

# LaNERR – Louisiana National Estuarine Research Reserve

Site Development Committee Meeting #5

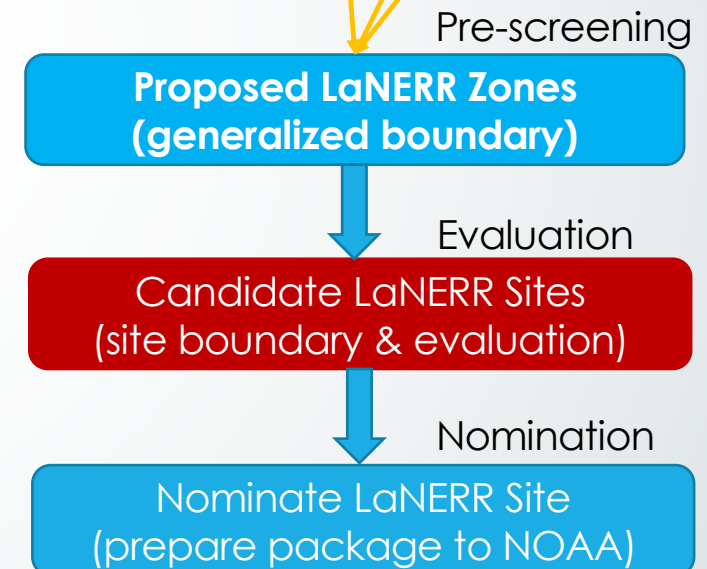
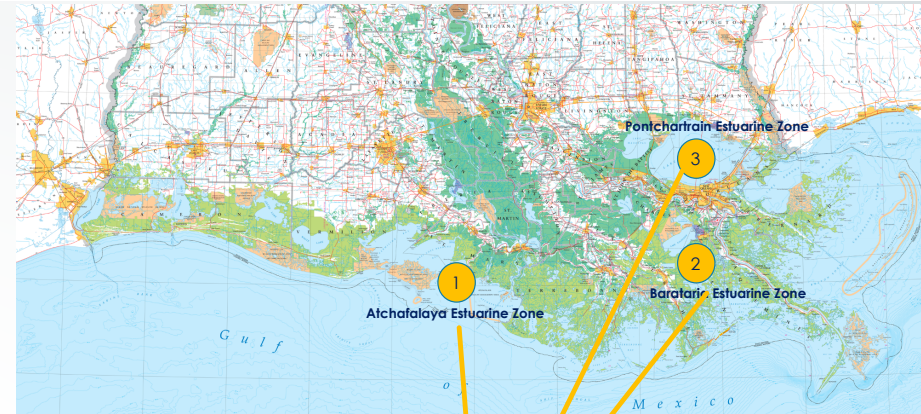
*May 13, 2021*





## How will Louisiana determine where to establish a LaNERR?

1. Develop **pre-screening criteria** that reflect LaNERR goals;
2. **Establish generalized zones** within which to identify candidate sites;
3. Use proposed zones to **modify NOAA site criteria** to help identify sites for consideration and final nomination;
4. Evaluate proposed LaNERR Zones to **select candidate sites** that define preferred goals;
5. **Generate public support and partnerships** for proposed final site to NOAA.





## Agenda:

Time	Topic
5 min	Welcome
60 min	Phase I Proposal Presentations
20 min	Pontchartrain Estuarine Zone
20 min	Barataria Estuarine Zone
20 min	Atchafalaya Estuarine Zone
30 min	2 <sup>nd</sup> Draft Site Selection Criteria
15 min	Phase II and Final Candidate Site Proposal Guidance
10 min	Wrap up and next steps: <ul style="list-style-type: none"><li>• Screening Subcommittee Meeting – Early June</li><li>• Criteria Subcommittee Meeting – Late May</li><li>• Proposal Team Check In – Late May and Mid June</li><li>• Phase II Proposals Due – June 30</li><li>• SDC Meeting #6 – Late July</li></ul>



**Pre-meeting Materials: LaNERR website**  
([www.laseagrant.org/deltanerr/](http://www.laseagrant.org/deltanerr/)) (password: deltanerr)

1. [Pontchartrain LaNERR Team Phase I Proposal](#) (PDF)
2. [Barataria LaNERR Team Phase I Proposal](#) (PDF)
3. [Atchafalaya LaNERR Team Phase I Proposal](#) (PDF)
4. [Second Draft of Site Criteria](#) (PDF)
5. [Phase II and Final Candidate Site Proposal Guidance](#) (PDF)
6. [Update of LaNERR Designation Workflow & Schedule](#) (PDF)



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# Protected: LaNERR: Site Development Committee

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Louisiana Sea Grant » LaNERR » Protected: LaNERR: Site Development Committee

## LaNERR: Site Development Committee

This password protected webpage has been set up to share information and files with the LaNERR Site Development Committee. Please do not share these files or links with others.

### Site Proposal Team Resources:

- Louisiana Governor and NOAA Letter of Intent (PDF)
- Recording of Site Proposal Team Meeting with DLT (Friday, Apr 16)
- Connecticut Site Nomination Package to NOAA

### SDC Meeting #5 Materials: 13 May 2021

1. Pontchartrain LaNERR Team Phase I Proposal (PDF)
2. Barataria LaNERR Team Phase I Proposal (PDF)
3. Atchafalaya LaNERR Team Phase I Proposal (PDF)
4. Second Draft of Site Criteria (PDF)
5. Phase II and Final Candidate Site Proposal Guidance (PDF)
6. Update of LaNERR Designation Workflow & Schedule (PDF)

### SDC Meeting #4 Materials: 30 & 31 Mar 2021

1. SDC Meeting #4 Presentation Slides (PDF)
2. SDC Meeting #4 Summary (PDF)
3. LaNERR Site Selection and Nomination Workflow Overview & Schedule – 2021 (Version 2) (PDF)



## Objectives:

1. Discuss Phase I Proposals
2. Discuss 2nd Draft Site Selection Criteria
3. Discuss Phase II and Final Candidate Site Proposal Guidance

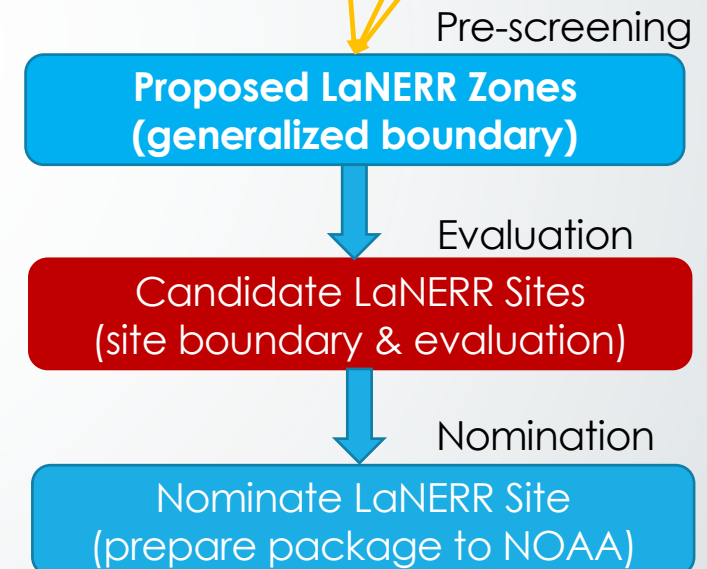
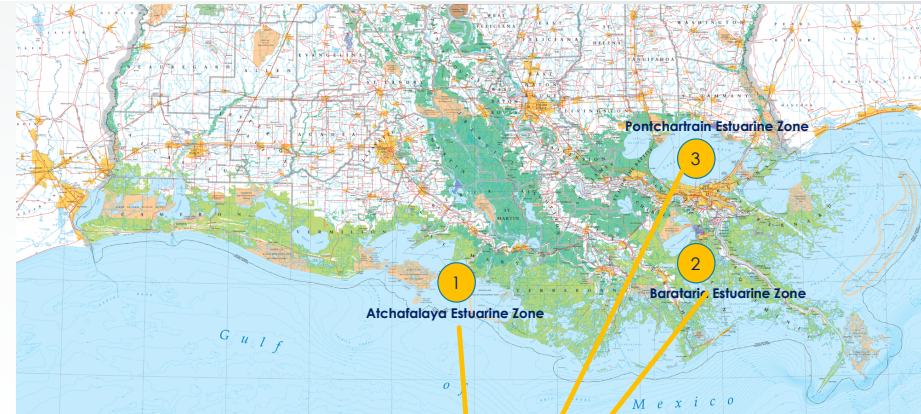
## Post-meeting follow up from DLT:

