setting of this Estuarine Zone is not unique in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates dominance by salt and brackish marsh with little representation of other salinity zones. The development of candidate sites for LaNERR in this Estuarine Zone would not provide unique habitats, coastal processes and salinity gradients that could be used for program development (research & education).	<u>Significant Unique Setting:</u> The coastal setting of this Estuarine Zone is unique in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates equal distribution by freshwater, brackish and saline zones. The development of candidate sites for LaNERR in this Estuarine Zone would provide unique habitats, coastal processes and salinity gradients that could be used for program development (research & education).	<u>Significant Unique Setting:</u> The coastal setting of this Estuarine Zone is unique in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates equal distribution by freshwater, brackish and saline zones. The development of candidate sites for LaNERR in this Estuarine Zone would provide unique habitats, coastal processes and salinity gradients that could be used for program development (research & education).	<u>Significant Unique Setting:</u> The coastal setting of this Estuarine Zone is unique in the Louisianian Biogeographic Zone of NERR System (sections 11, 12, 13) based on the objective to represent delta estuary. The vegetation diversity demonstrates dominance by intermediate salinity zones but also has freshwater, brackish and saline zones. The development of candidate sites for LaNERR in this Estuarine Zone would provide unique habitats, coastal processes and salinity gradients that could be used for program development (research & education).

Criterion #2 and Evaluation of each Estuarine Zone.

Estuarine Zone	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Zone
Pre-Screening Criteria	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation
2. Is there currently sufficient area of state-owned lands within this Estuarine Zone conducive to developing LaNERR Candidate Sites that meet National Estuarine Reserve System objectives? Description: Majority of publicly-owned land used as core areas within a candidate site cannot be federal lands. Further, the state must demonstrate adequate management control for core areas to be designated as a NERR. NOAA requires that state lands be available in the initial designation of a NERR site since the agreement is a NOAA-state MOU.	Insufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Calcasieu Estuarine Zone is very limited. Most of the public lands in this Estuarine Zone are federal lands. State Lands = 3,046 acres; Other Public Lands = 152,585 acres	Sufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Atchafalaya Estuarine Zone is sufficient. State Lands = 347,945 acres; Other Public Lands = 57,227 acres	Sufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Terrebonne Estuarine Zone is sufficient. State Lands = 44,203 acres; Other Public Lands = 15,260 acres	Sufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Barataria Estuarine Zone is sufficient. State-owned lands in this Estuarine Zone are slightly less compared to other public lands. State Lands = 40,185 acres; Other Public Lands = 49,913 acres	Sufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Pontchartrain Estuarine Zone is sufficient. State Lands = 200,207 acres; Other Public Lands = 53,640 acres	Sufficient Core Areas: The current availability of state-owned lands to establish core areas for candidate LaNERR sites in the Mississippi River Estuarine Zone is sufficient. State Lands = 116,118 acres; Other Public Lands = 49,048 acres

Criterion #3 and Evaluation of each Estuarine Zone.

Estuarine Zone	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Zone
Pre-Screening Criteria	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation
3. Is the integrity of the wetlands that may serve as potential core (state-owned land) and buffer areas that provide the unique features of the NERR (see criterion #1) maintained in perpetuity within this Estuarine Zone, which would allow for development of facilities and programs (research & education)? Description: Land change was measured by comparing the 2017 Coastal Master Plan initial condition vegetation to the year 50 projected vegetation under the medium scenario with implementation of the plan. A reduction of 50% in wetland area from initial to projected was considered sufficient to question the integrity of a zone.	<u>Insignificant Area Change:</u> There is insignificant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR The Estuarine Zone has minimum potential level of conflict because of future land loss with respect to developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 237,001 acres; Projected Wetland Area = 194,655 acres. % Wetland Change = -18.1%	<u>Insignificant Area Change:</u> There is insignificant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient, and the Estuarine Zone has minimum potential level of conflict because of future land loss with respect to developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 1,120,997 acres; Projected Wetland Area = 1,045,730 acres. Wetland Change = -6.7%	<u>Significant Area Change:</u> There is significant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient at present (initial conditions), but the Estuarine Zone has significant level of conflict in the future because of land loss of core areas that would be used for developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 115,007 acres; Projected Wetland Area = 33,573 acres. Wetland Change = -70.8%	<u>Insignificant Area Change:</u> There is insignificant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient, and the Estuarine Zone has minimum potential level of conflict because of future land loss with respect to developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 473,285 acres; Projected Wetland Area = 314,916 acres. Wetland Change = -33.5%	<u>Insignificant Area Change:</u> There is insignificant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient, and the Estuarine Zone has minimum potential level of conflict because of future land loss with respect to developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 597,075 acres; Projected Wetland Area = 484,214 acres. Wetland Change = -18.9%	<u>Significant Area Change:</u> There is significant land loss in the potential core areas (state-owned lands) that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient at present (initial conditions), but the Estuarine Zone has significant level of conflict in the future because of land loss of core areas that would be used for developing facilities and programs (research & education) of LaNERR. Initial Wetland Area = 107,521 acres; Projected Wetland Area = 38,766 acres. Wetland Change = -69.9%

