

**BEAUFORT COUNTY RURAL AND CRITICAL LANDS  
PRESERVATION BOARD  
ANNUAL RETREAT**

The Beaufort County Rural and Critical Lands Preservation Board Retreat (hereafter known as the Board) was held on Friday, March 8, 2019, at the Bluffton Library, Large Conference Room, 120 Palmetto Way, Bluffton, SC, 9:00 a.m. – 2:00 p.m.

**MEMBERS PRESENT:**

Mr. Mike Mathews (Chairman)

Mr. Bob Bender

Mr. Terry Hill

Mr. Beekman Webb (Vice Chairman)

Mr. Walter Mack

Ms. Gail O’Kane

Ms. Dorothy Scanlin

Mr. Richard Walls

Mr. Douglas Koop

Mr. Arthur Baer

**MEMBERS ABSENT:**

None

**STAFF PRESENT:**

Mr. Eric Greenway, Beaufort County Community Development Director

Ms. Amanda Flake, Beaufort County Natural Resources Planner

Ms. Barbara Holmes, Beaufort County Open Land Trust

Ms. Diane McMaster, Beaufort County Community Development Admin Asst

**GUESTS PRESENT:**

Ms. Alice Howard, Beaufort County Council

Mr. Chris Inglese, Beaufort County Assistant Attorney

Ms. Kristin Williams, Beaufort County Open Land Trust

Ms. Rikki Parker, Coastal Conservation League

**CALL TO ORDER AND WELCOME**

Chairman Mike Mathews called the meeting to order at 9:10 a.m.

**INTRODUCTION OF NEW BOARD MEMBER**

Chairman Mathews introduced Mr. Arthur Baer, new R&C Board member, representing District 1 and appointed February 25, 2019.

**REVIEW OF AGENDA**

Chairman Mathews made a motion to accept the Agenda as written but requested that Agenda items 5 and 6, Review of Minutes and Quarterly Financial Update respectively, be discussed at the beginning of the meeting. Mr. Beekman Webb seconded the motion, and there was unanimous agreement amongst Board members present.

**CITIZEN COMMENTS**

There were none at this time.

## REVIEW OF MINUTES

Chairman Mathews asked if there were any changes to the meeting minutes from the February 14, 2019, Board meeting and there were none. He asked for a motion to accept said minutes as written, and Ms. Gail O’Kane made the motion; seconded by Mr. Richard Walls.

## REVIEW OF QUARTERLY FINANCIALS

Chairman Mathews voiced concern regarding his ongoing request as Board Chairman for more informative quarterly financial reporting. As per the Beaufort County Finance Department on January 25, 2019, the R&C Lands Preservation Program available fund balance was \$7.6M.

## REGULAR MEETING

Ms. Barbara Holmes shared comments from the Public Input Session held during the prior R&C meeting (February 14, 2019), three (3) written responses from the circulated Questionnaire, and letter dated February 14, 2019, from Ms. Kate Schaefer, Director of Programs, Coastal Conservation League.

Question 9: (for Bft County citizens) **How can the Rural & Critical Program more effectively align with what you believe to be the expectations of the community?** *\*surveys & public workshops during the Greenprint update process; create improved awareness and understanding of the Program*

Ms. Holmes suggested utilizing the County’s website/County Channel to reach/educate the public. Mr. Webb suggested using multiple choice and yes/no questions for future questionnaires.

Question 10: (for project partners and stakeholders) **How can the Rural & Critical Program more effectively support your organization’s land preservation goals and mission?** *\*remember citizens are stakeholders too; use the best science to site conservation projects; raise capacity of local groups to achieve more conservation*

Ms. Holmes stated that an invitation has been extended to Mr. David Bishop, Port Royal Sound Watershed Mapping Initiative, or an associate, to speak at the April 11, 2019, R&C Board meeting.