1. Recording of meeting
2. Meeting summary



## How will Louisiana determine where to establish a LaNERR?

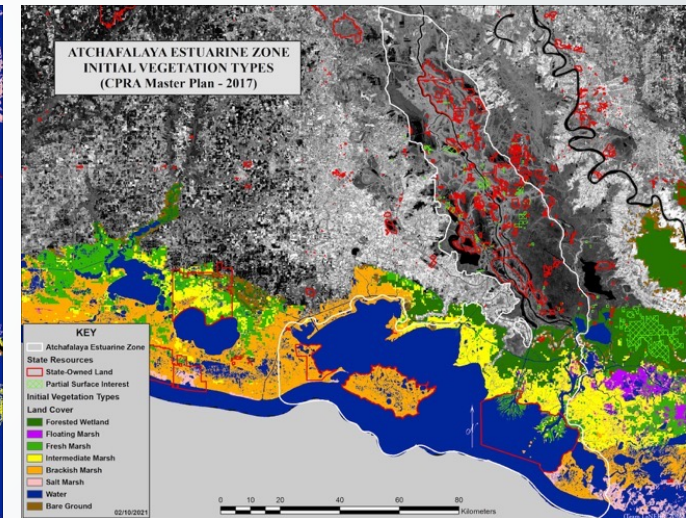
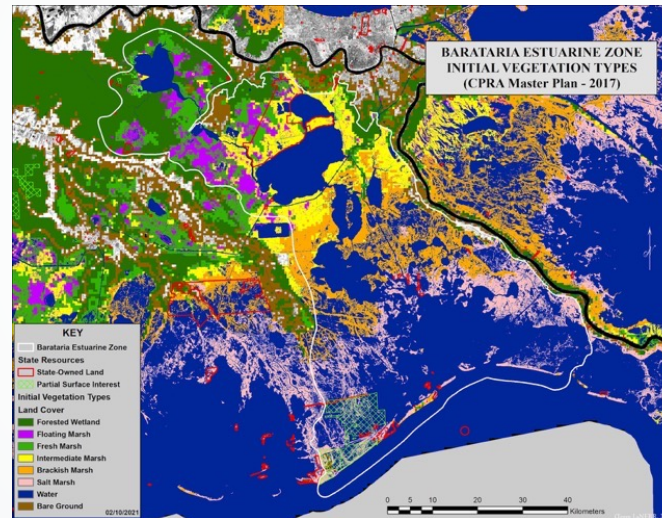
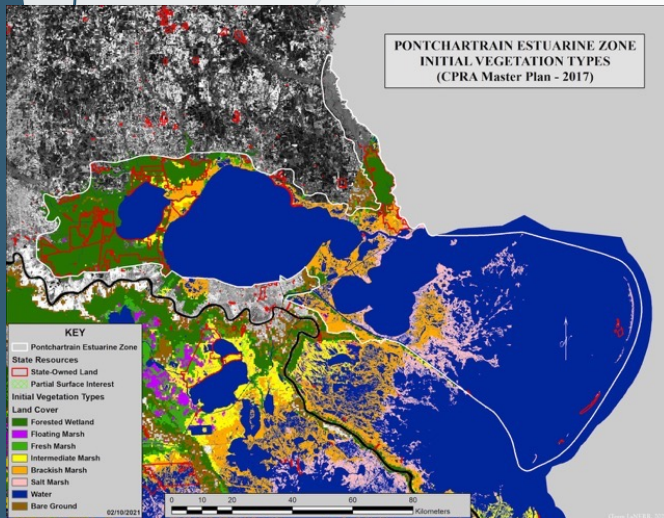
1. Develop pre-screening criteria that reflect LaNERR goals;
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3. Use proposed zones to modify NOAA site criteria to help identify sites for consideration and final nomination;
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## Candidate Site Proposals: Phase I Presentations to Site Development Committee

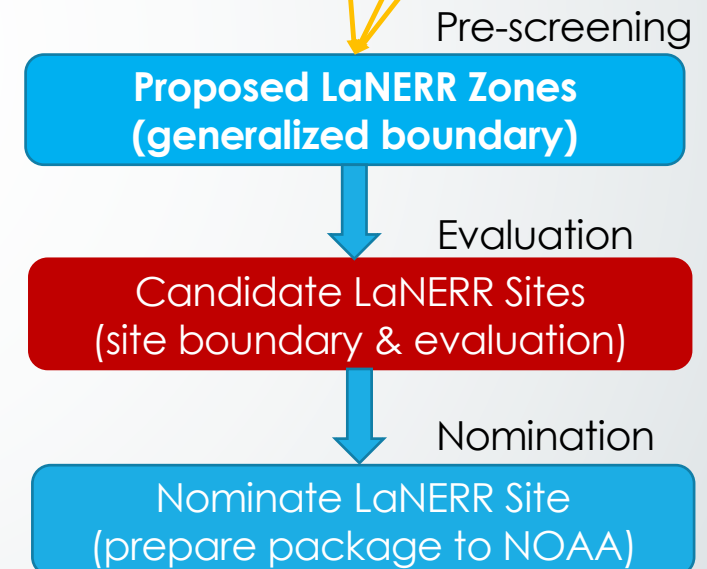
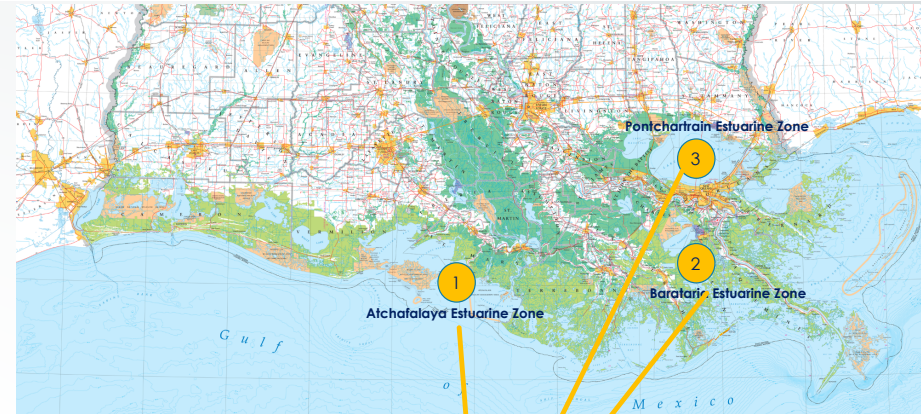






## How will Louisiana determine where to establish a LaNERR?

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# Criteria from the NOAA guidelines to establish a LaNERR site in the Mississippi River Delta.

## National Estuarine Research Reserve Designation Guidance

Site Selection, Nomination, and Designation

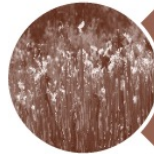


February 1, 2020

Authored by NOAA



Stewardship Division  
Office for Coastal Management  
National Ocean Service  
National Oceanic and Atmospheric Administration



### I. Environmental Representativeness



### II. Value of the Site for Research, Monitoring, and Resource Protection



### III. Suitability of the Site for Education and Interpretation



### IV. Acquisition and Management Considerations



## Site Criteria Subcommittee

### Criteria Subcommittee Members

Andy Fischer  
Brian Roberts  
Gary Shaffer  
Heather Stone  
Honora Buras  
Ilya Tietzel  
John Nyman  
Jonathan Foret  
Julie Whitbeck  
Justin Lemoine  
Kristi Trail  
Maida Owens  
Mark Tobler  
Michael Pasquier  
Natalie Snider  
Rebecca Triche  
Robert Moreau  
T. Erin Cox  
Thomas Robert  
Tracy Quirk

- The Designation Leadership Team (DLT) made minor modifications to the NOAA Site Selection Criteria which represents the 1<sup>st</sup> draft of the LaNERR Site Selection Criteria. The 2<sup>nd</sup> draft is due to the DLT at the end of April.
- Customizing NOAA Site Selection Criteria for use in screening and scoring candidate LaNERR site proposals is not intended to be a major or wholesale revision, but rather a review of the criteria with a focus on terminology that is so drastically unapplicable to coastal Louisiana and the uniqueness of our habitats that it cannot be applied as is in the LaNERR process.
- For example, we suggested changing the use of “high, mid, and low marsh zones” to “tidal freshwater, brackish, salt marsh zones including mangroves,” as this is more characteristic of Louisiana’s coastal systems. You may also suggest the addition of new criteria if unique coastal Louisiana features and/or areas of focus or importance are lacking from the list as provided.
- Prior to using the revised criteria to screen and score candidate site proposals, NOAA must review and approve the revisions.



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

**1.1 Ecosystem composition:** A measure of the diversity of ecosystem types present within the boundaries of the site. This criterion is based on the assumption that sites that have a high diversity of major ecosystem types are of higher relative “value” for protection and management than those with low ecosystem diversity (unless the ecosystem in consideration is rare or unique).

