

County Council of Beaufort County Planning Commission Meeting

Chairman

ED PAPPAS

Vice Chairman

RANDOLPH STEWART

Commission Members

DIANE CHMELIK
KEVIN HENNELLY
CAROLINE FERMIN
CECILY MCMILLAN
JASON HINCHER
FRANK DUCEY
JIMMIE LAWRENCE JR

Interim County Administrator

ERIC GREENWAY

Staff Support

ERIC GREENWAY ROBERT MERCHANT NOAH KREPPS

Administration Building

Beaufort County Government Robert Smalls Complex 100 Ribaut Road

Contact

Post Office Drawer 1228
Beaufort, South Carolina 299901-1228
(843) 255-2140
www.beaufortcountysc.gov

Planning Commission Agenda

Monday, March 1, 2021 at 6:00 p.m.

VIRTUAL MEETING VIA WEBEX

[This meeting is being held virtually in accordance with Beaufort County Resolution 2020-05.] ALL OF OUR MEETINGS ARE AVAILABLE FOR VIEWING ONLINE AT www.beaufortcountysc.gov AND CAN ALSO BE VIEWED ON HARGRAY CHANNELS 9 AND 113, COMCAST CHANNEL 2, AND SPECTRUM CHANNEL 1304.

- 1. CALL TO ORDER
- PLEDGE OF ALLEGIANCE
- 3. FOIA PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
- 4. APPROVAL OF MINUTES February 1, 2021
- 5. APPROVAL OF AGENDA
- CITIZEN COMMENTS (Comments are limited to 3 minutes.)
 CITIZENS MAY JOIN VIA WEBEX USING THE LINK AND MEETING INFORMATION PROVIDED.

CLICK HERE FOR WEBEX LINK

Meeting number (access code): 129 800 6258

Meeting password: gFUdgjFP377

ACTION ITEMS

- 7. **Text Amendment to Section 3.4.90 of the Community Development Code** to add a Coastal Resilience Overlay District to require real estate disclosure when property is transferred in low-lying areas.
- 8. **Text Amendment to Article 5 of the Community Development Code** adding a new division 5.13 titled "Fill Standards" to limit the amount of fill on low-lying areas.
- 9. **2020 Greenprint Plan** A plan that serves as a decision-making tool for the Rural and Critical Lands Preservation Program.

DISCUSSION ITEMS

- 10. CHAIRMAN'S REPORT
- 11. ADJOURNMENT



COUNTY COUNCIL OF BEAUFORT COUNTY Beaufort County Planning and Zoning Department

Beaufort County Government Robert Smalls Complex
Physical: Administration Building, Room 115 100 Ribaut Road
Mailing: Post Office Drawer 1228, Beaufort, SC 29901-1228
Phone: 843-255-2140 / FAX: 843-255-9432

The regular meeting of the Beaufort County Planning Commission (hereinafter "Commission") was held virtually on Monday, February 1, 2021, 6:00 p.m.

Members Present:

Mr. Ed Pappas, Chairman Dr. Caroline Fermin Mr. Randolph Stewart, Vice Chairman

Ms. Diane Chmelik Ms. Cecily McMillan Mr. Jimmie Lawrence Jr

Mr. Kevin Hennelly Mr. Frank Ducey

Members Absent:

Mr. Jason Hincher

Staff Present:

Mr. Robert Merchant, BC Planning and Zoning Acting Director

Mr. Noah Krepps, BC Long Range Planner

Ms. Diane McMaster, Senior Administrative Specialist

CALL TO ORDER: Chairman Ed Pappas called the meeting to order at 6:05 p.m.

PLEDGE OF ALLEGIANCE: Chairman Ed Pappas led those assembled in the pledge of allegiance.

REVIEW OF MEETING MINUTES: The Commissioners reviewed the October 5, 2020, meeting minutes, and Chairman Ed Pappas asked for a motion to approve same. Mr. Kevin Hennelly made a motion to approve the October 5, 2020, minutes as submitted, and Vice Chairman Stewart seconded the motion. There was unanimous support for the motion.

AGENDA REVIEW: Chairman Ed Pappas asked if there were any revisions or additions to the meeting agenda. There were none.

WELCOME NEW COMMISSION MEMBER: Jimmie Lawrence Jr

CITIZEN COMMENTS: Chairman Ed Pappas asked if there were any non-agenda citizen comments. There were none.

ACTION ITEMS:

Zoning Map Amendment/ Rezoning Request for 17.92 acres (R600 013 000 00369 0000) at the Intersection of Okatie Highway and Cherry Point Road from T2 Rural to C3 Neighborhood Mixed Use and C4 Community Center Mixed Use Districts; Applicant: Antoine Iskandar, ACH Custom Homes.

Mr. Robert Merchant, BC Planning and Zoning Acting Director, presented the staff report. BC Staff recommended conditional approval of the application as follows: Applicant shall follow the recommendations of the Traffic Impact Analysis and any additional conditions as provided by Kimley-Horn and the Beaufort County School District. The applicant hired Bihl Engineering to prepare the required Traffic Impact Analysis (TIA) dated 01/14/21. Ms. Jennifer Bihl with Bihl Engineering summarized the findings and discussed five (5) recommendations. Kimley-Horn conducted a technical review dated 01/26/21 of the Bihl Engineering TIA on behalf of the County. Mr. Jonathan Guy with Kimley-Horn

described the Bihl Engineering TIA as accurate but conservative and emphasized the need for a future, more comprehensive analysis. Both traffic engineering reports are a part of these minutes.

Mr. Antoine Iskandar spoke on behalf of the Cherry Point Road rezoning request.

Ms. Carol Crutchfield, Planning Coordinator BCSD, was in attendance as a representative for the Beaufort County School District (BCSD). The School District requested that the residential portion of the request be postponed until plans for the site are more defined. A copy of a letter dated 01/27/21 from the BCSD regarding this rezoning request is a part of these minutes.

Ms. Jessie White, Coastal Conservation League South Coast Office Director, spoke regarding the Okatie Highway/Cherry Point Road rezoning and described it as a significant up zoning request. On behalf of the SC Coastal Conservation League, she asked that the request be denied.

For the record, Vice Chairman Stewart recused himself from any discussion and vote regarding Agenda Item #8, Okatie Highway/Cherry Point Road rezoning due to the fact that he has performed work for the property owner's representative in the past.

Chairman Ed Pappas requested a motion regarding the Cherry Point Road rezoning. Mr. Kevin Hennelly made a motion to deny the proposed rezoning, seconded by Dr. Caroline Fermin. The motion to deny passed by a 7:0 vote with a recusal from Vice Chairman Stewart. (FOR: Ms. Diane Chmelik, Dr. Caroline Fermin, Mr. Kevin Hennelly, Chairman Ed Pappas, Ms. Cecily McMillan, Mr. Frank Ducey, Mr. Jimmie Lawrence Jr; and RECUSED: Vice Chairman Randolph Stewart.)

Zoning Map Amendment/Rezoning Request for 1.96 acres (R600 036 000 015E 0000) at the Southwest Corner of May River Road and Benton Lane in Pritchardville from T3 Edge to T2 Rural Center; Applicant: Blaine McClure.

Mr. Noah Krepps presented the staff report and history of zoning for this parcel. Currently, the site does not have access to public sewer or water. The proposed zoning change constitutes a "spot zoning" and therefore, cannot be supported by BC Planning staff. There is also Planning staff concern regarding potential impact to the surrounding residential areas.

Four (4) emails from Cedar Lake area residents expressing their concerns were received by Planning staff prior to the meeting. There were also three (3) citizen comments in favor of the rezoning which were received during the meeting.

Mr. Blaine McClure and Mr. Keene Reese spoke on behalf of the May River Road rezoning request.

Chairman Ed Pappas requested a motion regarding the May River Road rezoning. Ms. Cecily McMillan made a motion to deny the proposed rezoning due to the "spot zoning" issue, seconded by Mr. Kevin Hennelly. The motion to deny passed by a vote of 5:3. (FOR: Dr. Caroline Fermin, Mr. Kevin Hennelly, Chairman Ed Pappas, Ms. Cecily McMillan, and Mr. Jimmie Lawrence Jr; OPPOSED: Vice Chairman Randolph Stewart, Ms. Diane Chmelik, and Mr. Frank Ducey.)

DISCUSSION ITEMS:

Comprehensive Plan Update - Mr. Robert Merchant presented an update and document review timeline for the draft Comprehensive Plan.

The first draft from the consultant was received February 1, 2021, and Planning staff will present to the Planning Commission the middle of March 2021. Chairman Ed Pappas suggested a special Planning Commission meeting(s) be scheduled for March 2021 involving multiple discussions.

NEW/OTHER BUSINESS:

New Business: Chairman's Report

The 2021 Meeting Schedule was formally recognized. Chairman Ed Pappas also discussed the importance of continuing education training, attendance at scheduled meetings, and the number of educational resources provided at the SC Association of Counties website.

Dr. Caroline Fermin nominated Mr. Ed Pappas for a second term as Chairman of the BC Planning Commission, seconded by Mr. Kevin Hennelly. There was unanimous support for the nomination.

Dr. Caroline Fermin nominated Mr. Randolph Stewart for a second term as Vice Chairman of the BC Planning Commission, seconded by Mr. Kevin Hennelly. There was unanimous support for the nomination.

Other Business: The next Planning Commission meeting is scheduled for Monday, March 1, 2021, 6:00 p.m. Additional meeting details will be made available prior to the March 1 meeting date.

ADJOURNMENT: With no further business to discuss, Chairman Ed Pappas adjourned the meeting at 8:29 p.m.

SUBMITTED BY:	Diane McMaster Community Development Senior Administrative Specialist
	Ed Pappas Beaufort County Planning Commission Chairman
	Date:



Memorandum

To: Antoine Iskandar, ACH Custom Homes

From: Jennifer T. Bihl, PE, PTOE, RSP21

Date: January 14, 2021

Re: Parcel R600-013-000-0369-0000 Cherry Point Rezoning – Transportation Review

This memorandum documents the transportation related items associated with the proposed rezoning of parcel R600-013-000-0369-0000 located on Cherry Point Road in Beaufort County, SC. The 17.92 acre parcel is currently zoned T2 Rural and is proposed to be rezoned C3 Neighborhood Mixed Use and C4 Community Center Mixed Use. While the exact details of the development are not known at this time, for the purposes of the study, the C3 portion of the site is planned for 250 mid-rise multifamily units with an expected buildout year of 2024 and the C4 portion of the site is planned for 100,000 square feet (sf) of general commercial use (land use code 820 – shopping center was assumed in the analysis) with an expected buildout year of 2023. There are three access points shown on the initial concept plan accessing Cherry Point Road, with one access point serving the C3 portion of the site and two access points serving the C4 portion of the site. The two C4 access points were combined for this study. As shown on the concept plan, internal connections between the C4 and C3 areas are planned. The parcel has approximately 1,100 feet of frontage on Cherry Point Road with no direct access to SC 170.

Figure 1 (Appendix) shows the site location, and **Figure 2 (Appendix)** shows the initial conceptual plan. The concept plan is expected to be updated and development details finalized as the project moves forward.

The study area for this transportation review was coordinated with Beaufort County Planning staff.

Existing Roadway Conditions

The existing roadways in the project vicinity include SC 170, Cherry Point Road and Pearlstine Drive.

SC 170 is a principal arterial four-lane divided (grassed median) roadway with a posted speed limit of 55 miles per hour (mph). **Table 1** shows the Average Annual Daily Traffic (AADT) data on SC 170 collected by the South Carolina Department of Transportation (SCDOT) from 2009 to 2019.

Cherry Point Road is a two-lane Beaufort County roadway that provides access to the Cherry Point area and Okatie Elementary School. Cherry Point Road is paved from SC 170 to Okatie Elementary School and unpaved just east of Okatie Elementary School. This roadway experiences congestion during school pickup and drop-off periods. This is discussed in more detail later in the memo.



Pearlstine Drive is a two-lane roadway, which is located across from Cherry Point Road at its intersection with SC 170.

	Table 1: SC 170 – SCDOT Daily Traffic Counts by Year											
Road S	Section						Year					
Start	End	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
US 278	SC 462	35,000	33,400	33,000	30,100	29,200	27,700	25,800	24,300	23,300	23,300	22,500

Source: SCDOT AADT Data

Existing Intersection Conditions

The intersection of SC 170 at Cherry Point Road/Pearlstine Drive has exclusive left-turn lanes on SC 170 and an exclusive northbound right-turn lane on SC 170. The Cherry Point Road approach has a shared left-through lane with an exclusive right-turn lane. The Pearlstine Drive approach is a shared left-through-right lane.