Question 1: **How would you rank the following potential land acquisition categories in the order of highest priority and why?** a. natural resource protection b. historic or cultural significance c. passive recreation potential d. scenic views, scenic vistas e. protection from detrimental land use patterns, traffic congestion

*\*a, b, c, d, e      \*e, a, b, c, d      \*a is the highest priority; increase focus on larger tracts that are cost effective – northern Bft County and St. Helena*

Question 2: **What other important factors should be considered for a land preservation project and why?** *\*public access, wildlife/habitat, corridors/connections      \*stormwater management to reduce pollutants run-off, flooding potential, soil erosion      \*the intersection*

*of nature and people; invest to reduce flooding or allow for marsh migration associated with sea level rise*

**Question 4: Are there specific areas of importance in the County that you believe should be protected and why?** *\*fill in gaps/adjacent properties for the benefit of wildlife corridors*

*\*Low-lying properties and waterways inundated by floodwater/stormwater runoff and sea level rise, properties that once developed will interfere with natural waterways and/or connect waterways* *\*review the model for the Port Royal Sound watershed – protect water quality and flooding/marsh migration*

**Question 5: Are there specific properties in the County that you believe should be protected and why?** *\*parcels greater than 10 acres; farmlands on St. Helena – will be crucial for future marsh migration*

**Question 6: Do you have suggestions for specific initiatives the Program should consider undertaking?** *\*more partnerships and grants for cost sharing* *\*review TPL study*

*“Economic Benefits of Parks, Trails, and Conserved Open Spaces in Beaufort County” leverage funds, extend partnerships, develop/execute a strategic plan* *\*become a partner in the Port Royal Sound conservation initiative*

**Question 3: Do you have specific comments for modifying/improving the Project Criteria Ranking Sheets?** *\*Public Benefits section of Critical Lands sheet should be revised, Recreational Benefits and Public Access categories should be more highly weighted than the Vista Protection and Traffic Congestion categories, Post Sale Costs should be more highly weighted in the Financial section, Ecological Benefits and Proximity to Other Protected Lands should have percentages flip-flopped on PDR sheet* *\*re-weight Land Conservation criteria that addresses the greater interests/benefits to citizens of Beaufort County* *\*recognize the opportunity to leverage USDA dollars on St. Helena through their ag easement program*

### **Proposed Critical Lands Criteria (Fee Simple) Ranking Sheet**

#### Property Characteristics (25%)

Level of threat 25%

Uniqueness of property 20%

Historic or cultural features 15%

% SHOULD BE HIGHER

Proximity to other protected land 20%

Consistency w/applicable Comp Plan(s) 20%

#### Financial Considerations (20%)

Bargain sale aspects 40%

Favorable post-sale costs 30%

Leverage of other funding 30%



Public Benefits (25%)

|  |     |                       |
|--|-----|-----------------------|
| Potential public access/passive recreation | 60% | % TOO HIGH            |
| Vista protection                           | 20% | % SHOULD BE HIGHER ?? |
| Reduction in traffic congestion            | 20% | % SHOULD BE HIGHER    |

Environmental Benefits (30%)

|   |     |
|---|-----|
| Protection of wildlife habitat            | 25% |
| Protection of wildlife corridors, buffers | 25% |
| Water quality/groundwater recharge        | 25% |
| Flood control/marsh migration             | 25% |

Chairman Mathews indicated that the Board may want to begin receiving the completed Ranking Sheets as part of their property review process. He questioned the importance of obtaining a conservation easement on future critical land purchases.

Mr. Eric Greenway, Beaufort County Community Development Director, stated that current procedures require conservation easements be placed on property when purchasing development rights. One complication, when the County purchases properties fee simple, is once the conservation easement is in place, the administrator of the easement must review any decision made regarding that piece of property. This defers authority over the property to an outside agency and away from County Council. Therefore, the current County administration is considering restricting the use of conservation easements on properties purchased fee simple.