- 3 Points The site has a high diversity of habitat composition within its major ecosystem type, i.e., it contains three or more habitat types or subtypes within its major ecosystem type (e.g., site consists of a combination of swamps, coastal marshes, and mud flats) or has a combination of multiple coastal marsh types (e.g., tidal freshwater, brackish, salt marsh zones).
- 2 Points The site has a moderate diversity of habitat composition within its major ecosystem type, i.e., it contains only two habitat types or subtypes within its major ecosystem type (e.g., consists of a combination of forested wetlands and a single coastal marsh type).
- 1 Point The site has a low diversity of habitat composition within its major ecosystem type, i.e., its major ecosystem type consists of a single habitat type (e.g., tidal freshwater marsh or brackish marsh, or forested wetland).

These are the suggested Ecosystem Types to be used in the LaNERR evaluation:

### Group I- Uplands

- Alluvial Forested Wetlands
- Maritime Forest- Woodland
- Coastal Prairie
- Coastal Shrublands and Cheniers

### Group II- Intertidal areas

- Coastal Forested Wetlands
- Coastal Floating Marshes
- Coastal Freshwater Marsh
- Coastal Intermediate Marsh
- Coastal Brackish Marsh
- Coastal Salt Marsh
- Coastal Mangroves
- Intertidal Beaches and Dunes
- Intertidal Mud and Sand Flats

### Group III- Submerged Bottoms

- Subtidal hard bottoms/reefs
- Subtidal soft bottoms
- Subtidal Plants (SAV)



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.2 Balanced Ecosystem Composition: A measure of the relative composition of ecosystem types within the boundaries of a site (buffer plus core areas). This criterion is based on the assumption that sites with a balanced proportion of ecosystem types are of higher relative "value" for protection and management. High, moderate, and low values are assigned to sites that contain variations in the proportions of all three ecosystem types. A value of zero is assigned to a site that is dominated by one ecosystem type or contains less than three ecosystem types.

3 Point. The site contains representative upland, intertidal, and subtidal habitats in relatively equal proportions (i.e. areal cover of any one ecosystem type not less than 25 percent of the total area)

2 Point. The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type not less than 10 percent of the total area.

1 Point. The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type less than 10 percent of the total area

0 Points the site contains representative upland, intertidal and subtidal habitats, with the areal cover of two types being less than 10 percent of the total area or the site consists of habitats from only one or two of the three major ecosystem types





ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.2 Balanced Ecosystem Composition: A measure of the relative composition of ecosystem types within the boundaries of a site (buffer plus core areas). This criterion is based on the assumption that sites with a balanced proportion of ecosystem types are of higher relative "value" for protection and management. High, moderate, and low values are assigned to sites that contain variations in the proportions of all three ecosystem types. A value of zero is assigned to a site that is dominated by one ecosystem type or contains less than three ecosystem types.

3 Point. The site contains representative upland, intertidal, and subtidal habitats in relatively equal proportions (i.e. areal cover of any one ecosystem type not less than 25 percent of the total area)

2 Point. The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type not less than 10 percent of the total area.

1 Point. The site contains representative upland, intertidal, and subtidal habitats, with the areal cover of any one type less than 10 percent of the total area

0 Points the site contains representative upland, intertidal and subtidal habitats, with the areal cover of two types being less than 10 percent of the total area or the site consists of habitats from only one or two of the three major ecosystem types



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.3 Habitat Composition and Complexity: A measure of the diversity of habitat types present within the major ecosystem type found within the boundaries of the site. This criterion is based on the assumption that sites that have a high diversity of habitat types are of higher relative “value” for protection and management than those with a low diversity of habitat types. Major ecosystem type is defined here as that type that comprises approximately 40 percent of the site. Use the habitat type designations listed above for “ecosystem composition.”

- 3 Points The site has a high diversity of habitat composition within its major ecosystem type, i.e., it contains three or more habitat types or subtypes within its major ecosystem type (e.g., site consists of a combination of swamps, coastal marshes, and reefs) or has a combination of multiple coastal marsh types (e.g., tidal freshwater, brackish, salt marsh zones including mangroves).
- 2 Points The site has a moderate diversity of habitat composition within its major ecosystem type, i.e., it contains only two habitat types or subtypes within its major ecosystem type (e.g., consists of a combination of swamps and a single coastal marsh type).
- 1 Point The site has a low diversity of habitat composition within its major ecosystem type, i.e., its major ecosystem type consists of a single habitat type (e.g., brackish marsh or tidal freshwater wetlands).



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

### 1.4 Habitat uniqueness of the Site:

A measure of the presence of rare or unique habitat types within a candidate site relative to other NERR sites in Louisiana Biogeographic Region. This criterion recognizes the importance of emphasizing unique areas in the selection process, in addition to the representativeness of the candidate site in terms of ecosystem and habitat diversity. Unique habitat is defined here as a habitat type of "limited" known occurrence within the biogeographic region or sub-region. This criterion can be a simple "yes/no" question.



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.5 Significant faunal and floral support: A measure of the degree to which a site supports significant faunal or floral components. This criterion focuses on a site's contribution (i.e., function) toward supporting the activities (e.g., feeding, nesting) of the following suite of significant faunal or floral components. The list of components includes groups or organisms that are known to be dependent upon estuarine habitats for the entire or a crucial part of their life cycle.

- Fish and Shellfish Spawning and Nursery Grounds (includes use by either freshwater, estuarine, or estuarine-dependent marine species)
- Migratory Bird or Waterfowl Use
- Bird Nesting or Roosting Area
- Critical Mammal Habitat
- Non-Game Animals (amphibians, reptiles, etc.)
- State or federally Listed Species or of concern (animal or plant – including candidate species)
- Other biodiversity support as representative of ecosystem services (such as invertebrates ....

3 Points: The candidate site supports or serves as an important site for a wide range of the faunal or floral components listed above (4 of 6) or is extremely important site for any threatened or endangered species.

2 Points: The site supports or serves as an important site for a moderate range and diversity of the significant faunal or floral components listed above (3 of 6).

1 point: The site supports or serves as an important site for one or two of the significant faunal or floral components listed above.

0 point: The site does not support significant faunal or floral components



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.6 Geologic representativeness, Diversity, and Uniqueness of the Site: A measure of the representativeness, diversity, and uniqueness of the deltaic geologic characteristics that define part or the whole of a candidate site. This criterion attempts to consider both the surface and subsurface geologic formations that may be representative or unique within a site, particularly as they affect or define associated biotic habitats. Included in these considerations are the ways that local geology affects surface hydrology, such as drainage systems, and subsurface hydrology, such as shallow-water aquifers. Geologic and hydrologic maps should be used to evaluate this criterion.

- 3 Points The site has numerous deltaic geologic characteristics, two or more unique geologic characteristics, and contains a high diversity of formation types or strata within its boundaries.
- 2 Points The site has a moderate number of representative geologic characteristics and at least one unique geologic characteristic, and contains a moderate diversity of formation types or strata within its boundaries.
- 1 Point The site has a moderate number of geologic characteristics, no unique geologic characteristics, or contains a moderate diversity of formation types or strata within its boundaries.
- 0 Points. The site has few or only one representative geologic characteristics, no unique geologic characteristics, or contains few or only one formation type or strata within its boundaries.





ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.7 Salinity Gradient A measure of the seasonal and spatial range of salinity over multiple years within a candidate site's boundaries. This criterion recognizes the effect of salinity on the biotic structure of estuarine habitats (including the plant communities and faunal components that inhabit them). It makes the assumption that a site with a greater range of salinity will support a broader range of habitat types and organisms.

3 Points: The site encompasses > 10 parts per thousand (ppt) or greater range of salinity within its boundaries.

2 Points: The site encompasses a 5-10 ppt range of salinity within its boundaries.

1 Point: The site encompasses a 2-5 ppt range of salinity within its boundaries

0 Points: The site encompasses < 2 ppt range of salinity within its boundaries



ER

Environmental Representativeness (ER)

## Proposed SECOND DRAFT of LaNERR Site Criteria

1.8 Degree Developed and Potential impacts to water quality: A measure of the degree to which the hydrologic basins (see reference map) are developed and the relative impacts to surface waters from human activities. This criterion is based on the assumption that human impacts to a site are directly proportional to the degree of development. Exceptions to this assumption may need to be considered where development at a site and its surrounding area have been subject to high levels of control. Data on land use and water quality measurements from local, county, and state government agencies should be used to judge this criterion.

3 Points: The site is relatively undisturbed and the hydrologic basins contains low intensity development (e.g., few residences, minimal agricultural or silvicultural activity) or the land is in protected status.

2 Points: The site is relatively undisturbed and the hydrologic basins contains moderate development (e.g., relatively few residences, moderate agricultural or silvicultural activity, minimal commercial development).

1 Point: The site has been moderately disturbed and the hydrologic basins contains relatively intensive development (e.g., moderate density of residences, or the presence of industrial activity).

0 Points: The site has been extremely disturbed and the hydrologic basins contains very intensive development (e.g., high density residential, or commercial or industrial activity).