Previous Transportation Studies in the Surrounding Area

The following sections discuss recent studies in the vicinity of the site and their applicability to this project.

Okatie Village PUD

The proposed Cherry Point development is adjacent to the Okatie Village PUD, which includes Malind Bluff (Osprey Point) and River Oaks developments. The PUD has both residential and commercial components. In discussions with Beaufort County Planning Staff, the trips associated with the residential component of the development (Phase 1) should be included as approved development in this analysis. The 2021 Phase 1 Build conditions for this study include the following land uses:

- Osprey Point PUD (Malind Bluff) 345 single-family detached units
- River Oaks PUD 315 single-family detached units

Traffic counts were collected in 2017 at the intersection of SC 170 at Cherry Point Road/Pearlstine Drive on a typical weekday from 7:00 AM to 9:00 AM and 2:00 PM to 6:00 PM. The 2017 existing conditions analysis showed the intersection operating at LOS E during the AM peak hour and LOS B during the PM peak hour.



The transportation improvements identified as part of Phase 1 of the Okatie Village PUD that are applicable to the Cherry Point rezoning site include:

- SC 170 at Pearlstine Drive/Cherry Point Road Restriping of the westbound approach (Cherry Point Road) into a shared through right lane and a left-turn lane and installation of a second leftturn lane
- Improvements to Cherry Point Road (to be coordinated with County Staff) Improvements to roadway conditions from site access point to SC 170, potential installation of left-turn lane into the School property, etc.
- Coordination with Beaufort County, Beaufort County School District staff and Developer regarding potential turn lane for school access
- Traffic signal timing optimization at study area signalized intersections

In the 2028 buildout phase of the Okatie Village PUD, SC 170 was planned to be widened as a transportation improvement associated with buildout of the PUD.

Lowcountry Council of Governments (LCOG) SC 170 Access Management Study – Phase 1

In 2019, LCOG reviewed potential access management strategies for application on SC 170 (*LCOG SC 170 Corridor Access Management Study – Phase 1*, AECOM, 2019). It is our understanding that this study is being reviewed by local agencies and has not yet been adopted by Beaufort County. Therefore, the results should be considered preliminary at this time. Traffic counts were collected in 2019 at the intersection of SC 170 at Cherry Point Road/Pearlstine Drive from 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM. The study found that the intersection operated at LOS E in the existing 2019 AM peak hour conditions and LOS C in the existing 2019 PM peak hour conditions. In the morning, the side street approaches experienced elevated delay. In the projected no build year 2040 conditions, the intersection was found to operate at LOS F during the AM and PM peak hour conditions. Based on the results of the access management study, the intersection is recommended to be converted to a restricted crossing U-Turn with U-Turn bulb outs north and south of this intersection on SC 170. With this intersection design concept, no left turns would be allowable from the side streets to SC 170.

Project Access Points

As stated previously, three access points are preliminarily planned on Cherry Point Road for this project. No access points are planned on SC 170. The approximate location of the project access points should be coordinated with Beaufort County and SCDOT as it relates to the spacing from the intersection of SC 170 at Cherry Point Road/Pearlstine Drive. Project access points should also be spaced appropriately and located outside of existing or planned turn lanes on Cherry Point Road with appropriate spacing from the existing school driveway.



It is recommended that the project access points be reviewed in detail in the next phase of the project to determine the appropriate number of access points, the location of the access points for the project and other driveway access design details.

Okatie Elementary School Pick-up Conditions

Currently, Okatie Elementary School uses Cherry Point Road as part of their stacking for families picking up their children at the end of the school day. Based on recent site observations, this stacking builds along Cherry Point Road as the time gets closer to the dismissal and extends along the entire distance of Cherry Point Road from the school driveway to SC 170. (Observations were made during COVID-19 conditions so queuing may vary under normal conditions.) During this time, vehicles (both personal vehicles and school buses) were observed traveling in the opposing traffic lane to travel through on Cherry Point Road or access the school (for purposes other than pick-up/drop-off) while the eastbound lane is blocked. It appears Okatie Elementary staff are stationed on Cherry Point Road to help identify the order of the vehicles queuing for pickup and to facilitate the processing of the queue.

As noted in the Okatie Village PUD traffic analysis, the operations of Cherry Point Road should be coordinated with County and the School District to review other opportunities to satisfy the needed stacking and/or facilitate traffic flow on Cherry Point Road. The County and School District should coordinate with the adjacent properties to investigate opportunities to improve the current conditions.

Improvements to this school queuing situation will need to be addressed prior to the development of this parcel because during the school pick-up time period in the afternoon, the 1,100 feet of frontage of the Cherry Point rezoning site will likely be partially to fully blocked for a 15-30 minute period.

Projected Trip Generation

The traffic generation potential of the proposed development was determined using trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 10^{th} *Edition* (2017) based on the projected use. The AM peak hour and School PM peak hour are being studied as a part of this project. To be conservative, projected trip generation for the PM peak hour of adjacent street traffic from 4-6 pm was used for the School PM peak hour analysis.

Internal capture trips are those trips that stay within the site and do not use the external roadway network. Internal capture trips were assumed within the proposed development and were calculated using National Cooperative Highway Research Program (NCHRP) Report 684 standards.

Pass-by trips are those trips currently on the roadway network that will pass by the proposed development during their original trip, enter the development, then return to their original trip. The AM and School PM peak hour pass-by trips were calculated using ITE standards. School PM peak hour conditions applied the PM peak hour pass-by percentages. No AM peak hour pass-by traffic is expected.



Table 2 shows the projected trip generation for the proposed development for the AM and School PM peak hour conditions.

	_	Table 2: Trip Generatio	n					
Land Use and Intensity	ITE Land Use Code	Daily Weekday	AM]	Peak H	lour		ol PM l Hour	Peak
	Use Code	(gross)	Total	In	Out	Total	In	Out
250 Mid-Rise Multifamily Units	221	1,360	84	22	62	107	65	42
100,000 sf Shopping Center	820	6,012	202	125	77	544	261	283
	Gross Trips	7,372	286	147	139	651	326	325
	Internal	l Capture Trips	-2	-1	-1	-96	-48	-48
	Drive	eway Volumes	284	146	138	555	278	277
		Pass-By Trips	0	0	0	-169	-83	-86
	I	Net New Trips	284	146	138	386	195	191

Source: ITE Trip Generation, 10th Edition, NCHRP 684

As shown in **Table 2**, the proposed development is projected to generate 284 driveway trips during the AM peak hour, 284 of which are new trips (146 entering and 138 exiting), and 555 driveway trips during the PM peak hour, 386 of which are new trips (195 entering and 191 exiting).

Trip Distribution

The proposed project traffic was assigned to the surrounding roadway network. The directional distribution and assignments were based on qualitative knowledge of the project area, previous travel demand model information and expected trip length.

The following general trip distribution was applied to the project trips:

- 66% to/from the south on SC 170
- 30% to/from the north on SC 170
- 1% to/from the west on Pearlstine Drive
- 3% to/from the east on Cherry Point Road

It was assumed that C3 trips would primarily use the C3 Project Access and C4 trips would primarily use the C4 Project Access. The detailed trip distribution for the site is shown in **Figure 3 (Appendix)**.



Existing Traffic Volumes

Historic 2017 traffic data was used in the analysis as it was collected during the school arrival and dismissal period. The 2017 count was compared to the 2019 count and they were found to be generally consistent (with growth applied to 2017 count data).

Future Volume Projections

The development of the background traffic for SC 170 was determined by reviewing, historic AADT growth, projected travel demand model growth, and growth rates used in past studies. Historic traffic counts on the SC 170 corridor in this area shows a historic growth of approximately 5.5% per year for the 10-year, 5-year and 3-year periods. Based on the LCOG SC 170 Corridor Access Management Study, the travel demand model shows a projected annual growth of 1.31% per year in this segment of SC 170 however it is our understanding that some SC 170 developments are not included in this version of the model. This growth rate was used in their analysis with an SC 170 "balancing adjustment" applied. The Okatie Village PUD TIA applied a 6.5% growth rate per year from 2017 to 2021 and a 5% growth rate per year from 2021 to 2028. For the purposes of this study, a 5.5% growth rate per year was used for the SC 170 traffic volumes.

A 1% per year growth rate was used for the side street background traffic. On the Cherry Point approach, Okatie Village PUD Phase 1 traffic was added to the intersection traffic volumes as approved development traffic.

Figure 4 (Appendix) shows the existing and planned laneage for the study area intersections.

Figure 5 (Appendix) and **Figure 6 (Appendix)** shows the projected 2024 Build peak hour traffic volumes for the study area intersections for the AM peak hour and School PM peak hour, respectively.

Turn Lane Analysis

The intersection of Cherry Point Road at C4 Project Access was reviewed for potential installation of an exclusive eastbound left-turn lane and an exclusive westbound right-turn lane on Cherry Point Road. Cherry Point Road is a Beaufort County roadway; however, the South Carolina Department of Transportation (SCDOT) *Roadway Design Manual* (2017) guidelines were reviewed at the intersection to determine if criteria were met for the consideration of exclusive turn lanes. Based on a comparison of the projected 2024 Build AM and PM peak hour traffic volumes to the criteria and the overall projected traffic volumes, it was determined that an exclusive eastbound left-turn lane "should be considered" and an exclusive westbound right-turn lane imay not be necessary." Therefore, the exclusive eastbound left-turn lane is recommended on Cherry Point Road and included in the analysis. The exclusive westbound right-turn lane is not recommended at this time and was not included in the analysis. The turn lane analysis charts are attached.



The intersection of Cherry Point Road at C3 Project Access was also reviewed for potential installation of an exclusive eastbound left-turn lane and an exclusive westbound right-turn lane on Cherry Point Road. SCDOT *Roadway Design Manual* (2017) guidelines were reviewed at the intersection to determine if criteria were met for the consideration of exclusive turn lanes. Based on a comparison of the projected 2024 Build AM and PM peak hour traffic volumes to the criteria and the overall projected traffic volumes, it was determined that an exclusive eastbound left-turn lane "should be considered" and an exclusive westbound right-turn lane imay not be necessary." Therefore, the exclusive eastbound left-turn lane is recommended on Cherry Point Road and included in the analysis. The exclusive westbound right-turn lane is not recommended at this time and was not included in the analysis. The turn lane analysis charts are attached.

Capacity Analysis

Capacity analyses were performed for the AM and School PM peak hours for the 2024 Build conditions using the Synchro, Version 10 software to determine the operating characteristics of the adjacent roadway network and the impacts of the proposed project at the project driveways. The analyses were conducted with methodologies contained in the *Highway Capacity Manual*, 6th Edition (HCM 6) (Transportation Research Board, 2016). The Synchro intersection analysis worksheets are attached.

Capacity of an intersection is defined as the maximum number of vehicles that can pass through an intersection during a specified time, typically an hour. Capacity is described by level of service (LOS) for the operating characteristics of an intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A being the best and F being the worst.

LOS for a two-way, stop-controlled (TWSC) intersection is determined by the delay of the poorest performing minor approach, as LOS is not defined for TWSC intersections as a whole. It is not unusual for minor stop-controlled side streets and driveways on major streets to experience longer delays at LOS E and LOS F during peak hours while the majority of the traffic moving through the corridor typically experiences little or no delay.

Capacity analyses were performed for the 2024 Build AM and School PM peak hour traffic conditions for the following intersections:

- SC 170 at Cherry Point Road/Pearlstine Drive
- Cherry Point Road at C4 Project Access (2024 Build only)
- Cherry Point Road at C3 Project Access (2024 Build only)

The peak hour factors (PHFs) were adjusted from the existing conditions to reflect the increase in traffic from the approved development and proposed development where a more consistent traffic flow is expected. This resulted in PHFs ranging from 0.70 to 0.80, therefore for the future conditions the PHFs for the Cherry Point Road approaches were adjusted to 0.75.



Table 2 summarizes LOS and control delay (average seconds of delay per vehicle) for the existing 2017, 2024 No Build and 2024 Build AM and School PM peak hour conditions. The 2024 Build conditions were reviewed with and without the SC 170 at Cherry Point Road/Pearlstine Drive intersection improvements planned in the Okatie Village PUD. These improvements shown in **Figure 4** (**Appendix**) included restriping of the westbound approach (Cherry Point Road) of the SC 170 at Cherry Point Road/Pearlstine Drive intersection into a shared through right lane and a left-turn lane and installation of a second left-turn lane. It is our understanding that these are not scheduled for construction at this time.