**Question 8: Do you have suggestions on how the R&C Lands preservation Program land acquisition review, discussion, and approval process can be more transparent so the public has the necessary, non-contractual information regarding a potential project?**

*\*provide the name of the property/parcel number on the meeting agendas; discuss project in open session to the extent possible*      *\*promote RCLP web site; publish the application and review process*

**Question 7: Do you have suggestions regarding how to create more opportunities for various organizations to submit potential land acquisition projects?**

*\*create an application process*      *\*promote the RCLP web site and links to other partner websites, publish the application/review process*      *\*allow all qualified land trusts to apply for funding for projects*

Mr. Eric Greenway, Beaufort County Community Development Director, spoke regarding R&C Board transparency. He explained that new acquisition and due diligence procedures have been proposed by the Interim County Administrator. The proposed procedures will be discussed at the March 18, 2019, Natural Resources Committee meeting. Under the current proposal, the Natural Resources Committee would review a potential property acquisition first and then send it to the R&C Board for consideration. An application will be developed and placed on the County web site for requested property review/evaluation. In the future, property PIN, location, and acreage will be made part of all published meeting agendas, and no items will be discussed in Executive Session except when a competitive bid situation exists.

Mr. Greenway also discussed the scheduling of County-wide input sessions for Greenprint updates to include narratives that describe why properties/areas have been listed, written surveys placed on digital/social platforms for citizen and stakeholder input, more use of science-based concepts (TNC Port Royal Sound Model) to enhance conservation, and increased coordination with applicable agencies, departments, and adjacent jurisdictions. A detailed, strategic plan for the Greenprint update process will be crucial.

### **Proposed Rural Lands Criteria Ranking Sheet**

#### Property Characteristics: Soil Type/Use (20%)

- USDA-designated prime, important or unique 50%
- Currently in agricultural or timber production 30%
- Current use of BMP's, erosion and soil management 20%

#### Threat of Conversion from Rural to Developed (20%)

- Rapidly developing area 40%
- Changing land regulations/zoning 30%
- Competing land transaction pending/threatened 30%

#### Sufficient Connections/Size to Ensure Stability (20%)

- Proximity to other protected lands 40%
- Provides connections between rural land uses 40%
- Sufficient size for stand-alone rural use 20%

#### Financial & Stewardship Considerations (20%)

- Bargain sale aspects 45%
- Leverage of other funding 45%
- Long-term management plan 10%

#### Environmental and Other Public Benefits (20%)

- Water quality/groundwater recharge 40%
- Flood control/marsh migration 30%
- Protection of wildlife habitat, corridors, buffers 30%

**Question 11: Do you have additional comments regarding the Program?**     *\*Program should integrate discussions about Greenprint update, economic development, planning for future development, stormwater – flooding and sea level rise impacts     \*future health of the region will require Jasper County to get on board with conservation*

Chairman Mathews requested that Board members review both Ranking Sheets prior to the April 11, 2019, R&C meeting.

Ms. Holmes distributed information from Lowcountry Estuarium, Port Royal Sound, *A Unique Estuarine Environment* which has been made a part of these minutes.

**ADJOURNMENT**

With no further business, Chairman Mathews made a motion at 1:45 p.m. to adjourn the meeting.

**Submitted by:** Diane McMaster, Beaufort County Community Development  
Senior Administrative Specialist

**Approved:** Michael Mathews  
Mike Mathews, Chairman  
Beaufort County Rural and Critical Lands Preservation Board

Date: 4/11/19



Except for the Antarctic, all continents have coastal estuaries. One function of estuaries is that they serve as nursery grounds for near shore fish populations. 70% of all commercially harvested species either spend part of their life in an estuary or feed on those that do.

Estuaries of the North American Atlantic Coast are the most productive ecosystems on earth with regard to total biomass created within the system. While it has not been established scientifically, anecdotal evidence leads many to believe that the Port Royal Sound system is the most productive of these.

Simply put, estuaries are coastal zones where fresh water flowing from a land mass meets and mixes with sea water. Estuaries typically are brackish water systems with salinities therein ranging less (.5 to 29 parts per thousand or ppt) than that of the sea which is 35 ppt by volume.

An easy way to understand the concept of ppt is to imagine a container that holds 1,000 cups liquid. If it is filled with seawater and the water is allowed to evaporate, there will be 35 cups of sea salt left behind.

Virtually all North American Atlantic Coast estuaries are fed by river systems which deliver a relatively constant flow of fresh water. This maintains a relatively stable brackish zone suitable to the species that evolved to inhabit such transitional ecosystems for at least a portion of their lifecycle.