RMRP

Research, Monitoring & Resource  
Protection (RMRP)

## Proposed SECOND DRAFT of LaNERR Site Criteria

2.1 Value of site for research: A measure of the opportunities offered by characteristics of the site for research, such as a high diversity of ecosystem and habitat types, a balanced habitat composition, a wide salinity range (see criterion 1.8), biotic or geologic representativeness of the site, known historic uses or archaeological sites, and unique opportunities to conduct applied research regarding important local, state, and regional coastal management issues (including past and potential management activities). The assumption is that a site with representative, unique, and highly diverse characteristics will provide greater research, monitoring, and resource protection opportunities than one lacking these characteristics. Ratings generated for these factors under previous selection criteria can be used as a guide for rating this overall factor.

3 Points: The site has (1) a high diversity of ecosystem and habitat types, (2) moderate salinity range, (3) representative biotic and geologic sites or hydrologic characteristics, (4) state and federally listed species, (5) historic and archaeological significance, and (6) opportunities to address important habitat or resource management issues.

2 Points: The site has four or five of the six above.

1 Point: The site has two or three of the six above.

0 Points: The site has one or none of the six above.



RMRP

Research, Monitoring & Resource  
Protection (RMRP)

## Proposed SECOND DRAFT of LaNERR Site Criteria

2.2 Previous research and monitoring efforts: A measure of the degree to which the site (including the hydrologic basin) has been used for past research and monitoring, including considerations of the diversity of inquiry (fields of research), and the availability of data (the form and availability of documentation, e.g., peer-reviewed papers, grey literature, inventory reports). The assumption is that an area with previously established research and monitoring interest offers greater opportunity for future projects than an area that has not sparked such an interest in the past.

3 Points: The site has a long history of well-documented research and monitoring projects in a wide variety of topics. Data are readily available.

2 Points: The site has had major and well-documented research and monitoring efforts, generating data that are readily available. It has not had a long history of research and monitoring.

1 Point: The site has had only minor research and monitoring projects generating limited data (e.g., inventories) and/or these data may be difficult to obtain.

0 Points: The site has no known history of research and monitoring.



RMRP

Research, Monitoring & Resource  
Protection (RMRP)

## Proposed SECOND DRAFT of LaNERR Site Criteria

2.3 Suitability of site for environmental baseline monitoring: A measure of the suitability of the site as a reference area for assessing long-term natural resource trends or ecological characteristics, based on the degree to which the site has not been altered by land-use practices on or near the site. The assumption is that a site with uninterrupted habitat patches that provide landscape continuity (not interrupted by developed or disturbed lands & waters) will be a more valuable reference area to generate baseline monitoring information than a site that has been extensively altered.

3 Points: The site has outstanding areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics for a wide range of needs.

2 Points: The site has adequate areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics for many needs.

1 Point: The site has marginal areas to generate environmental baseline data to assess long-term resource trends or ecological characteristics.

0 Points: The site has been so extensively altered by past activities that it is unsuitable for generating environmental baseline data.





RMRP

Research, Monitoring & Resource  
Protection (RMRP)

## Proposed SECOND DRAFT of LaNERR Site Criteria

2.4 Coastal Resilience Research: How suitable is the site (and hydrologic basin it is found) to support research on coastal resilience including both natural and social resources. This includes how climate change may amplify land-use change and vulnerability of candidate site (and hydrologic basin) to relative sea level rise to natural and social systems including both impacts to each, but also degree of adaptations of each system to biogeophysical changes.

3 Points: The candidate site (and hydrologic basin) demonstrates high value in how both natural and social resources that can be the focus of research on how climate change will amplify impacts of land-use and relative sea level rise including research on adaptations.

2 Points: The candidate site (and hydrologic basin) demonstrates moderate value in how both natural and social resources that can be the focus of research on how climate change will amplify impacts of land-use and relative sea level rise including research on adaptations..

1 Point: The candidate site (and hydrologic basin) demonstrates low value in how both natural and social resources that can be the focus of research on how climate change will amplify impacts of land-use and relative sea level rise including research on adaptations.



RMRP

Research, Monitoring & Resource  
Protection (RMRP)

## Proposed SECOND DRAFT of LaNERR Site Criteria

2.5. Ability to address key local, state, and regional coastal management issues: A measure of the degree to which the site is appropriate for investigating issues relevant to coastal management at the local, state, and regional levels. Solutions to these issues may require either the application of land management practices or habitat manipulations to perform meaningful research and assessment. As such, the site should offer both adequate control areas plus areas where demonstration projects and habitat manipulations (such as coastal restoration projects) can be accommodated to study many of the issues of concern. The assumption is that a site where diverse coastal management issues are evident and can be addressed will be of greater value from research and resource management standpoint than sites where these issues do not arise. The diversity and significance of coastal management issues should be identified for the hydrologic basin as it may influence core and buffer areas proposed. The following list are suggestions that may be included in the description of the sites ability to address key local, state and regional coastal management issues.

- Wetland loss and habitat change;
- Wetland loss mitigation, restoration, creation;
- Dredging and spoil disposal;
- Beneficial uses of dredged materials;
- Shoreline erosion;
- Commercial or recreational fisheries;
- Waterfowl and other wildlife management;
- Best management practices for habitat protection or management (e.g., wildlife management);
- Best management practices to limit impacts from agricultural, silvicultural, or development activities;
- Effects of pollutants on water quality and living resources (including oil spills, nutrients; harmful algal blooms, bacteria contamination, etc.);
- Impacts of relative sea-level rise;
- Prehistoric and early historic settlement and land use;
- Unique connections in cultural and natural resources within the site (language, customs, land-use, etc.);

3 Points: The site is highly appropriate for investigating diversity of coastal zone management issues

2 Points: The site is appropriate for investigating coastal zone management issues

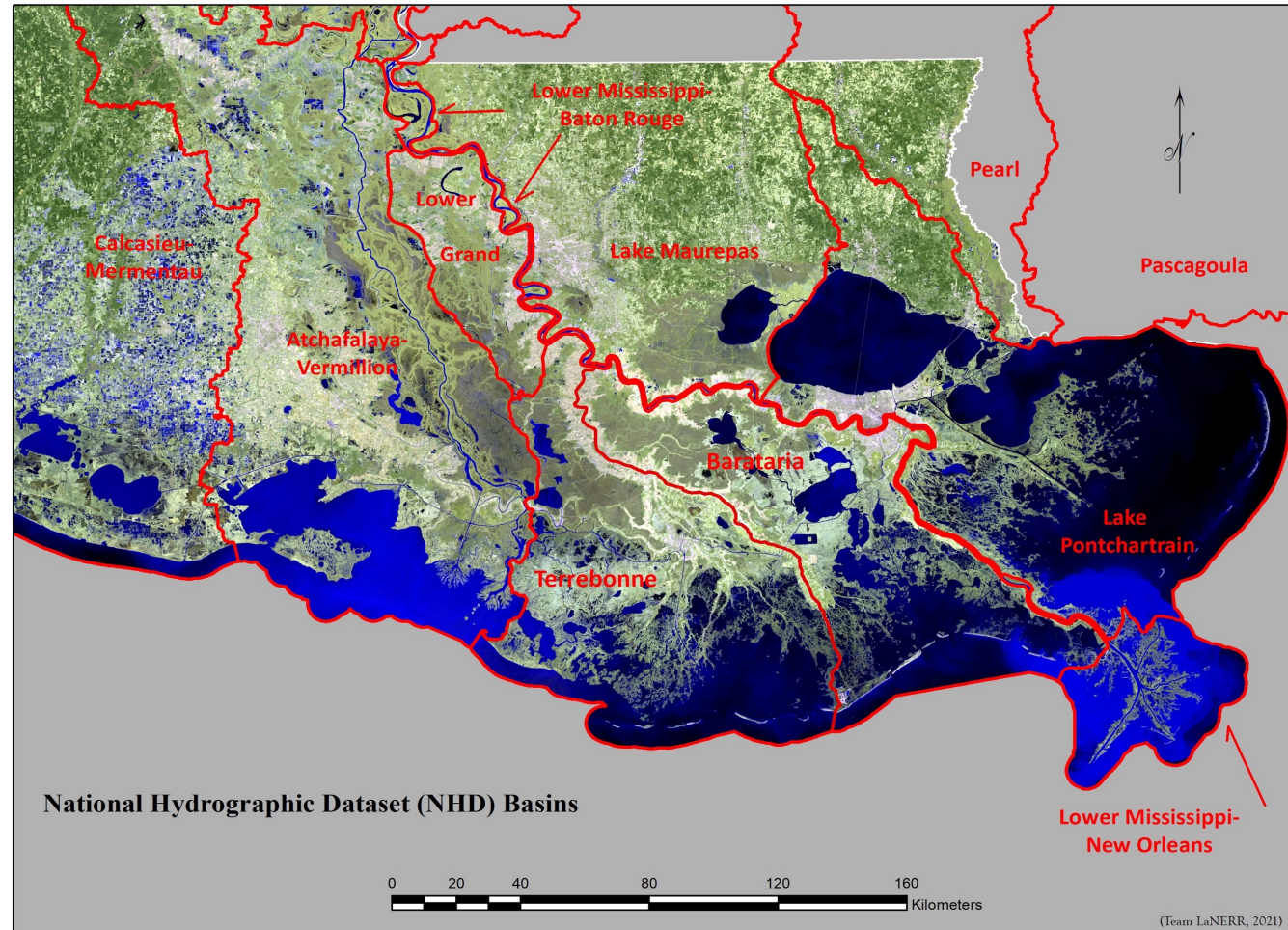
1 Point. The site is minimally appropriate for investigating coastal zone management issues