		Level of S	ervice and	Table 2		nds per veh	nicle)		
Intersection	Traffic Control ¹	2017 Co	nditions	2024 N Cond	o Build itions	Okatie Vi SC 170 a Poin Inters	itions planned llage PUD tt Cherry tt Rd.	Cond (with p Okatie Vi SC 170 a Poin Inters	olanned llage PUD it Cherry t Rd.
		AM Peak Hour	School PM Peak Hour	AM Peak Hour	School PM Peak Hour	AM Peak Hour	School PM Peak Hour	AM Peak Hour	School PM Peak Hour
SC 170 at Cherry Point Rd./ Pearlstine Dr.	S	E (71.2)	C (23.7)	F (253.7)	F (93.6)	F (246.9)	F (106.4)	F (161.1)	E (67.9)
Cherry Point Rd. at C4 Project Access	U	-	-	-	-	C (17.3) – SB	C (18.1) – EB	C (17.3) – SB	C (18.1) – EB
Cherry Point Road at C3 Project Access	U	-	-	-	-	B (13.9) – SB	B (11.7) – SB	B (13.9) – SB	B (11.7) – SB

^{1.} U = Unsignalized, S = Signalized

As shown in **Table 2**, the intersection of SC 170 at Cherry Point Road/Pearlstine Drive is shown to operate at LOS E in the 2017 AM peak hour conditions and LOS C in the 2017 School PM peak hour conditions. In the 2024 No Build conditions, the intersection is projected to operate at LOS F in the AM peak hour conditions and the School PM peak hour conditions. This is primarily due to the traffic on SC 170. The intersection is projected to operate at LOS F in the AM peak hour and School PM peak hour conditions without the Okatie Village PUD improvements and LOS F (with a 35% decrease in delay and over a minute of average savings per vehicle) in the AM peak hour conditions and LOS F (with a 35% decrease in delay and approximately 40 seconds of average savings per vehicle) in the School PM peak hour conditions with the improvements.



As shown in **Table 2**, the intersection of Cherry Point Road and C4 Project Access is shown to operate at LOS C in the 2024 AM peak hour and School PM peak hour conditions with the addition of the eastbound left-turn lane on Cherry Point Road.

As shown in **Table 2**, the intersection of Cherry Point Road and C3 Project Access is shown to operate at LOS B in the 2024 AM peak hour and School PM peak hour conditions with the addition of the eastbound left-turn lane on Cherry Point Road.

Recommendations

Based on the results of the analysis the following preliminary improvements are recommended as part of this project.

- Due to the uncertainty both in the details of the site beyond a concept plan and the timing of improvements external to the site, the completion of formal traffic impact analysis is recommended when the plans for the site are more defined. This would include the following (but is not limited to):
 - Analysis of study area intersections as determined at that time by regulatory staff.
 (Additional improvements than what is noted in this study may be identified in future TIAs.)
 - Coordinate with Beaufort County and SCDOT the location, number and design details of the project access points on Cherry Point Road
- SC 170 at Cherry Point Road/Pearlstine Drive (if not already completed by others)
 - Restriping of the westbound approach (Cherry Point Road) into a shared through-right turn lane
 - o Installation of a second left-turn lane on Cherry Point Road
 - o Optimize traffic signal timings
- Cherry Point Road at C4 Project Access
 - o Installation of eastbound left-turn lane on Cherry Point Road
- Cherry Point Road at C3 Project Access
 - o Installation of eastbound left-turn lane on Cherry Point Road
- Coordinate with Beaufort County (and Okatie Village PUD developer as appropriate) on improvement plans for Cherry Point Road identified in the Okatie Village PUD
- Coordination with Beaufort County, Beaufort County School District staff regarding school access and stacking on Cherry Point Road
- Coordination with Beaufort County, LCOG, adjacent developers on future widening of SC 170 to six lanes, implementation of the LCOG access management concept, or other improvement.

Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.



Appendix





Cherry Point Rezoning Transportation Review Site Location

Figure 1

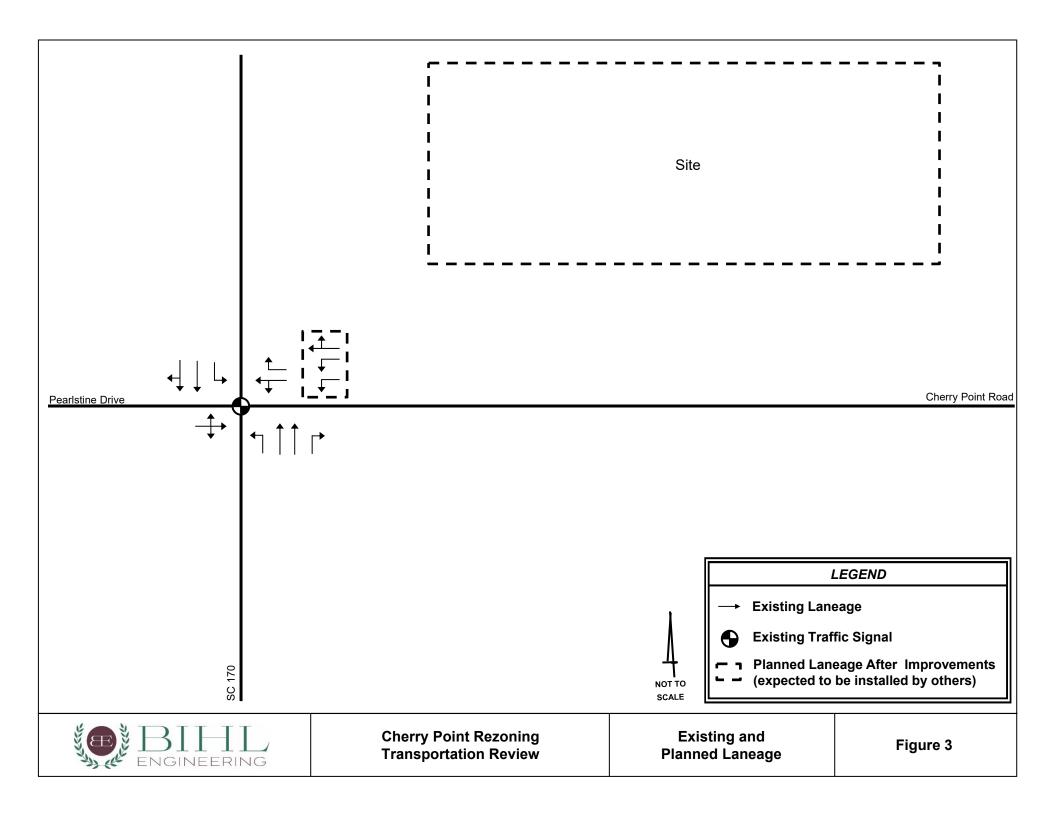


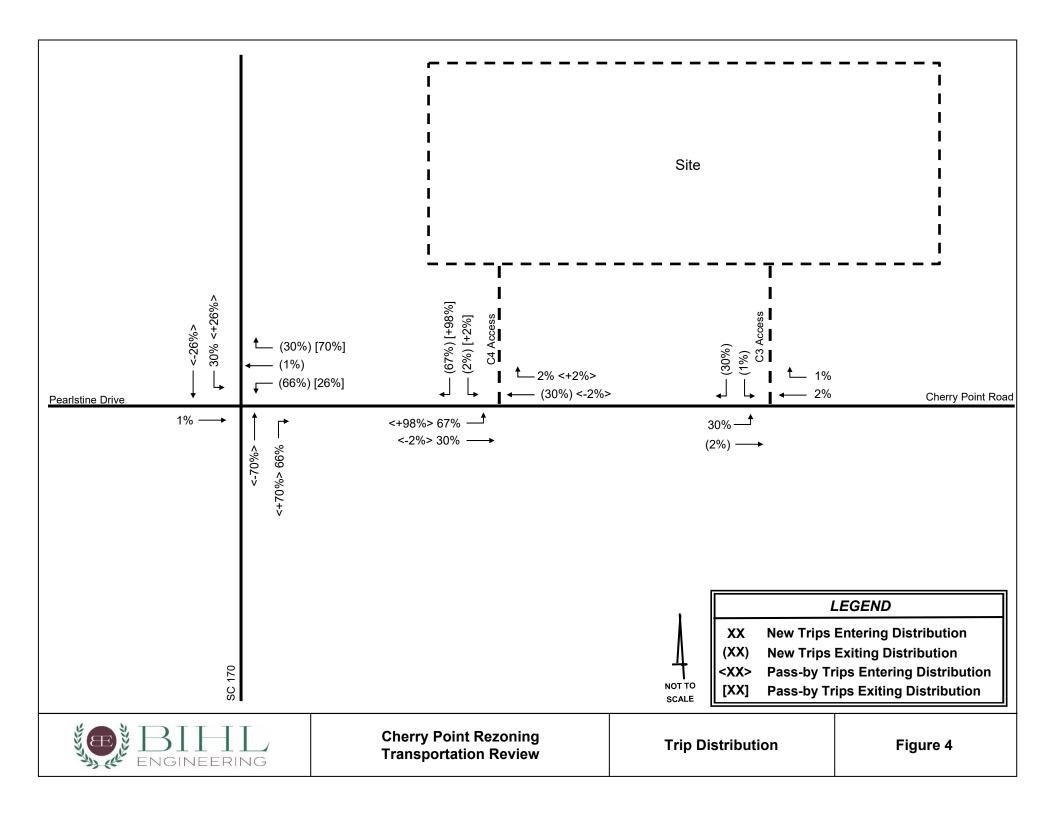
Source: Antoine Iskandar

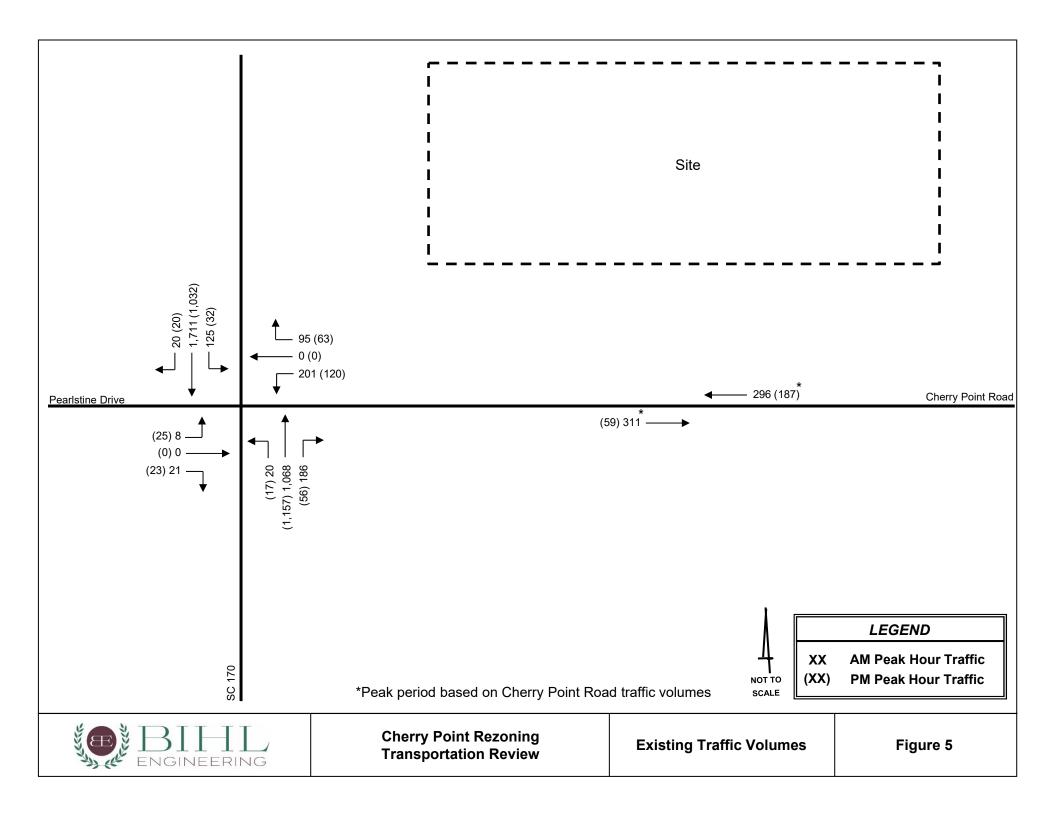
Cherry Point Rezoning Transportation Review