Criterion #4 and Evaluation of each Estuarine Zone.

Estuarine Zone	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Zone
Pre-Screening Criteria	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation
4. Do the wetlands that would serve as potential core (state-owned land) and buffer areas currently support a diversity of habitats along a salinity gradient representative of a delta estuary. Do these wetland areas maintain a diversity of habitats in perpetuity (maintain integrity) within this Estuarine Zone over the next 50 years? Description: Changes that demonstrate Significant Habitat Diversity change represent conflict with foreseeable program development in research & education to meet the mission of a NERR. Change in habitat diversity was measured by comparing the 2017 Coastal Master Plan initial condition vegetation to the year 50 projected vegetation under the medium scenario with implementation of the plan. Insignificant change (fresh or saline habitat change <-25%). Moderate change (fresh or saline habitat change -25 to -65%). Significant change (fresh or saline habitat change > -65%.	Significant Habitat Diversity Change: There is significant change in habitat types in the core areas that could be used to develop candidate sites for LaNERR. Potential core areas in the Estuarine Zone are insufficient in the future because of significant habitat change to develop programs (research & education) of LaNERR. Percent change in Fresh Wetland Area = -94.7%. Percent change in Saline Wetland Area = -8.4%.	Moderate Habitat Diversity Change: There is moderate change in habitat types in the core areas that could be used to develop candidate sites for LaNERR. Potential core areas are sufficient and the Estuarine Zone has moderate potential level of conflict due to change in habitat type that would impact future program development (research & education) of LaNERR. Percent change in Fresh Wetland Area = +6.2%. Percent change in Saline Wetland Area = -48.6%.	Significant Habitat Diversity Change: There is significant change in habitat types in the core areas that could be used to develop candidate sites for LaNERR and the diversity lacks tidal freshwater habitats. Potential core areas in the Estuarine Zone are insufficient in the future because of significant habitat change to develop programs (research & education) of LaNERR. Percent change in Fresh Wetland Area = +12.0%. Percent change in Saline Wetland Area = -73.8%.	Significant Habitat Diversity Change: There is significant change in habitat types in the core areas that could be used to develop candidate sites for LaNERR. Potential core areas in the Estuarine Zone are insufficient in the future because of significant habitat change to develop programs (research & education) of LaNERR. Percent change in Fresh Wetland Area = +13.9%. Percent change in Saline Wetland Area = -69.8%.	Significant Habitat Diversity Change: There is significant change in habitat types in the core areas that could be used to develop candidate sites for LaNERR. Potential core areas in the Estuarine Zone are insufficient in the future because of significant habitat change to develop programs (research & education) of LaNERR. Percent change in Fresh Wetland Area = +26.8%. Percent change in Saline Wetland Area = -82.6%.	Significant Habitat Diversity Change: There is significant change in habitat types in the core areas that could be used to develop candidate sites for LaNERR. Potential core areas in the Estuarine Zone are insufficient in the future because of significant habitat change to develop programs (research & education) of LaNERR. Percent change in Fresh Wetland Area = +343.8%; Percent change in Saline Wetland Area = -96.5%.

Criterion #5 and Evaluation of each Estuarine Zone.