The Port Royal Sound system is the exception to the rule. The few small fresh water rivers that flow into it originate in Jasper County and drain a relatively small watershed. The distance between the mouths of these rivers and the low volume of fresh water carried by them precludes the establishment of a contiguous and stable brackish zone. Salinity throughout the majority of the system typically reads at 29 to 32 ppt.

Another factor contributing high salinity is the sheer volume of sea water delivered by the extraordinary tidal forces this section of the coast is subject to. Picture, if you will, the South Atlantic Coast from North Carolina to Florida. How it bows inward with Port Royal Sound being at the center of the concavity. The oceanic tide moving landward is concentrated toward the center as it approaches. This phenomenon accounts for the highest tidal amplitudes found this side of the Bay of Fundy

Also contributing to the uniqueness of Port Royal Sound is the fact that its waters are vertically mixed. This means that except for during periods of excessive rain, the salinity is constant from surface to bottom. The water column in most estuarine systems is either slightly or highly stratified with the highest salinity being the densest water at the bottom. The amount of mixing occurring within a system is determined by such variables as the volume of fresh water being introduced; the size, shape and depth of the system; bottom topography and tidal forces. A stratified system brings a stratification of species within it. This can pose a problem for sessile (can't move around) species if normal conditions are disrupted for even relatively short periods of time.

Port Royal Sound is home to the vast majority of species found in other Atlantic Coast estuaries. Its inhabitants, however, have evolved to tolerate the vertically mixed high salinity environment. This adaptation accounts for some species being more wide spread and in greater populations than that of their cousins in stratified salinity systems. This partially accounts for

the claim of higher biomass productivity. Another contributing factor is that it is also home to a number of species that prefer a higher salinity and are not found in brackish water.

One denizen of the deep not normally associated with estuaries and yet a frequent visitor to local waters is the elegant manta ray. In the 19<sup>th</sup> century there was even a manta ray fishery here. The grand creatures were harpooned and processed into pet food and fertilizer.

Another species not typically found in estuaries, cobia, draw sport fishermen from near and far to the Broad River each spring.

Next to the water, the second most important element in a salt marsh system is the marsh grass itself. It stabilizes vast areas of intertidal geography and provides habitat and cover for numerous species. More importantly, the annual fall die back of the spartina grass is the beginning of the process of restocking the estuarine larder. Over time the grass is broken down by bacteria and transformed into tiny particles, which mix with all the other decaying organic material forming the essential estuarine nutrient called detritus. Marsh grass is the main constituent of detritus which along with plankton is at the center of the food web.

Detritus is an essential element in the diet of many small creatures like the ubiquitous fiddler crabs, many species of other small invertebrates and several species of minnows. They are in turn eaten by larger creatures which are themselves consumed by those of us who enjoy seafood.

White shrimp and blue crabs spawn off shore where the offspring feed on plankton throughout their larval stages. In their post larval forms (shrimp, 3 to 4 mm in length and crabs the size of the head of a pin) migrate to the upper reaches of small creeks in the estuary. Their first food once in the estuary is a species of tiny worm (*Monopylephorus rubroniveus*) living in the mud bottom that feeds almost exclusively on detritus. Hence, no marsh grass – no shrimp or crab.

Detritus is also part of the food web for the fry of most estuarine and many near shore fish species. Black sea bass and red drum (aka red fish - spot tail bass) are two of many game fish species that spawn in the ocean with the young entering the estuary as fry. They feed and grow in the food rich and relatively protective waters until ready to face the sea.

Because they are filter feeders detritus forms a large part of the diet of oysters, clams and mussels also. They are fed upon by three of the four native whelk species which are found on local menus listed as conch.

Again, the Port Royal Sound ecosystem is arguably one of the richest on earth. Those riches, however, are not locked within its boundaries. Outgoing tidal currents deliver nutrients beneficial to populations of near shore species which in a web of interconnectivity are a food source for large open water species.

One would think, because of its unique nature, that the Port Royal Sound system would be the subject large scale active and ongoing scientific study. This has not been the case, however. Much could be learned about estuarine systems in general through research in this one of a kind laboratory. It is hoped that, through efforts of the Port Royal Sound Foundation, interest within the scientific community will grow and lead to knowledge critical to the wise use and sustainability of this very special resource.

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