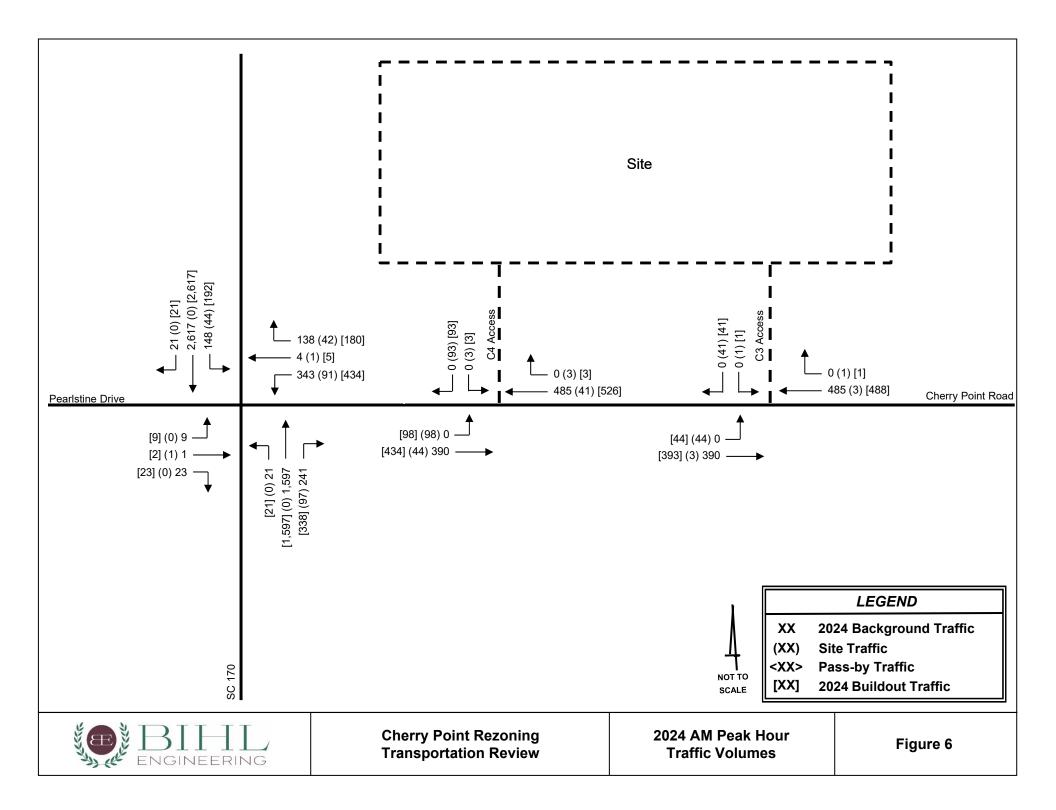
Conceptual Site Plan

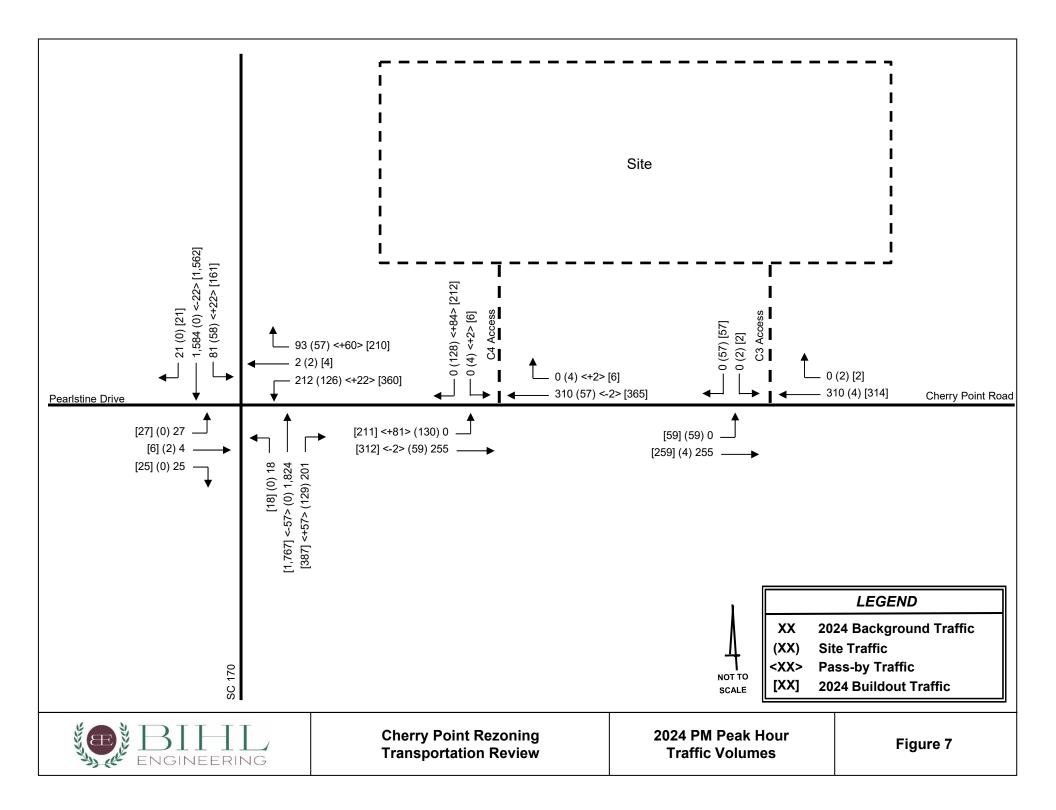
Figure 2











File Name: SC 170 @ Pearlstine-Cherry Point

Site Code:

Start Date : 10/11/2017

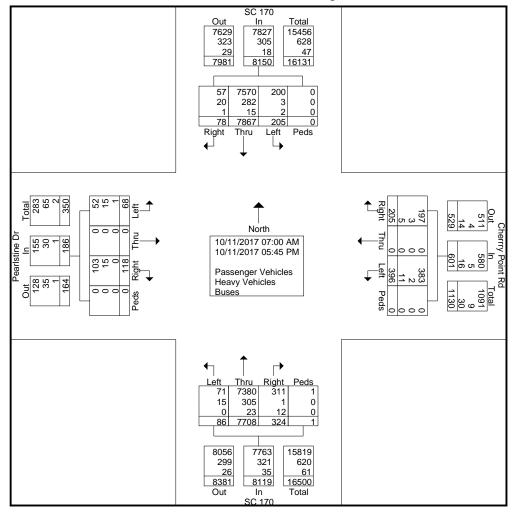
Groups Printed- Passenger	Vehicles - Heavy	Vehicles - Buses

				Ģ					les - Hea		icles - B	uses					
		_SC			(Cherrry F					170			Pearls			
		From				From					South				West		
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	33	404	13	0	44	0	15	0	5	215	37	0	1	0	2	0	769
07:15 AM	47	405	2	0	46	0	20	0	4	252	69	0	3	0	1	0	849
07:30 AM	41	458	0	0	79	0	50	0	6	318	75	0	4	0	11	0	1042
07:45 AM	4	444	5	0	32	0	10	0	5	283	5	0	0	0	7	0	795
Total	125	1711	20	0	201	0	95	0	20	1068	186	0	8	0	21	0	3455
08:00 AM	0	430	4	0	5	0	4	0	3	276	2	0	2	0	5	0	731
08:15 AM	2	370	5	0	3	0	1	0	2	281	3	0	1	0	3	0	671
08:30 AM	2	275	7	0	3	0	0	0	5	247	1	0	2	0	3	0	545
08:45 AM	2	314	4	0	1	0	1_	0	7	238	3	0	2	0	7	0	579
Total	6	1389	20	0	12	0	6	0	17	1042	9	0	7	0	18	0	2526
,																	1
02:00 PM	9	255	3	0	1	0	4	0	7	275	12	1	3	0	5	0	575
02:15 PM	10	253	4	0	2	0	3	0	4	254	14	0	2	0	4	0	550
02:30 PM	11	272	7	0	2	0	4	0	5	263	21	0	6	0	8	0	599
02:45 PM	16	244	5	0	31	0	23_	0	5_	269	25_	0	7	0	5	0	630
Total	46	1024	19	0	36	0	34	0	21	1061	72	1	18	0	22	0	2354
	ı			1				1									1
03:00 PM	3	236	3	0	68	0	25	0	4	292	8	0	11	0	5	0	655
03:15 PM	2	280	5	0	19	0	11	0	3	333	2	0	1	0	5	0	661
03:30 PM	1	308	3	0	7	0	3	0	6	304	2	0	2	0	9	0	645
03:45 PM	1	324	0	0	6	0	3_	0	1_	356	4	0	2	0	2	0	699
Total	7	1148	11	0	100	0	42	0	14	1285	16	0	16	0	21	0	2660
			_	- 1		_	_	_ 1	_			- 1	_	_		_	
04:00 PM	6	292	1	0	14	0	4	0	3	381	11	0	6	0	4	0	722
04:15 PM	0	272	1	0	11	0	5	0	0	419	4	0	1	0	6	0	719
04:30 PM	3	323	3	0	3	0	5	0	2	346	8	0	1	0	3	0	697
04:45 PM	4	359	0	0	4	0	5	0	6	390	4_	0	2	0	5	0	779
Total	13	1246	5	0	32	0	19	0	11	1536	27	0	10	0	18	0	2917
05.00.514	۱ ۵	074	•	ا م		•		ا م		404	_	ا م			•		000
05:00 PM	2	371	3	0	3	0	3	0	2	461	5	0	4	0	9	0	863
05:15 PM	2	345	0	0	7	0	2	0	0	447	1	0	2	0	3	0	809
05:30 PM	1	338	0	0	2	0	4	0	1	463	6	0	2	0	5	0	822
05:45 PM	3	295	0	0	3	0	0	0	0	345	2	0	1	0	1	0	650
Total	8	1349	3	0	15	0	9	0	3	1716	14	0	9	0	18	0	3144
O I T1	005	7007	70	ا م	000	0	005	ا م	00	7700	004		00	0	440	0	47050
Grand Total	205	7867	78	0	396	0	205	0	86	7708	324	1	68	0	118	0	17056
Apprch %	2.5	96.5	1	0	65.9	0	34.1	0	1.1	94.9	4	0	36.6	0	63.4	0	
Total %	1.2	46.1	0.5	0	2.3	0	1.2	0	0.5	45.2	1.9	0	0.4	0	0.7	0	40005
Passenger Vehicles	200	7570	57 72.4	0	383	0	197	0	71	7380	311	1 100	52	0	103	0	16325
% Passenger Vehicles	97.6	96.2	73.1	0	96.7	0	96.1	0	82.6	95.7	96	100	76.5	0	87.3	0	95.7
Heavy Vehicles	3	282	20	0	2	0	3	0	15	305 4	1	0	15	0	15	0	661
% Heavy Vehicles	1.5	3.6	25.6	0	0.5	0	1.5	0	17.4		0.3	0	22.1	0	12.7	0	3.9
Buses	2	15	1	0	11	0	5	0	0	23	12	0	1	0	0	0	70
% Buses	1	0.2	1.3	0	2.8	0	2.4	0	0	0.3	3.7	0	1.5	0	0	0	0.4

File Name: SC 170 @ Pearlstine-Cherry Point

Site Code:

Start Date : 10/11/2017

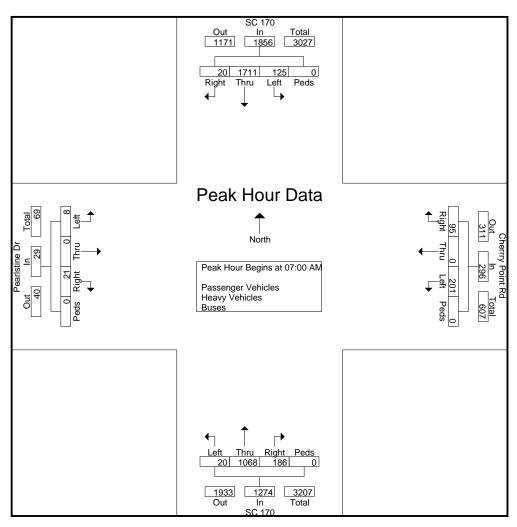


File Name: SC 170 @ Pearlstine-Cherry Point

Site Code:

Start Date : 10/11/2017

			SC 17	-			Cherrry Point Rd From East				SC 170 From South				Pearlstine Dr From West						
Start Time	Left	Thru	Right		App. Total	Left			Peds	App. Total	Left		Right	Peds	App. Total	Left	Thru	Right		App. Total	Int. Total
Peak Hour A	nalysis	From (07:00 A	AM to 1	1:45 AM	1 - Pea	k 1 of 1	1													
Peak Hour fo	r Entire	Inters	ection	Begins	at 07:0	MA 0															
07:00 AM	33	404	13	0	450	44	0	15	0	59	5	215	37	0	257	1	0	2	0	3	769
07:15 AM	47	405	2	0	454	46	0	20	0	66	4	252	69	0	325	3	0	1	0	4	849
07:30 AM	41	458	0	0	499	79	0	50	0	129	6	318	75	0	399	4	0	11	0	15	1042
07:45 AM	4	444	5	0	453	32	0	10	0	42	5	283	5	0	293	0	0	7	0	7	795
Total Volume	125	1711	20	0	1856	201	0	95	0	296	20	1068	186	0	1274	8	0	21	0	29	3455
% App. Total	6.7	92.2	1.1	0		67.9	0	32.1	0		1.6	83.8	14.6	0		27.6	0	72.4	0		
PHF	.665	.934	.385	.000	.930	.636	.000	.475	.000	.574	.833	.840	.620	.000	.798	.500	.000	.477	.000	.483	.829

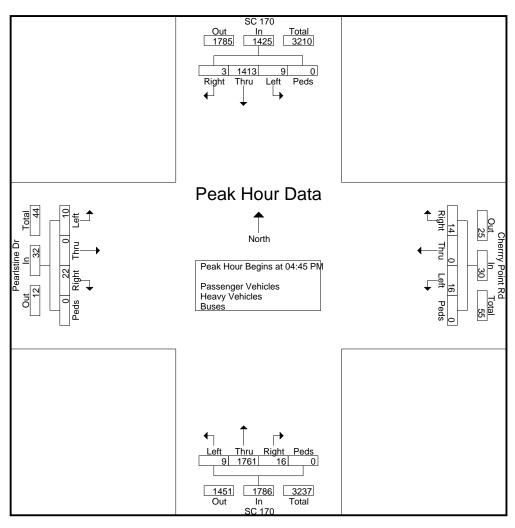


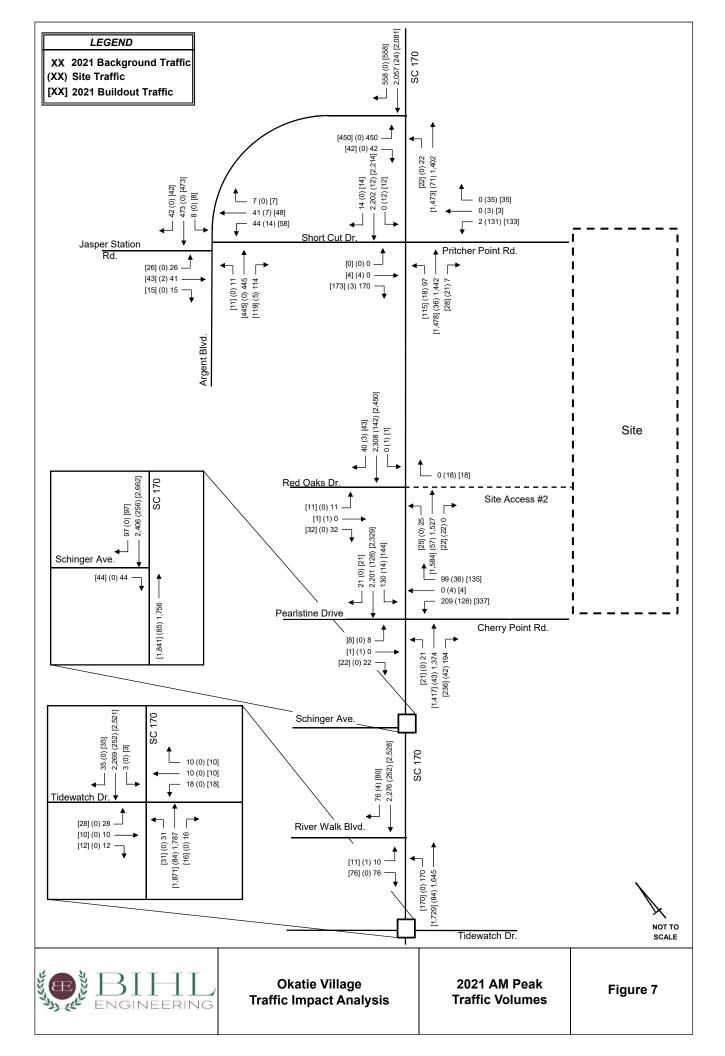
File Name: SC 170 @ Pearlstine-Cherry Point

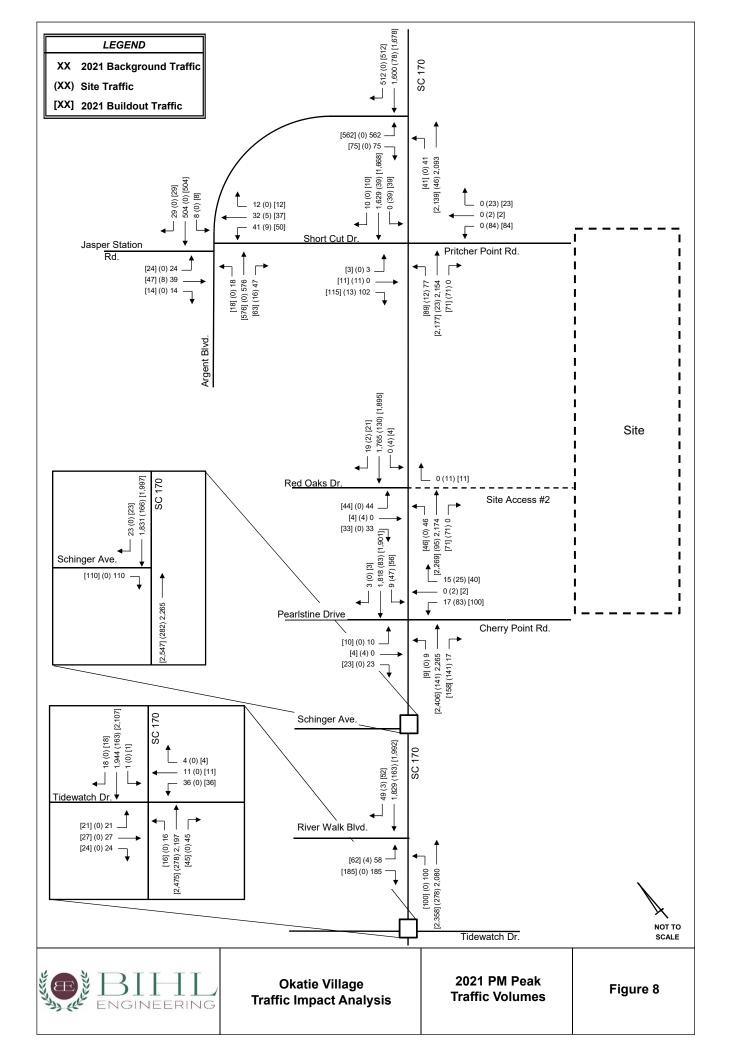
Site Code:

Start Date : 10/11/2017

			SC 17	-			Cherrry Point Rd						SC 17	-		Pearlstine Dr					
		<u>Fr</u>	om No	orth			From East				From South					From West					
Start Time	Left	Thr u	Rig ht	Ped s	App. Total	Left	Thr u	Rig ht	Ped s	App. Total	Left	Thr u	Right	Peds	App. Total	Left	Thr u	Right	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From 1	12:00 F	M to 0	5:45 PN	1 - Peal	< 1 of 1														
Peak Hour fo	r Entire	Inters	ection	Begins	at 04:4	5 PM															
04:45 PM	4	359	0	0	363	4	0	5	0	9	6	390	4	0	400	2	0	5	0	7	779
05:00 PM	2	371	3	0	376	3	0	3	0	6	2	461	5	0	468	4	0	9	0	13	863
05:15 PM	2	345	0	0	347	7	0	2	0	9	0	447	1	0	448	2	0	3	0	5	809
05:30 PM	1	338	0	0	339	2	0	4	0	6	1	463	6	0	470	2	0	5	0	7	822
Total Volume	9	1413	3	0	1425	16	0	14	0	30	9	1761	16	0	1786	10	0	22	0	32	3273
% App. Total	0.6	99.2	0.2	0		53.3	0	46.7	0		0.5	98.6	0.9	0		31.2	0	68.8	0		
PHF	.563	.952	.250	.000	.947	.571	.000	.700	.000	.833	.375	.951	.667	.000	.950	.625	.000	.611	.000	.615	.948







INTERSECTION VOLUME DEVELOPMENT

Cherry Point Rezoning

SC 170 at Cherry Point Road/Pearlstine Road AM PEAK HOUR (7:00 AM to 8:00 AM)

		SC 170		SC 170			Pea	arlstine R	oad	Cherry Point Road			
	_	orthboun	_	Southbound				<u>Eastboun</u>		Westbound			
Description	Left	Left Through Right			Through	Right	Left	Through	Right	Left	Through	Right	
2017 Raw Turning Movement Count Data	20	1,068	186	125	1,711	20	8	0	21	201	0	95	
Pedestrians		0			0			0			0		
Heavy Vehicle %		4.0%			4.0%			17.0%			4.0%		
Peak Hour Factor		0.80			0.93			0.48		0.57 (0.75)			
Annual Growth Rate	1.0%	5.5%	1.0%	1.0%	5.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Growth Factor	1.072	1.455	1.072	1.072	1.455	1.072	1.072	1.072	1.072	1.072	1.072	1.072	
Adjacent Site Development Traffic	0	43	42	14	128	0	0	1	0	128	4	36	
2024 Background Traffic	21	1,597	241	148	2,617	21	9	1	23	343	4	138	
Trip Distribution	+												
New Trips IN			66%	30%				1%					
New Trips OUT										66%	1%	30%	
Pass By Distribution													
Pass By IN		-70%	70%	26%	-26%								
Pass By OUT										26%		70%	
New Trips	0	0	97	44	0	0	0	1	0	91	1	42	
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	97	44	0	0	0	1	0	91	1	42	
2024 Buildout Total	21	1,597	338	192	2,617	21	9	2	23	434	5	180	

SCHOOL PM PEAK HOUR (2:30 PM to 3:30 PM)

	SC 170 Northbound		SC 170 <u>Southbound</u>			Pearlstine Road <u>Eastbound</u>			Cherry Point Road <u>Westbound</u>				
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
2017 Raw Turning Movement Count Data	17	1,157	56	32	1,032	20	25	0	23	120	0	63	
Pedestrians		0			0			0		0			
Heavy Vehicle %		4.0%			4.0%			17.0%			4.0%		
Peak Hour Factor	0.91			0.93			0.75			0.49 (0.75)			
Annual Growth Rate	1.0%	5.5%	1.0%	1.0%	5.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Growth Factor	1.072	1.455	1.072	1.072	1.455	1.072	1.072	1.072	1.072	1.072	1.072	1.072	
Adjacent Site Development Traffic	0	141	141	47	83	0	0	4	0	83	2	25	
2024 Background Traffic	18	1,824	201	81	1,584	21	27	4	25	212	2	93	
Trip Distribution													
New Trips IN			66%	30%				1%					
New Trips OUT										66%	1%	30%	
Pass By Distribution													
Pass By IN		-70%	70%	26%	-26%								
Pass By OUT										26%		70%	
New Trips	0	0	129	58	0	0	0	2	0	126	2	57	
Pass By Trips	0	-57	57	22	-22	0	0	0	0	22	0	60	
Total Project Trips	0	-57	186	80	-22	0	0	2	0	148	2	117	
2024 Buildout Total	18	1,767	387	161	1,562	21	27	6	25	360	4	210	

1/14/2021 22:40

INTERSECTION VOLUME DEVELOPMENT Cherry Point Rezoning

Cherry Point Road at C4 Access AM PEAK HOUR (7:00 AM to 8:00 AM)