0 points: The site is not appropriate for investigating coastal zone management issues



RMRP

# Research, Monitoring & Resource Protection (RMRP)





EI

Education and Interpretation (EI)

## Proposed SECOND DRAFT of LaNERR Site Criteria

3.1 Diversity and quality of training education and interpretation of opportunities: A measure of the variety and quality of training, education, and interpretation opportunities (i.e., ecological, archaeological, cultural, historical, etc.) provided by the site (core and buffer areas) for the different target audiences. The assumption is that a candidate site with a diversity of such opportunities of high quality will be utilized to a greater extent than one with fewer opportunities.

3 Points: The site has numerous different training, education, and interpretation opportunities of high quality.

2 Points: The site has several significantly different educational opportunities of good quality.

1 Point: The site has few significant educational opportunities.

0 Points: The site has insignificant educational opportunities.



EI

Education and Interpretation (EI)

## Proposed SECOND DRAFT of LaNERR Site Criteria

3.2 Diversity and availability of target audiences: A measure of the diversity and availability of target audiences (e.g., user groups, resource managers, residents, environmental groups, decision makers, teachers and students, the general public) which may routinely utilize the site for training, education, and interpretation. The assumption is that a candidate site with a variety of available target audiences will be utilized to a greater extent than one with fewer target audiences.

3 Points: The site is suitable for a variety of target audiences that are readily available;

2 Points: The site is suitable for a moderate number of target audiences that are readily available;

1 Point: The site is suitable for few target audiences that are available

0 Point: The site is so remote or inaccessible that it is not suitable for any target audience.





EI

Education and Interpretation (EI)

## Proposed SECOND DRAFT of LaNERR Site Criteria

3.3 Availability of facilities: The degree to which the site (core and buffer areas) have existing facilities or potential sites for future facilities that can be used by staff, researchers, classes, and training groups (e.g., administrative building space, dormitories, labs, interpretive centers, trails and boardwalks, boat ramps, etc.). The assumption is that, due to limited reserve construction funds, a candidate site with existing facilities can meet the objectives of the Reserve System program sooner and more completely than a site without existing facilities. The availability of other sources of construction funds should be considered as part of this criterion.

3 Points: The site has established structures and facilities that can be used for reserve activities.

2 Points: The site has limited established structures or facilities that can be used for reserve activities.

1 Point: The site has excellent potential for the development of facilities for reserve activities.

0 Points : The site has limited established structures limited potential for the development facilities for reserve activities.





EI

Education and Interpretation (EI)

## Proposed SECOND DRAFT of LaNERR Site Criteria

3.4 Proximity and accessibility of site to Researchers, Educators, and Resource Management decision makers: A measure of (1) the relative proximity of the site to urban centers, K-12 schools, research and education institutions, and resource management agencies that may routinely utilize the site and (2) the adequacy of the roads or points for boat access at the site. The underlying assumption is that the proximity and accessibility of the site will enhance its utilization for education, research, monitoring, and resource protection purposes.

3 Points: The candidate site can be utilized by the above-listed entities during a single day trip. There are good roads or points for boat access at the site.

2 Points: The candidate site is relatively isolated and utilization would require an overnight stay from any of the above-listed entities, but accommodations are readily available. There are adequate roads or points for boat access at the site.

1 Point: The candidate site is relatively isolated and reasonable accommodations for an overnight stay to utilize the site are limited. There are limited roads or points for boat access at the site.

0 Points: The candidate site is extremely isolated and accommodations to utilize the site are not available. There are inadequate or no roads, or points for boat access at the site.



EI

Education and Interpretation (EI)

## Proposed SECOND DRAFT of LaNERR Site Criteria

3.5 Value of Site for Environmental Education and Interpretation Programs: It is likely that sites with existing education programs have the necessary infrastructure in place to further expand their programs, thus it is valuable to rate sites based on the presence of these programs. However, in an area as large as the Louisiana Coastal Area, numerous excellent sites exist where virtually no education or interpretation programs have been developed. Thus, the potential for education and interpretation program development should be considered as well according to the diversity and quality of educational and interpretive program opportunities.

3 Points: The site has a long history of education and interpretation, or the site offers excellent potential for future education and interpretation program development.

2 Points: The site has a good but short history of education and interpretation, but is otherwise well suited or offers good potential for future education and interpretation program development.

1 Point: The site has had only a minor amount of education and interpretation being conducted, or the site offers fair potential for future education and interpretation program development.

0 Points: The site offers no significant potential for education and interpretation program development



AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

### 4.1 Publicly owned lands and feasibility of land acquisition

The degree of control on activities allowed on proposed land and waters of the candidate site (core and buffer areas) is regulated by conditions of land ownership. Land ownership by state, federal government, or local governments, or environmental interest groups, and the degree to which owners have an interest in participating in a research reserve are important to realize the missions of a LaNERR. The assumption is that the degree of control needed to maintain the site to meet the missions of a NERR increases with publicly and privately owned land, along with the chances of purchasing additional areas, increase value of a NERR candidate site.

3 Points: A large percentage (more than 50 percent) of the candidate site (core and buffer areas) is currently owned by the state, federal, or local governments, or environmental groups, and these entities have an interest in participating in a research reserve.

2 Points: State, federal, or local governments, or environmental groups own 25 to 50 percent of the candidate site with the remainder in the hands of a few owners who have an interest in participating in a research reserve.

1 Point: State, federal, or local governments or environmental groups own less than 25 percent of the site with the remainder in the hands of a few owners who have an interest in participating in a research reserve

0 Points: The site is owned by a large number of owners with little potential interest in sale or donation.



AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

4.2. Compatibility with existing management practices and consumptive and non-consumptive uses A measure of the degree to which existing management practices (e.g., habitat manipulations, restoration projects, best management practices, wildlife management areas, leased bottoms, conservation easements, etc.) and historic and current consumptive and non-consumptive uses might conflict with planned and future management practices implemented under a research reserve program. The assumption is that sites with fewer conflicts are more likely to maintain both public support and the integrity of the site (core and buffer areas). NOTE: This factor should be measured with focus on how present management practices for both land and water in core and buffer areas support both the mission of a NERR and reduce potential conflict with how the public expectations align with the expected usage of the candidate site to meet the mission of a research reserve site. It should be measured with a balance of how the site protects natural and cultural resources against reasonable access by the public to other areas of the site.

- 3 Points: Existing management practices and consumptive and non-consumptive uses of the candidate site would not conflict with any foreseeable management policy of a research reserve
- 2 Points: Due to the presence of proportionately small areas of unique habitat and endangered species or threats to the integrity of ecosystem, there is the potential for limited restrictions on existing management practices or consumptive and non-consumptive uses of a site
- 1 Point: Due to the presence of areas of unique habitat and endangered species and threats to the integrity of the ecosystem, some restrictions on existing management practices or consumptive and non-consumptive uses of a site are likely
- 0 Point: Large areas of unique habitat and threats to the integrity of the ecosystem will require restrictions on existing management practices or consumptive and non-consumptive uses of a site.



AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

4.3 Compatibility with adjacent land use: A measure of the potential conflicts between management practices on a candidate site (core and buffer areas) with land-use practices on adjacent lands to the site. It is also a measure of the adequacy of land-use regulations, plans, or other risk management controls (e.g. sufficient regulatory control in the event of an impact) to sustain the site's natural resources for long-term research, education, and resource protection. The assumption is that a candidate site with compatible land-use practices on adjacent lands is more likely to maintain the integrity of the reserve. NOTE: This issue should be evaluated relative to the potential for present or future conflicts with adjacent lands and the potential to designate buffer areas around a site.

3 Points A large percentage of the land adjacent to the site is not currently used for activities that might impact the site (and therefore, may be obtainable as a buffer) or the land-use practices on adjacent lands would not have any negative impacts on a possible research reserve

2 Points A large to moderate percentage of the land adjacent to the site is not currently used for activities that might negatively impact the site, or the land-use practices on adjacent lands either could be negotiated or would have only minor impacts a possible research reserve

1 Point Some of the land adjacent to the site is currently used for activities that would have negative impacts on a possible research reserve and may not be negotiable

0 Points A large percentage of the land adjacent to the site is currently used for activities that would have negative impacts on a possible research reserve and would lead to conflicts.





AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

4.4 Land ownership A measure of the degree to which the property used to establish core and buffer areas of a candidate site is divided among land owners (e.g., divided into fewer parcels or owned by many agencies/individuals). The assumption is that a candidate site with fewer property owners will be easier to control types and levels of activities, and also offer opportunity for future acquisitions.

- 3 Points: The property is relatively undivided among agencies or individuals;
- 2 Points: The property is divided among few property owners.
- 1 Point: The property is divided among many property owners



AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

4.5. Controlled land and water access: A measure of the degree to which land and water access to the candidate site can be controlled to limit the types and levels of activities that are inconsistent with the management plans described in Site Criterion 4.2 above. This degree of control is based on size, geography, proximity to adjacent residential development and present management practices and controls. The assumption is that the integrity and security of a potential research reserve site can be better maintained with a higher level of enforcement of management practices (such as a wildlife management area) that protects the consistency with how land and water access will promote the mission of a NERR.

- 3 Points: The candidate site is relatively isolated and of a size that can be controlled. Historically, access has been controlled, and can easily be controlled in the future due to the presence of limited access points by boat or vehicle.
- 2 Points: The candidate site is not very isolated, but has a limited number of access points. Historically, site access has not been controlled, but the site is of a size that it can be controlled in the future.
- 1 Point : Site access will be difficult to control due to the large number of access points or the size of the area. Historically, site access has not been controlled and it is unclear whether it can be controlled in the future.
- 0 Points: Site access cannot be controlled due to the large number of access points, lack of historical controls, the size of the area, or dense adjacent development.



AMC

Acquisition and Management  
Consideration (AMC)

## Proposed SECOND DRAFT of LaNERR Site Criteria

4.6. Future urban and industrial development plans A measure of the potential level of future impacts of land development (urban and industry) in areas on or adjacent to a candidate site that would impact core and buffer areas. The assumption is that a candidate site with minimal to no development plans on-site and on adjacent lands to the candidate site is more likely to maintain the integrity of the reserve. NOTE: This issue involves the degree to which adjacent lands are currently being used or may be attainable as buffer areas for the research reserve

3 Points: A large percentage (more than 50 percent) of the land adjacent to the candidate site is currently undeveloped or is not inclined to be developed for industrial usage (based on present industrial activity). This large percentage of adjacent lands is very unlikely to be developed in the near future for urban and industrial development (e.g., consisting of marginally developable property, such as wetlands, which could be obtained as buffer).

2 Points: A moderate percentage (between 25 and 50 percent) of the land adjacent to the candidate site is currently undeveloped or is not inclined to be developed for industrial usage (based on present industrial activity). The adjacent lands are unlikely to be developed in the near future for urban and industrial development (e.g., consisting of marginally developable property, such as wetlands, which could be obtained as buffer).

1 Point: A small to moderate percentage (10 to 25 percent) of the land adjacent to the candidate site is currently undeveloped or is not inclined to be developed for industrial usage (based on present industrial activity).

0 Points: A large percentage (more than 50 percent) of the land adjacent to the site is developed (urban or industrial) and the area is likely to continue to be developed in the future.

Louisiana  
National Estuary Research Reserve

# Site Criteria Comments?





## Proposal Teams - Developing Phase 2 Candidate Site Proposals

### Phase 2 Proposals – DUE JUNE 30, 2021

1.0 Physical Description of the Site (one page maximum): Adequacy of Site's Core and Buffer Areas to merit NOAA-State Partnership: (a) boundaries should encompass an adequate portion of the key land and water areas of the natural system; (b) key land and water areas should encompass environmental resources that are representative of a delta estuary ecosystem; (c) boundaries must balance the overall size of a reserve by covering an ecosystem large enough to make long-term estuarine research viable yet having a discrete contiguous area that can be effectively managed with resources available to support a NERR.

1.1 Include map of Core and Buffer Areas (provided by Team LaNERR GIS Support; see instructions to proposal teams for providing information on polygons of proposed core and buffer areas; polygons are due by June 1, 2021, by sending to [deltanerr@lsu.edu](mailto:deltanerr@lsu.edu) / SEE SECTION 4.0 BELOW FOR DETAILS OF SUBMISSION)

1.2 Include land-owner names and contact information for CORE and BUFFER AREAS including state, parish, federal, and private lands

1.3 What percentage of the total CORE AREA is owned by the state: \_\_\_\_\_%

1.4 Have candidate site CORE AREA land-owners been contacted?

1.5 Have candidate site BUFFER AREA land-owners been contacted?





## Proposal Teams - Developing Phase 2 Candidate Site Proposals

### Phase 2 Proposals – DUE JUNE 30, 2021

2.0 Ecological Characteristics of the Site (one page maximum): Use the listing of habitats in the second draft of LaNERR Site Criteria to describe the habitats proposed in the core and buffer areas that capture the ecological characteristics of a delta estuary. Include a statement that also defines the proposed core and buffer areas as unique contributions to the Biogeographic Zone compared to the other NERR sites in the Gulf of Mexico.

2.1 Include map of Vegetation Types in the general region of the Core and Buffer Areas (provided by Team LaNERR GIS Support (deltanerr@lsu.edu); see instructions in section 4.0 for team responsibility in providing information on polygons of proposed core and buffer areas)

2.2 List examples of habitat types in the general area of the Core and Buffer Zones based on the SECOND DRAFT of SITE CRITERIA;

2.3 Significant Fauna and Flora in the general area of the Core and Buffer Areas.



## Proposal Teams - Developing Phase 2 Candidate Site Proposals

3.0 Narrative describing the candidate site's qualities around each of the following topics. Use the SECOND DRAFT of the LaNERR Site Criteria for guidance on what constitute qualities of a site in each of the three areas below (there is 500-word limit on narrative for each of the three areas – a listing may also be used).

3.1 Suitability for Research, Monitoring and Resource Protection: Is there a history of research activities at the site? If so, can they be generally described? If there is not a history, can the site support a research program? What are some examples/reasons? Are there any obvious limitations or concerns?

3.2 Suitability for Education, Interpretation, and Training: Is there a history of educational activities at the site? If so, can they be described? If there is not a history, can the site support educational activities? What are some examples/reasons? Are there any obvious limitations or concerns?

3.3 Site's Compatibility with Coastal Management Issues: Since most of these may be already under some level of protection, this is more geared toward what functional roles they provide (e.g., bird habitat, wildlife management, etc.). Are there any obvious limitations or concerns?

- i. Existing and future land and water uses and manipulations
- ii. Land use projections in core and buffer areas
- iii. Consumptive uses in the proposed LaNERR
- iv. Contributions to coastal stewardship



## Proposal Teams - Developing Phase 2 Candidate Site Proposals

4.0 Maps and Tables to Document Sections 1-3: The Team LaNERR GIS Support will provide TWO maps and quantitative estimates for each of the Proposal Teams as outlined below.

4.1 Two standardized Site GIS Maps will be generated for each team for Phase II. The Thematic GIS Maps will be generated for each Site based on geospatial polygons submitted by each respective Proposal Team of the CORE and BUFFER areas proposed by the teams. The polygons will be used by Team LaNERR GIS Support to generate information based on EXISTING GIS Data Layers for each of the three Estuarine Zones (Atchafalaya, Barataria, Pontchartrain; see base maps below that the polygons will be placed). Each polygon needs to be uniquely identified (e.g. core-#1, core-#2, buffer-#1, buffer-#2, or use specific place names for each core or buffer polygon, etc.) and are due June 1, 2021, by sending to [deltanerr@lsu.edu](mailto:deltanerr@lsu.edu) . Please also include contact information for person managing geospatial data for each respective proposal team.