Estuarine Zone	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Zone
Pre-Screening Criteria	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation	Pre-Screening Recommendation
5. Do existing or anticipated operations of water control structures and levees (including marsh impoundments) by federal and state authorities with sole purpose of manipulating hydrology in coastal basins for either flood control, marsh management, or coastal restoration have the potential to impact the integrity of potential core or buffer areas thus causing potential conflicts between LaNERR objectives (environmental representativeness, research & education)?	Hydrologic Control Impacts - Potentially Interfere: The coastal setting of this Estuarine Zone presents future potential coastal management issues with planned construction of marsh management and salinity control structures associated with the Calcasieu Ship Channel. The planning of candidate sites in this Estuarine Zone will have to consider how to incorporate these manipulations in planning program development (research & education) that utilize these impacts.	Hydrologic Control Impacts - Insignificant: This Estuarine Zone is manipulated by the Old River Control Structure at the head of the Atchafalaya River Basin. This flood control structure operates on a fixed percentage (70/30% split) of flow from combined Red and Mississippi River discharge that is directed to the Mississippi and Atchafalaya River, respectively. Given the percentage of total flow represents seasonal flood-pulse of a major river basin, this is not considered an operation abnormal to seasonal river flood patterns.	Hydrologic Control Impacts - Potentially Interfere: This Estuarine Zone is impacted by water control structures (e.g., Pointe-aux-Chenes WMA) and the construction and operation of the Morganza to the Gulf flood control project that has water control structures and levees that may impact developing programs (research & education) in candidate sites for LaNERR.	Hydrologic Control Impacts - Potentially Interfere: The coastal setting of this Estuarine Zone presents future potential coastal management issues with operation of the Mid-Barataria diversion structure and Upper Barataria Risk Reduction Project. The planning of candidate sites in this Estuarine Zone will have to consider how to incorporate these manipulations in planning program development (research & education) that utilize these impacts.	Hydrologic Control Impacts - Potentially Interfere: The coastal setting of this Estuarine Zone presents future potential coastal management issues with operation of the Bonnet Carre flood control structure and West Shore Lake Pontchartrain flood protection project. In addition, there is the future construction of the Maurepas diversion structure. The planning of candidate sites in this Estuarine Zone will have to consider how to incorporate these manipulations in planning program development (research & education) that utilize these impacts.	Hydrologic Control Impacts - Insignificant: This Estuarine Zone does not have issues of impacts from water control structures and levees that would potentially impact developing programs (research & education) in candidate sites for LaNERR.

SUMMARY STATEMENT RECOMMENDATIONS	Calcasieu Estuarine Zone	Atchafalaya Estuarine Zone	Terrebonne Estuarine Zone	Barataria Estuarine Zone	Pontchartrain Estuarine Zone	Mississippi River Estuarine Z
The following columns contain summary statements and recommendations for each Estuarine Zone prepared by the Designation Leadership Team.	The Calcasieu Estuarine Zone has very limited state-owned lands that could be used as core areas to establish a LaNERR. The state-owned lands that are currently present do not represent the diverse unique habitats and processes of delta estuary. The changes in land area are not significant, but changes in habitat type are significant. Due to the lack of state-owned land, there is limited opportunity for establishing a LaNERR in this Estuarine Zone. Further, hydrologic manipulations potentially challenge the establishment of a NERR.	The Atchafalaya Estuarine Zone currently has significant state-owned lands that represent the unique habitats and processes of delta estuary. There are diverse habitat types and salinity zones representative of a delta estuary. The projected changes to both the land area and habitat types over the next 50-yrs are insignificant and moderate, respectively. This zone experiences the least future change when compared to the other zones. This Estuarine Zone represents a region sufficient to establish a LaNERR, and hydrologic manipulations will not challenge the establishment of a NERR.	The Terrebonne Estuarine Zone currently has state-owned lands that could serve as core areas. However, the zone does not have a diversity of habitat types or salinity gradients representative of a delta estuary. The projected changes to both the land area and habitat types over the next 50-yrs limit the potential of this zone for establishing a LaNERR. Further, hydrologic manipulations potentially challenge the establishment of a NERR.	The Barataria Estuarine Zone currently has significant state-owned lands that represent the diverse habitats and salinity gradients of a delta estuary. The projected changes in land area are not significant, but changes in habitat type over the next 50-yrs is significant. The more interior regions of this Estuarine Zone may represent a region sufficient to establish a LaNERR. Hydrologic manipulations will potentially challenge the establishment of a LaNERR.	The Pontchartrain Estuarine Zone currently has significant state-owned lands that represent the diversity habitats and salinity gradients of a delta estuary. The projected changes in land area are not significant, but changes in habitat type over the next 50-yrs is significant. The more interior regions of this Estuarine Zone may represent a region sufficient to establish a LaNERR. However, hydrologic manipulations will potentially challenge the establishment of a NERR.	The Mississippi River Estuarine Zone has current state-owned lands that represent the unique habitats, although dominated by intermediate marsh and salinity zone. There are both fresh and saline habitats in this Estuarine Zone. However, the projected loss of land area and changes to habitat types over the next 50-yrs limit the potential of this zone for establishing a LaNERR. Hydrologic manipulations will not challenge the establishment of a NERR.