	Northbound		C4 Access <u>Southbound</u>			Cherry Point Road <u>Eastbound</u>			Cherry Point Road <u>Westbound</u>				
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
2017 Raw Turning Movement Count Data	0	0	0	0	0	0	0	311	0	0	296	0	
Pedestrians			ı		I.			<u> </u>	ı		1		
Heavy Vehicle %					2.0%			3.0%		3.0%			
Peak Hour Factor		0.90		0.90			0.67 (0.75)			0.57 (0.75)			
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	
Adjacent Site Development Traffic	0	0	0	0	0	0	0	57	0	0	168	0	
2024 Background Traffic	0	0	0	0	0	0	0	390	0	0	485	0	
Trip Distribution	+												
New Trips IN							67%	30%				2%	
New Trips OUT				2%		67%					30%		
Pass By Distribution													
Pass By IN							98%	-2%			-2%	2%	
Pass By OUT				2%		98%							
New Trips	0	0	0	3	0	93	98	44	0	0	41	3	
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	0	3	0	93	98	44	0	0	41	3	
2024 Buildout Total	0	0	0	3	0	93	98	434	0	0	526	3	

SCHOOL PM PEAK HOUR (2:45 PM to 3:45 PM)

	- <u>Northbound</u>		C4 Access <u>Southbound</u>			Cherry Point Road <u>Eastbound</u>			Cherry Point Road <u>Westbound</u>					
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right		
2017 Raw Turning Movement Count Data	0	0	0	0	0	0	0	59	0	0	187	0		
Pedestrians		ı	ı		I.									
Heavy Vehicle %		0.0%			2.0%			3.0%			3.0%			
Peak Hour Factor	0.90			0.90			0.36 (0.75)			0.5 (0.75)				
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072		
Adjacent Site Development Traffic	0	0	0	0	0	0	0	192	0	0	110	0		
2024 Background Traffic	0	0	0	0	0	0	0	255	0	0	310	0		
Trip Distribution														
New Trips IN							67%	30%				2%		
New Trips OUT				2%		67%					30%			
Pass By Distribution														
Pass By IN							98%	-2%			-2%	2%		
Pass By OUT				2%		98%								
New Trips	0	0	0	4	0	128	130	59	0	0	57	4		
Pass By Trips	0	0	0	2	0	84	81	-2	0	0	-2	2		
Total Project Trips	0	0	0	6	0	212	211	57	0	0	55	6		
2024 Buildout Total	0	0	0	6	0	212	211	312	0	0	365	6		

1/14/2021 22:40

INTERSECTION VOLUME DEVELOPMENT Cherry Point Rezoning

Cherry Point Road at C3 Access AM PEAK HOUR (7:00 AM to 8:00 AM)

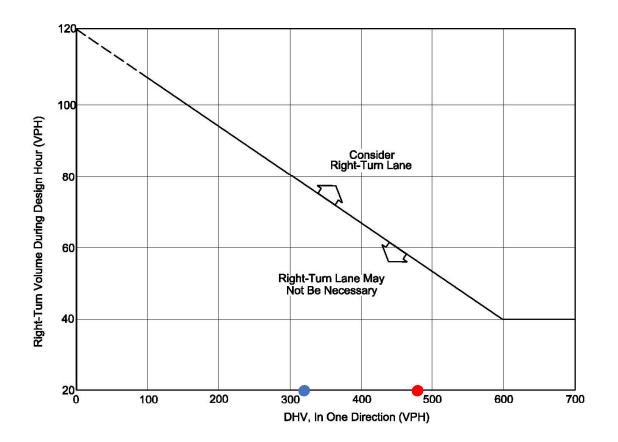
Description	- <u>Northbound</u> Left Through Right		C3 Access Southbound			Cherry Point Road <u>Eastbound</u>			Cherry Point Road <u>Westbound</u> Left Through Right				
Description	Left	Tillough	Kigiit	Left	Through	Right	Left	Through	Kigiit	Left	Tillough	Kigiii	
2017 Raw Turning Movement Count Data	0	0	0	0	0	0	0	311	0	0	296	0	
Pedestrians													
Heavy Vehicle %				2.0%			3.0%			3.0%			
Peak Hour Factor					0.90			0.67 (0.75)	0.57 (0.75)			
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	
Adjacent Site Development Traffic	0	0	0	0	0	0	0	57	0	0	168	0	
2024 Background Traffic	0	0	0	0	0	0	0	390	0	0	485	0	
Trip Distribution													
New Trips IN							30%				2%	1%	
New Trips OUT				1%		30%		2%					
Pass By Distribution													
Pass By IN													
Pass By OUT													
New Trips	0	0	0	1	0	41	44	3	0	0	3	1	
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	0	1	0	41	44	3	0	0	3	1	
2024 Buildout Total	0	0	0	1	0	41	44	393	0	0	488	1	

SCHOOL PM PEAK HOUR (2:45 PM to 3:45 PM)

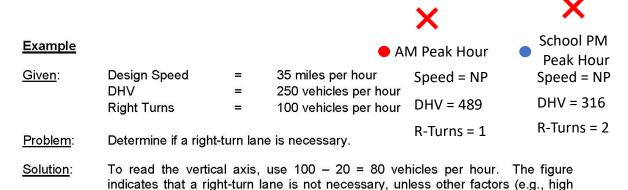
	- <u>Northbound</u>		C3 Access Southbound			Cherry Point Road <u>Eastbound</u>			Cherry Point Road <u>Westbound</u>				
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
2017 Raw Turning Movement Count Data	0	0	0	0	0	0	0	59	0	0	187	0	
Pedestrians													
Heavy Vehicle %					2.0%		3.0%			3.0%			
Peak Hour Factor				0.90			0.36 (0.75)			0.5 (0.75)			
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	
Adjacent Site Development Traffic	0	0	0	0	0	0	0	192	0	0	110	0	
2024 Background Traffic	0	0	0	0	0	0	0	255	0	0	310	0	
Trip Distribution													
New Trips IN							30%				2%	1%	
New Trips OUT				1%		30%		2%					
Pass By Distribution													
Pass By IN													
Pass By OUT													
New Trips	0	0	0	2	0	57	59	4	0	0	4	2	
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	0	2	0	57	59	4	0	0	4	2	
2024 Buildout Total	0	0	0	2	0	57	59	259	0	0	314	2	

1/14/2021 22:40

9.5-2 INTERSECTIONS March 2017



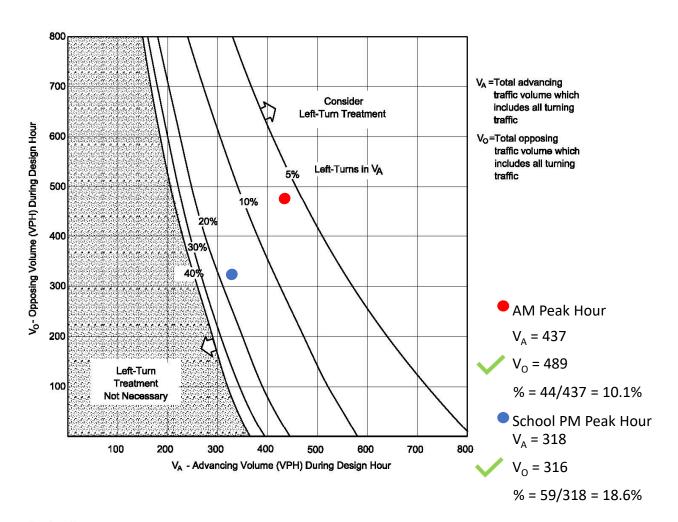
Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.



GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS
ON TWO-LANE HIGHWAYS
Figure 9.5-A

crash rate) indicate a lane is needed.

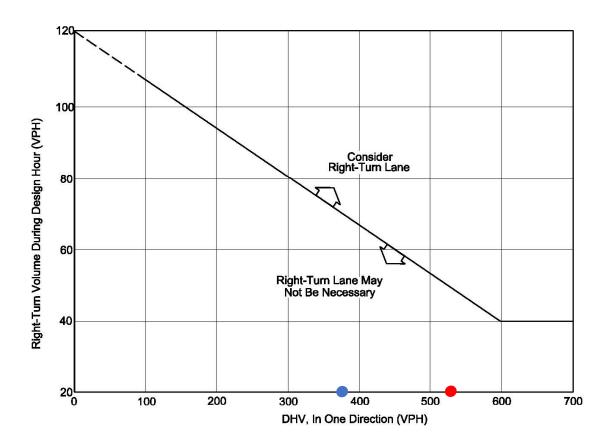
March 2017 INTERSECTIONS 9.5-9



Instructions:

- The family of curves represents the percent of left turns in the advancing volume (V_A).
 The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
- 2. Read V_A and V_O into the chart and locate the intersection of the two volumes.
- 3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

9.5-2 INTERSECTIONS March 2017

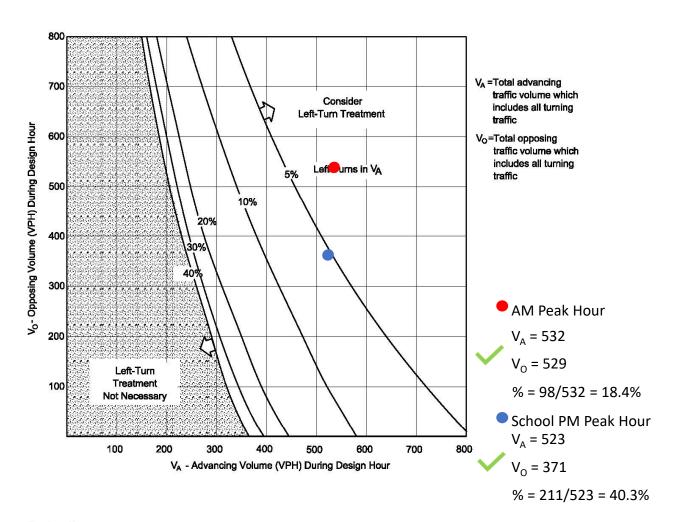


Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

				X	×
<u>Example</u>			• A	M Peak Hour	School PM Peak Hour
<u>Given</u> :	Design Speed	=	35 miles per hour	Speed = NP	Speed = NP
	DHV Right Turns	=	250 vehicles per hour 100 vehicles per hour	DHV = 529	DHV = 371
<u>Problem</u> :	Determine if a righ	t-turn lar	ne is necessary.	R-Turns = 3	R-Turns = 6
Solution:			use 100 – 20 = 80 ve ane is not necessary, ur	1.54	

crash rate) indicate a lane is needed.

March 2017 INTERSECTIONS 9.5-9



Instructions:

- The family of curves represents the percent of left turns in the advancing volume (V_A).
 The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
- 2. Read V_A and V_O into the chart and locate the intersection of the two volumes.
- 3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

	۶	→	•	•	—	•	4	†	~	/	Ţ	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	7	ሻ	44	7	*	∱ ∱	
Traffic Volume (veh/h)	8	0	21	201	0	95	20	1068	186	125	1711	20
Future Volume (veh/h)	8	0	21	201	0	95	20	1068	186	125	1711	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	17	0	44	353	0	167	25	1335	0	134	1840	22
Peak Hour Factor	0.48	0.48	0.48	0.57	0.57	0.57	0.80	0.80	0.80	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	48	21	53	193	0	289	151	1720		288	1883	22
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.04	0.49	0.00	80.0	0.53	0.53
Sat Flow, veh/h	0	111	288	639	0	1560	1753	3497	1560	1753	3540	42
Grp Volume(v), veh/h	61	0	0	353	0	167	25	1335	0	134	907	955
Grp Sat Flow(s),veh/h/ln	399	0	0	639	0	1560	1753	1749	1560	1753	1749	1833
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	9.4	0.7	30.3	0.0	3.4	48.8	49.1
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	9.4	0.7	30.3	0.0	3.4	48.8	49.1
Prop In Lane	0.28		0.72	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	122	0	0	193	0	289	151	1720		288	930	975
V/C Ratio(X)	0.50	0.00	0.00	1.83	0.00	0.58	0.17	0.78		0.47	0.98	0.98
Avail Cap(c_a), veh/h	122	0	0	193	0	289	303	1861		370	931	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	0.0	0.0	42.8	0.0	35.9	22.1	20.2	0.0	16.7	22.0	22.1
Incr Delay (d2), s/veh	3.2	0.0	0.0	392.9	0.0	2.8	0.5	2.2	0.0	1.2	23.7	23.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	25.7	0.0	3.8	0.3	11.4	0.0	1.2	23.1	24.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	0.0	435.7	0.0	38.7	22.7	22.3	0.0	17.8	45.6	45.8
LnGrp LOS	D	Α	Α	F	Α	D	С	С		В	D	D
Approach Vol, veh/h		61			520			1360	Α		1996	
Approach Delay, s/veh		37.5			308.2			22.3			43.9	
Approach LOS		D			F			С			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	60.0		25.0	15.5	56.1		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+I1), s	2.7	51.1		19.9	5.4	32.3		19.9				
Green Ext Time (p_c), s	0.0	0.3		0.0	0.2	11.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			71.2									
HCM 6th LOS			E									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