4.2 Thematic GIS Map ONE: A GIS map that depicts the candidate site's CORE and BUFFER AREAS. Data will be generated as follows for each of the CORE and BUFFER polygons:

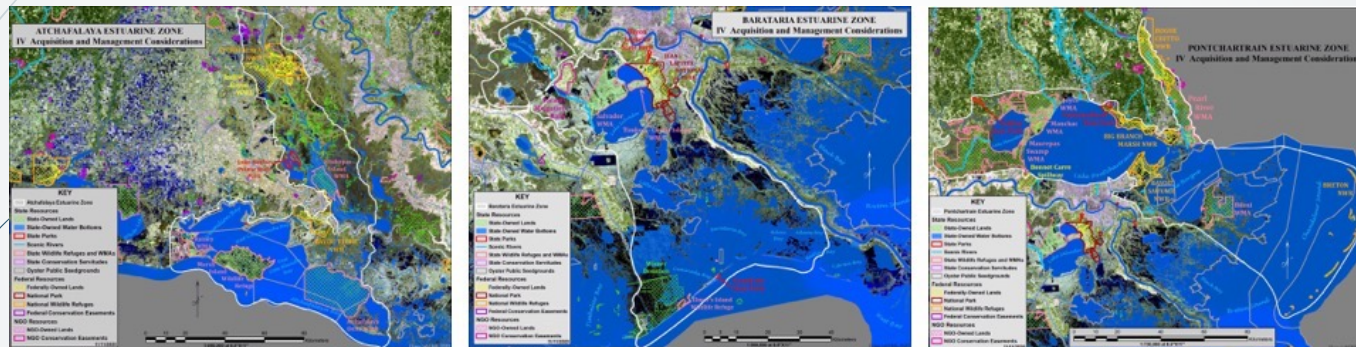
a. total area of each polygon; b. total area of state-owned lands of each polygon; c. total area of state-owned water bottoms of each polygon; d. other area that is not state-owned (land plus water bottoms) of each polygon;

4.3 Thematic GIS Map TWO: A GIS map of the CPRA initial vegetation types and distribution described in sections 2.0 above. Data will be generated as follows for each of the CORE and BUFFER polygons:

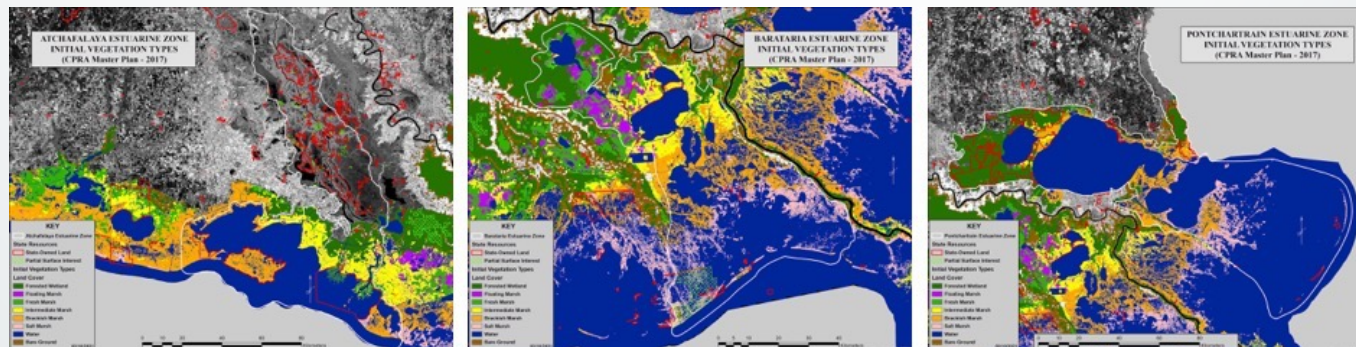
a. acreage of each wetland typology of CPRA initial vegetation in each CORE AREA polygon (if vegetation types are included in CPRA data); b. acreage of each wetland typology of CPRA initial vegetation in each BUFFER AREA polygon (if vegetation types are included in CPRA data);

MAPS to be generated by Team LaNERR GIS Support: see instructions above for Phase II and below for Final Proposal

These are the base maps that polygons of core and buffer areas will be placed for Map #1.

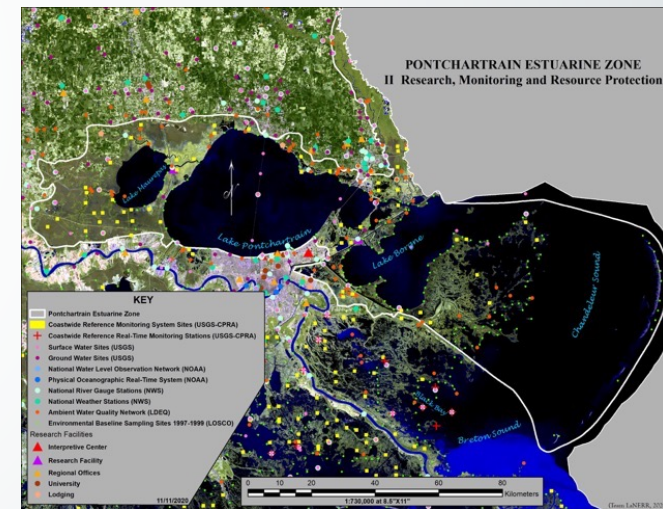
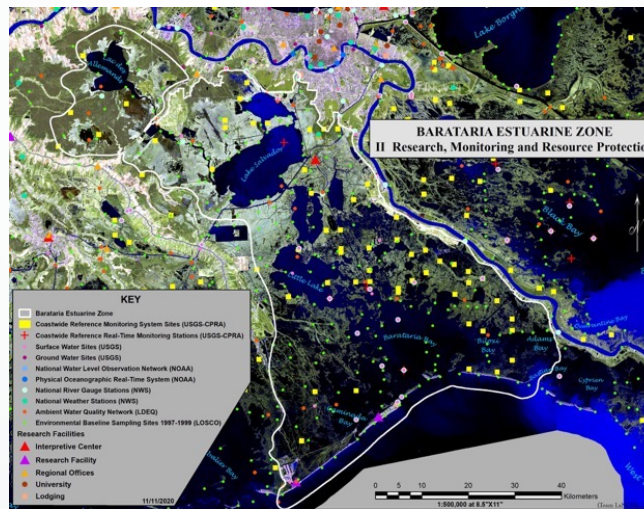
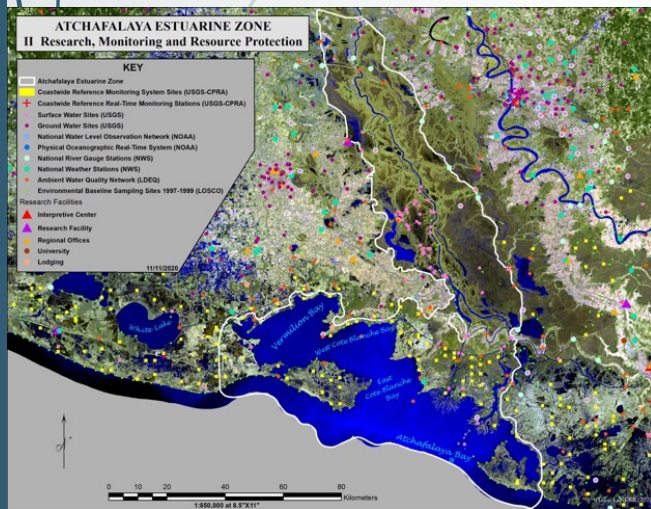


These are the base maps that polygons of core and buffer areas will be placed and vegetation typology acreage calculated for Map #2.



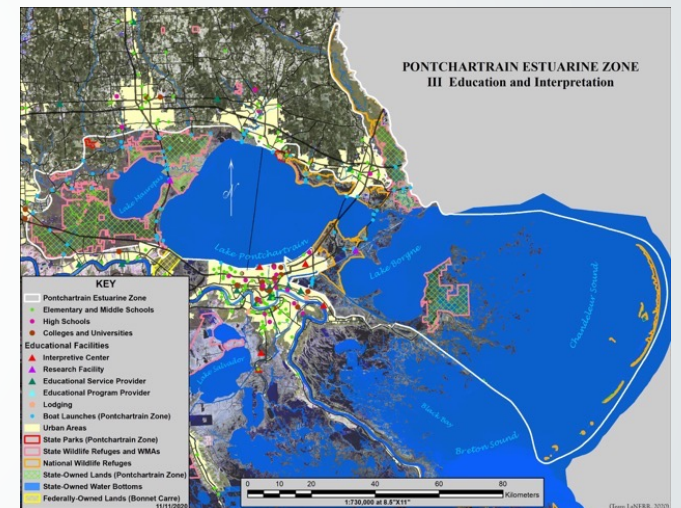
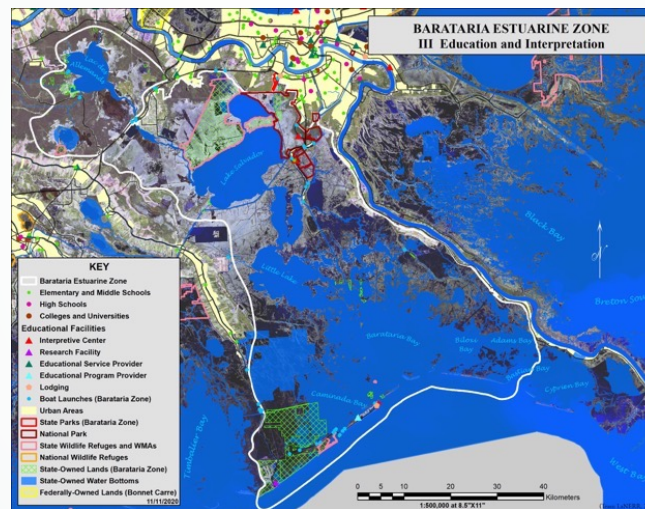
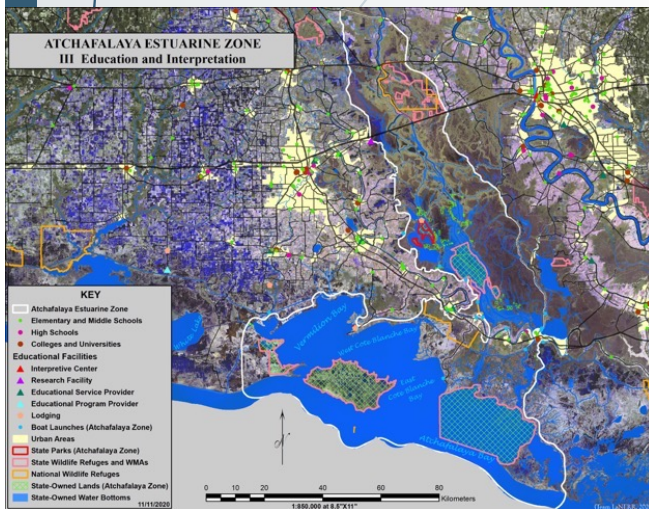