	•	→	•	•	←	4	4	†	/	>	↓	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	7	7	^	7	7	∱ î≽	
Traffic Volume (veh/h)	25	0	23	120	0	63	17	1157	56	32	1032	20
Future Volume (veh/h)	25	0	23	120	0	63	17	1157	56	32	1032	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	33	0	31	245	0	129	19	1271	0	34	1110	22
Peak Hour Factor	0.75	0.75	0.75	0.49	0.49	0.49	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	17	16	285	0	323	266	1647		246	1714	34
Arrive On Green	0.21	0.00	0.21	0.21	0.00	0.21	0.03	0.47	0.00	0.05	0.49	0.49
Sat Flow, veh/h	0	82	77	976	0	1560	1753	3497	1560	1753	3507	70
Grp Volume(v), veh/h	64	0	0	245	0	129	19	1271	0	34	553	579
Grp Sat Flow(s),veh/h/ln	159	0	0	976	0	1560	1753	1749	1560	1753	1749	1828
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.2	0.5	26.1	0.0	0.8	20.5	20.5
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	6.2	0.5	26.1	0.0	0.8	20.5	20.5
Prop In Lane	0.52		0.48	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	96	0	0	285	0	323	266	1647		246	854	893
V/C Ratio(X)	0.67	0.00	0.00	0.86	0.00	0.40	0.07	0.77		0.14	0.65	0.65
Avail Cap(c_a), veh/h	96	0	0	285	0	323	456	2078		405	1039	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	0.0	0.0	35.9	0.0	29.6	12.9	19.0	0.0	14.3	16.5	16.5
Incr Delay (d2), s/veh	16.2	0.0	0.0	22.2	0.0	0.8	0.1	1.7	0.0	0.3	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	6.9	0.0	0.1	0.2	9.5	0.0	0.3	7.4	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	0.0	0.0	58.1	0.0	30.4	13.0	20.7	0.0	14.6	17.9	17.8
LnGrp LOS	D	Α	Α	Ε	Α	С	В	С		В	В	В
Approach Vol, veh/h		64			374			1290	Α		1166	
Approach Delay, s/veh		50.7			48.6			20.6			17.8	
Approach LOS		D			D			С			В	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	50.9		25.0	12.2	49.3		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+l1), s	2.5	22.5		19.9	2.8	28.1		19.9				
Green Ext Time (p_c), s	0.0	11.4		0.0	0.0	12.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			23.7									
HCM 6th LOS			С									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

	۶	→	•	•	•	•	1	†	/	>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	7	*	^	7	ሻ	∱ ∱	
Traffic Volume (veh/h)	9	1	23	343	4	138	21	1597	241	148	2617	21
Future Volume (veh/h)	9	1	23	343	4	138	21	1597	241	148	2617	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	19	2	48	602	7	242	26	1996	0	159	2814	23
Peak Hour Factor	0.48	0.48	0.48	0.57	0.57	0.57	0.80	0.80	0.80	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	46	22	50	184	1	278	144	1787		209	1950	16
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.04	0.51	0.00	0.08	0.55	0.55
Sat Flow, veh/h	0	124	283	632	7	1560	1753	3497	1560	1753	3555	29
Grp Volume(v), veh/h	69	0	0	609	0	242	26	1996	0	159	1382	1455
Grp Sat Flow(s),veh/h/ln	407	0	0	640	0	1560	1753	1749	1560	1753	1749	1835
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	15.2	0.7	51.4	0.0	4.7	55.2	55.2
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	15.2	0.7	51.4	0.0	4.7	55.2	55.2
Prop In Lane	0.28		0.70	0.99		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	118	0	0	185	0	278	144	1787		209	959	1007
V/C Ratio(X)	0.58	0.00	0.00	3.29	0.00	0.87	0.18	1.12		0.76	1.44	1.45
Avail Cap(c_a), veh/h	118	0	0	185	0	278	286	1787		286	959	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	0.0	44.8	0.0	40.2	23.4	24.6	0.0	25.2	22.7	22.7
Incr Delay (d2), s/veh	7.2	0.0	0.0	1045.4	0.0	24.7	0.6	61.0	0.0	7.7	204.5	206.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	58.3	0.0	7.7	0.3	33.6	0.0	2.1	73.7	77.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	0.0	0.0	1090.2	0.0	64.9	24.0	85.6	0.0	32.9	227.2	228.7
LnGrp LOS	D	Α	Α	F	Α	E	С	F		С	F	<u> </u>
Approach Vol, veh/h		69			851			2022	Α		2996	
Approach Delay, s/veh		43.7			798.7			84.8			217.6	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	63.8		25.0	15.6	60.0		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+l1), s	2.7	57.2		19.9	6.7	53.4		19.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.2	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			253.7									
HCM 6th LOS			F									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

	۶	→	•	•	←	•	1	†	/	/	+	√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	7	7	^	7	ሻ	∱ ⊅	
Traffic Volume (veh/h)	27	4	25	212	2	93	18	1824	201	81	1584	21
Future Volume (veh/h)	27	4	25	212	2	93	18	1824	201	81	1584	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	36	5	33	433	4	190	20	2004	0	87	1703	23
Peak Hour Factor	0.75	0.75	0.75	0.49	0.49	0.49	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	54	18	14	237	2	279	169	1798		200	1953	26
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.51	0.00	0.07	0.55	0.55
Sat Flow, veh/h	0	99	80	925	9	1560	1753	3497	1560	1753	3533	48
Grp Volume(v), veh/h	74	0	0	437	0	190	20	2004	0	87	842	884
Grp Sat Flow(s),veh/h/ln	179	0	0	934	0	1560	1753	1749	1560	1753	1749	1832
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	11.4	0.5	51.4	0.0	2.2	41.5	41.7
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	11.4	0.5	51.4	0.0	2.2	41.5	41.7
Prop In Lane	0.49		0.45	0.99		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	86	0	0	239	0	279	169	1798		200	967	1013
V/C Ratio(X)	0.86	0.00	0.00	1.83	0.00	0.68	0.12	1.11		0.44	0.87	0.87
Avail Cap(c_a), veh/h	86	0	0	239	0	279	325	1798		288	967	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	0.0	0.0	43.7	0.0	38.4	18.0	24.3	0.0	22.2	19.3	19.3
Incr Delay (d2), s/veh	55.2	0.0	0.0	389.4	0.0	6.5	0.3	60.0	0.0	1.5	8.9	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	31.8	0.0	4.8	0.2	33.3	0.0	1.0	16.8	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.9	0.0	0.0	433.1	0.0	44.9	18.3	84.3	0.0	23.7	28.2	28.1
LnGrp LOS	F	Α	Α	F	Α	D	В	F		С	С	C
Approach Vol, veh/h		74			627			2024	Α		1813	
Approach Delay, s/veh		97.9			315.5			83.6			27.9	
Approach LOS		F			F			F			С	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	63.9		25.0	15.0	60.0		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+l1), s	2.5	43.7		19.9	4.2	53.4		19.9				
Green Ext Time (p_c), s	0.0	6.6		0.0	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			93.6									
HCM 6th LOS			F									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

	۶	→	•	•	←	•	1	†	/	>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	7	*	^	7	ሻ	∱ ⊅	
Traffic Volume (veh/h)	9	2	23	434	5	180	21	1597	338	192	2617	21
Future Volume (veh/h)	9	2	23	434	5	180	21	1597	338	192	2617	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	19	4	48	579	7	240	26	1996	0	206	2814	23
Peak Hour Factor	0.48	0.48	0.48	0.75	0.75	0.75	0.80	0.80	0.80	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	45	24	50	179	1	272	142	1754		238	1978	16
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.04	0.50	0.00	0.10	0.56	0.56
Sat Flow, veh/h	0	137	285	623	8	1560	1753	3497	1560	1753	3555	29
Grp Volume(v), veh/h	71	0	0	586	0	240	26	1996	0	206	1382	1455
Grp Sat Flow(s),veh/h/ln	422	0	0	631	0	1560	1753	1749	1560	1753	1749	1835
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	15.4	0.7	51.4	0.0	7.7	57.0	57.0
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	15.4	0.7	51.4	0.0	7.7	57.0	57.0
Prop In Lane	0.27		0.68	0.99		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	118	0	0	180	0	272	142	1754		238	973	1021
V/C Ratio(X)	0.60	0.00	0.00	3.26	0.00	0.88	0.18	1.14		0.87	1.42	1.42
Avail Cap(c_a), veh/h	118	0	0	180	0	272	281	1754		281	973	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	0.0	45.8	0.0	41.3	23.8	25.5	0.0	30.0	22.7	22.7
Incr Delay (d2), s/veh	8.2	0.0	0.0	1029.7	0.0	26.6	0.6	69.7	0.0	21.1	195.5	197.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	56.1	0.0	7.9	0.3	35.7	0.0	3.6	72.7	76.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	0.0	1075.5	0.0	67.8	24.4	95.2	0.0	51.1	218.2	219.7
LnGrp LOS	D	A	Α	F	A	E	С	F		D	F	F
Approach Vol, veh/h		71			826			2022	Α		3043	
Approach Delay, s/veh		45.7			782.7			94.3			207.6	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	65.6		25.0	17.5	60.0		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+l1), s	2.7	59.0		19.9	9.7	53.4		19.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			246.9									
HCM 6th LOS			F									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	2.1					
		EDT	MOT	MDD	007	000
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	1	↑	f)		¥	
Traffic Vol, veh/h	98	434	526	3	3	93
Future Vol, veh/h	98	434	526	3	3	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage	e, # -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	90	90
Heavy Vehicles, %	3	3	3	3	2	2
Mvmt Flow	131	579	701	4	3	103
	Major1		Major2		Minor2	
Conflicting Flow All	705	0	-	0	1544	703
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	841	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	888	-	_	_	126	438
Stage 1	_	-	-	-	491	-
Stage 2	-	_	-	_	423	_
Platoon blocked, %		_	_	_	0	
Mov Cap-1 Maneuver	888	_	_	_	107	438
Mov Cap-2 Maneuver	-	_	_	_	107	-
Stage 1	_	-	_	_	418	_
_	_	_	_	_	423	_
Stage 2	_	_	-	_	423	-
Approach	EB		WB		SB	
HCM Control Delay, s	1.8		0		17.3	
HCM LOS					C	
Min = n - n = /M = i = n M = m =	.1	EDI	EDT	WDT	WDD	ODL 4
Minor Lane/Major Mvm	IL	EBL	EBT	WBT	WBR	
Capacity (veh/h)		888	-	-	-	399
HCM Lane V/C Ratio		0.147	-	-	-	0.267
HCM Control Delay (s)		9.8	-	-	-	17.3
HCM Lane LOS		Α	-	-	-	С
HCM 95th %tile Q(veh)		0.5	-	-	-	1.1

Intersection						
Int Delay, s/veh	0.9					
		EDT	MOT	MDD	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ሻ	↑	}	4	Y	4.4
Traffic Vol, veh/h	44	393	488	1	1	41
Future Vol, veh/h	44	393	488	1	1	41
Conflicting Peds, #/hr	_ 0	_ 0	0	_ 0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	450	None	-		-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	90	90
Heavy Vehicles, %	3	3	3	3	2	2
Mvmt Flow	59	524	651	1	1	46
Major/Minor	Major1		/loior?		Minor2	
	Major1		Major2			050
Conflicting Flow All	652	0	-		1294	652
Stage 1	-	-	-	-	652	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	
Pot Cap-1 Maneuver	930	-	-	-	179	468
Stage 1	-	_	-	-	518	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	930	-	-	-	168	468
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	_	-	-	-	485	-
Stage 2	_	_	-	_	524	_
otago _					<u> </u>	
Approach	EB		WB		SB	
HCM Control Delay, s	0.9		0		13.9	
HCM LOS					В	
Minor Lane/Major Mvn	ot	EBL	EBT	WBT	WBR :	QRI n1
	IL.		LDI	VVDI		
Capacity (veh/h)		930	-	-	-	449
HCM Cartral Dalay (a)		0.063	-	-		0.104
HCM Control Delay (s)		9.1	-	-	-	
HCM Lane LOS	,	A	-	-	-	В
HCM 95th %tile Q(veh	1)	0.2	-	-	-	0.3