## Distribution of monitoring stations (including coastwide reference monitoring stations – CRMS).





## Distribution of urban areas and schools along with access points in proximity of three Estuarine Zones.





## Proposal Teams - Developing Phase 2 Candidate Site Proposals

5.0 Optional Sections Encouraged (two-page maximum).

- Facilities in the region that may help to support the research, education, and training mission of the proposed LaNERR.
- Bibliography of past research, data, or reports documenting candidate site's resources



## Final Phase Proposals: Due on September 24, 2021.

Instructions: There are four sections to the Final Phase proposals.

Section 1 is an update from Phase II Proposals on information concerning the physical description of the site.

Section 2 requests details on how the site addresses each of the Site Criteria using the worksheet provided in Appendix 1.

Sections 3 and 4 request additional information on public support and engagement from community in support of the Candidate Site Proposal. This information will be used to score the proposal that will be used along with other information such as physical description and letters of support (public engagement) to determine which candidate site will be used to develop a nomination package from Governor Edwards to NOAA.

		DESIGNATION LEADERSHIP TEAM	SITE DEVELOPMENT COMMITTEE	CRITERIA SUBCOMMITTEE	SCREENING SUBCOMMITTEE	PROPOSAL TEAMS
MAY	Early					
	Mid		SDC Mtg 5: Update on Phase 1 proposals, Expectations for Phase 2 proposals, Review 2 <sup>nd</sup> draft of Site Selection Criteria			
	Late			Provide 3rd draft of Site Selection Criteria to DLT		DLT check in w/Proposal Teams
JUN	Early	Submit 3rd draft of Site Selection Criteria to NOAA for approval			Review Phase 1 Site Proposals	
	Mid					DLT Check in w/Proposal Teams
	Late					Submit Phase 2 Candidate Site Proposals
JUL	Early	<i>Receives approved Site Selection Criteria from NOAA</i>				
	Mid				Screen Phase 2 Candidate Sites Proposals	
	Late		SDC Mtg 6: Review Results of Phase 2 Candidate Site Proposal Screening & vote to proceed to Final Candidate Site Proposals			

		DESIGNATION LEADERSHIP TEAM	SITE DEVELOPMENT COMMITTEE	CRITERIA SUBCOMMITTEE	SCREENING SUBCOMMITTEE	PROPOSAL TEAMS
AUG	Early	Host Town Hall Meetings				
	Mid					Participate/present at Town Hall Meetings
	Late					Participate/present at Town Hall Meetings
SEP	Early					
	Mid					
	Late					Submit Final Candidate Site Proposals
OCT	Early				Screen Final Candidate Site Proposals	
	Mid	Submit Final Candidate Site Proposal to Site Evaluation Committee for nomination to NOAA				
	Late					

# LaNERR

Louisiana  
National Estuary Research Reserve

## Questions?



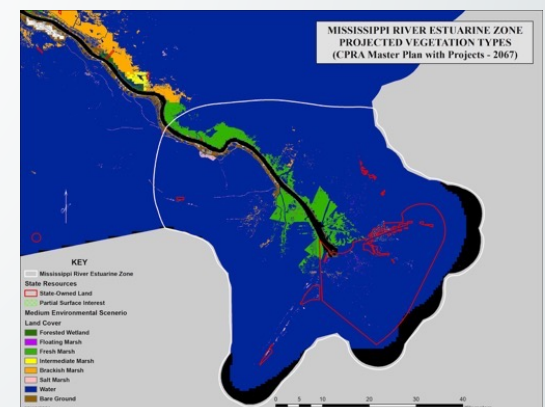
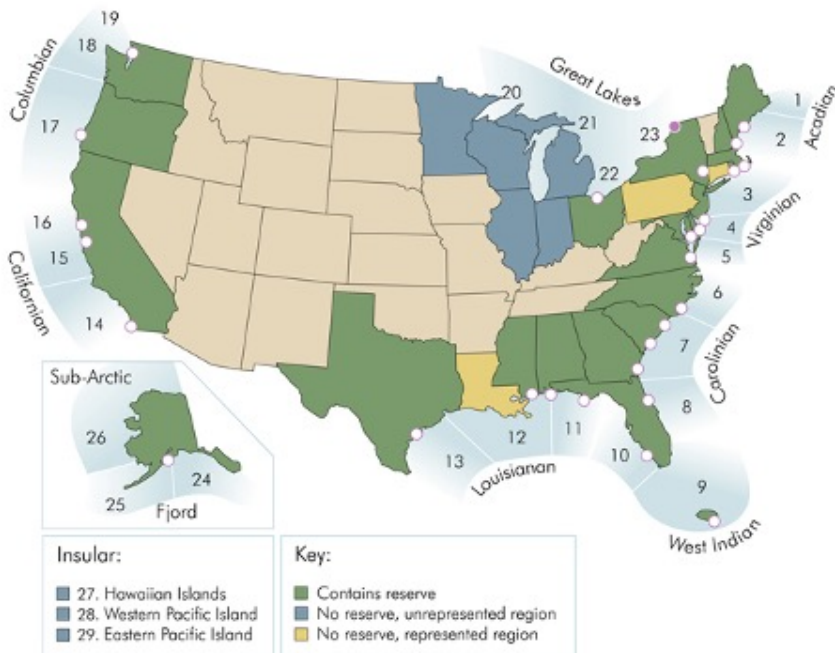




**Unique Environment**– Unique, as referred to in terms of NERR designation, refers to limited known occurrence of a habitat type, process, landscape feature, endangered or threatened species, etc. in the biogeographic region or sub-region.

**Core and buffer Areas** – NOAA regulations define key or “core” land and water areas which contain “ecological units of a natural estuarine system which preserves, for research purposes, a full range of significant physical, chemical, and biological factors contributing to the diversity of fauna, flora and natural processes occurring within the estuary.”

**Integrity** – Ecosystem integrity is generally used to refer to the completeness, functionality, and health of an ecosystem. Declines in integrity reduce habitat quality for native biota, disrupt ecological processes and functions, and diminish ecosystem resilience and capacity to sustain species and many ecosystem services. Significant declines in ecosystem integrity could jeopardize the NERR system goal of long-term research.





# How do I stay engaged in the process?

## Contact

email  
[deltanerr@lsu.edu](mailto:deltanerr@lsu.edu)

### • Social Media:

• <https://twitter.com/DeltaNERR>

### • Website:

• <http://www.laseagr.org/deltanerr/>

### • Facebook

• <https://www.facebook.com/DeltaNERR/>



# LaNERR Roadshow Presentation ([www.laseagr.org](http://www.laseagr.org))

## Search for Louisiana National Estuarine Research Reserve (LaNERR)

The National Estuarine Research Reserve System is a network of 29 coastal sites designated to protect and study estuarine systems. Established through the Coastal Zone Management Act, the reserves represent a partnership program between NOAA and the coastal states. NOAA provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners.

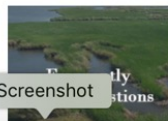
For decades now, the concept of siting a NERR here has been a point of discussion here in Louisiana. The first step was taken with a letter from the Governor's office to NOAA on July 23, 2019. Correspondence from Governor John Bel Edwards' office to the NERR program proceeded and advanced the initiative.



Request a LaNERR  
Virtual Roadshow

## LaNERR Status Update

Louisiana NERR, or LaNERR, is currently in the Site Development phase in the process of selecting a site to nominate to the National Oceanographic and Atmospheric Administration (NOAA). Visit [LaNERR Site Selection Process & Timeline](http://www.laseagr.org/deltanerr/) for more details.



## Contact

email  
[deltanerr@lsu.edu](mailto:deltanerr@lsu.edu)

- Social Media:  
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- Website:  
<http://www.laseagr.org/deltanerr/>
- Facebook  
<https://www.facebook.com/DeltaNERR/>