Cherry Point Rezoning - Transportation Review 2024 Build School PM

	۶	→	*	•	—	•	1	†	~	/	+	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	7	ሻ	^	7	*	∱ ∱	
Traffic Volume (veh/h)	27	6	25	360	4	210	18	1767	387	161	1562	21
Future Volume (veh/h)	27	6	25	360	4	210	18	1767	387	161	1562	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	36	8	33	480	5	280	20	1942	0	173	1680	23
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	52	20	15	230	2	277	174	1786		210	1962	27
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.51	0.00	0.08	0.56	0.56
Sat Flow, veh/h	0	111	83	895	9	1560	1753	3497	1560	1753	3532	48
Grp Volume(v), veh/h	77	0	0	485	0	280	20	1942	0	173	831	872
Grp Sat Flow(s),veh/h/ln	194	0	0	905	0	1560	1753	1749	1560	1753	1749	1832
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	17.9	0.5	51.4	0.0	5.6	40.5	40.7
Cycle Q Clear(g_c), s	17.9	0.0	0.0	17.9	0.0	17.9	0.5	51.4	0.0	5.6	40.5	40.7
Prop In Lane	0.47		0.43	0.99		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	87	0	0	232	0	277	174	1786		210	972	1018
V/C Ratio(X)	0.89	0.00	0.00	2.09	0.00	1.01	0.11	1.09		0.82	0.85	0.86
Avail Cap(c_a), veh/h	87	0	0	232	0	277	329	1786		286	972	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	0.0	44.1	0.0	41.4	17.5	24.6	0.0	27.0	18.9	19.0
Incr Delay (d2), s/veh	60.3	0.0	0.0	504.9	0.0	56.4	0.3	49.2	0.0	13.2	7.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	38.4	0.0	11.1	0.2	30.7	0.0	2.6	16.1	16.9
Unsig. Movement Delay, s/veh		0.0	0.0	T40.0	0.0	07.7	47.0	70.0	0.0	40.0	00.7	00.0
LnGrp Delay(d),s/veh	103.1	0.0	0.0	549.0	0.0	97.7	17.8	73.9	0.0	40.2	26.7	26.6
LnGrp LOS	F	A	Α	F	A	F	В	F		D	C	<u>C</u>
Approach Vol, veh/h		77			765			1962	Α		1876	
Approach Delay, s/veh		103.1			383.8			73.3			27.9	
Approach LOS		F			F			E			С	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	64.5		25.0	15.6	60.0		25.0				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6		7.1				
Max Green Setting (Gmax), s	12.3	* 51		17.9	12.3	* 51		17.9				
Max Q Clear Time (g_c+l1), s	2.5	42.7		19.9	7.6	53.4		19.9				
Green Ext Time (p_c), s	0.0	7.3		0.0	0.2	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			106.4									
HCM 6th LOS			F									

Notes

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			₽		W	
Traffic Vol, veh/h	211	312	365	6	6	212
Future Vol, veh/h	211	312	365	6	6	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage	e, # -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	90	90
Heavy Vehicles, %	3	3	3	3	2	2
Mvmt Flow	281	416	487	8	7	236
Major/Mina	Mais =4		Anis TO		Min s =0	
	Major1		Major2		Minor2	10 :
Conflicting Flow All	495	0	-		1469	491
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	978	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	
Pot Cap-1 Maneuver	1064	-	-	-	140	578
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	364	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1064	-	-	-	103	578
Mov Cap-2 Maneuver	-	-	-	-	103	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	364	-
<u> </u>						
A			\A/D		0.0	
Approach	EB		WB		SB	
HCM Control Delay, s	3.9		0		18.1	
HCM LOS					С	
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WBR :	SBLn1
Capacity (veh/h)		1064	_			513
HCM Lane V/C Ratio		0.264	_	_		0.472
HCM Control Delay (s)		9.6	_	_	_	18.1
HCM Lane LOS		Α	_	-	_	C
HCM 95th %tile Q(veh)	\	1.1				2.5
HOW JOHN JOHNE W(VEI))	1.1				2.0

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
				WBK		SBR
Lane Configurations	\frac{1}{2}	†	}	^	, A	F7
Traffic Vol, veh/h	59	259	314	2	2	57
Future Vol, veh/h	59	259	314	2	2	57
Conflicting Peds, #/hr	_ 0	_ 0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	90	90
Heavy Vehicles, %	3	3	3	3	2	2
Mvmt Flow	79	345	419	3	2	63
Maile a/Miles	NA-:		1-1-0		\ d: C	
	Major1		//ajor2		Minor2	4
Conflicting Flow All	422	0	-	0	924	421
Stage 1	-	-	-	-	421	-
Stage 2	-	-	-	-	503	-
Critical Hdwy	4.13	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.227	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1132	-	-	-	299	632
Stage 1	-	-	-	-	662	-
Stage 2	-	-	-	-	607	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1132	_	_	_	278	632
Mov Cap-2 Maneuver	- 102	_	_	_	278	-
Stage 1	_	_	_	_	616	_
Stage 2					607	_
Olaye Z	-				001	
Approach	EB		WB		SB	
HCM Control Delay, s	1.6		0		11.7	
HCM LOS					В	
Minan Land (Maria 24	-1	EDI	EDT	MOT	MPP	ODL 4
Minor Lane/Major Mvn	nt	EBL	EBT	WBT	WBR:	
Capacity (veh/h)		1132	-	-	-	606
HCM Lane V/C Ratio		0.069	-	-	-	0.108
HCM Control Delay (s)	8.4	-	-	-	
HCM Lane LOS		Α	-	-	-	В
HCM 95th %tile Q(veh	1)	0.2	-	-	-	0.4

	۶	→	•	•	←	4	1	†	/	/	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻሻ	1•		ሻ	^	7	7	∱ ∱	
Traffic Volume (veh/h)	9	2	23	434	5	180	21	1597	338	192	2617	21
Future Volume (veh/h)	9	2	23	434	5	180	21	1597	338	192	2617	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	19	4	48	579	7	240	26	1996	0	206	2814	23
Peak Hour Factor	0.48	0.48	0.48	0.75	0.75	0.75	0.80	0.80	0.80	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	47	12	59	417	11	360	111	1891		160	2021	16
Arrive On Green	0.07	0.07	0.07	0.12	0.24	0.24	0.04	0.54	0.00	0.06	0.57	0.57
Sat Flow, veh/h	247	183	897	3401	44	1522	1753	3497	1560	1753	3555	29
Grp Volume(v), veh/h	71	0	0	579	0	247	26	1996	0	206	1382	1455
Grp Sat Flow(s),veh/h/ln	1326	0	0	1700	0	1567	1753	1749	1560	1753	1749	1835
Q Serve(g_s), s	5.0	0.0	0.0	18.0	0.0	21.0	0.9	79.4	0.0	9.3	83.5	83.5
Cycle Q Clear(g_c), s	7.7	0.0	0.0	18.0	0.0	21.0	0.9	79.4	0.0	9.3	83.5	83.5
Prop In Lane	0.27		0.68	1.00		0.97	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	119	0	0	417	0	371	111	1891		160	994	1043
V/C Ratio(X)	0.60	0.00	0.00	1.39	0.00	0.67	0.23	1.06		1.29	1.39	1.39
Avail Cap(c_a), veh/h	146	0	0	417	0	404	145	1891		160	994	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.5	0.0	0.0	64.4	0.0	50.8	34.8	33.7	0.0	49.5	31.7	31.7
Incr Delay (d2), s/veh	4.7	0.0	0.0	189.2	0.0	3.7	1.1	37.1	0.0	167.9	181.9	183.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	18.8	0.0	8.7	0.5	41.0	0.0	10.4	82.6	87.1
Unsig. Movement Delay, s/veh		0.0	0.0	050.0	0.0	545	25.0	70.0	0.0	047.5	040.0	045.4
LnGrp Delay(d),s/veh	72.2	0.0	0.0	253.6	0.0	54.5	35.9	70.8	0.0	217.5	213.6	215.1
LnGrp LOS	E	A	Α	F	A	D	D	F		F	F	F
Approach Vol, veh/h		71			826			2022	Α		3043	
Approach Delay, s/veh		72.2			194.1			70.4			214.6	
Approach LOS		Е			F			Е			F	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	92.1		41.8	17.0	88.0	25.0	16.8				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6	7.0	7.1				
Max Green Setting (Gmax), s	8.0	* 81		37.9	9.3	* 79	18.0	12.9				
Max Q Clear Time (g_c+l1), s	2.9	85.5		23.0	11.3	81.4	20.0	9.7				
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	0.0	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			161.1									
HCM 6th LOS			F									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

	۶	→	•	•	←	•	1	†	~	>	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻሻ	₽		ሻ	^	7	ሻ	∱ ∱	
Traffic Volume (veh/h)	27	6	25	360	4	210	18	1767	387	161	1562	21
Future Volume (veh/h)	27	6	25	360	4	210	18	1767	387	161	1562	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1648	1648	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	36	8	33	480	5	280	20	1942	0	173	1680	23
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	17	17	17	4	4	4	4	4	4	4	4	4
Cap, veh/h	70	18	39	459	7	395	144	1807		168	1959	27
Arrive On Green	0.08	0.08	0.08	0.13	0.26	0.26	0.03	0.52	0.00	0.07	0.55	0.55
Sat Flow, veh/h	463	237	525	3401	27	1537	1753	3497	1560	1753	3532	48
Grp Volume(v), veh/h	77	0	0	480	0	285	20	1942	0	173	831	872
Grp Sat Flow(s),veh/h/ln	1225	0	0	1700	0	1564	1753	1749	1560	1753	1749	1832
Q Serve(g_s), s	7.4	0.0	0.0	20.0	0.0	24.5	8.0	76.6	0.0	10.1	59.7	60.0
Cycle Q Clear(g_c), s	9.1	0.0	0.0	20.0	0.0	24.5	8.0	76.6	0.0	10.1	59.7	60.0
Prop In Lane	0.47		0.43	1.00		0.98	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	128	0	0	459	0	402	144	1807		168	970	1016
V/C Ratio(X)	0.60	0.00	0.00	1.05	0.00	0.71	0.14	1.07		1.03	0.86	0.86
Avail Cap(c_a), veh/h	142	0	0	459	0	421	186	1807		168	970	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	0.0	64.1	0.0	50.0	26.1	35.8	0.0	49.8	28.0	28.1
Incr Delay (d2), s/veh	5.9	0.0	0.0	54.6	0.0	5.2	0.4	44.4	0.0	77.5	7.9	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	12.2	0.0	10.2	0.3	41.7	0.0	6.6	25.5	26.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	0.0	0.0	118.7	0.0	55.1	26.6	80.3	0.0	127.3	35.9	35.8
LnGrp LOS	E	Α	Α	F	Α	E	С	F		F	D	D
Approach Vol, veh/h		77			765			1962	Α		1876	
Approach Delay, s/veh		73.3			95.0			79.7			44.3	
Approach LOS		Е			F			Е			D	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	90.8		45.2	17.8	85.2	27.0	18.2				
Change Period (Y+Rc), s	7.7	* 8.6		7.1	7.7	* 8.6	7.0	7.1				
Max Green Setting (Gmax), s	8.0	* 79		39.9	10.1	* 77	20.0	12.9				
Max Q Clear Time (g_c+l1), s	2.8	62.0		26.5	12.1	78.6	22.0	11.1				
Green Ext Time (p_c), s	0.0	12.8		1.5	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			67.9									
HCM 6th LOS			Е									

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



January 26, 2021

Beaufort County, South Carolina Attn: Robert Merchant, AICP Assistant Development Beufort County Community Development 100 Ribaut Road Beaufort, SC 29902

RE: Technical Review for Parcel R600-013-000-0369-0000 Chery Point Rezoning – Transportation Review

Dear Mr. Merchant

At the request of the Beaufort County, Kimley-Horn has conducted a technical review of the transportation review prepared for the *Parcel R600-013-000-0369-0000 Chery Point Rezoning – Transportation Review* (Bihl Engineering, January 2021). The proposed site is located in the northeast quadrant of the SC 170 (Okatie Highway) at Cherry Point Road intersection. As currently envisioned the site will consists of:

- 250 Mid-Rise Multifamily Units
- 100,000 Square Feet of Shopping Center

This memo outlines our technical review of the transportation review and corresponding recommendations.

TECHNICAL REVIEW COMMENTS

Given the nature of the proposed site and the impact of the ongoing COVID-19 pandemic on normal traffic operations, the following elements of the analysis methodology were done in the Transportation Review:

- 2024 traffic volumes were estimated via:
 - Historic (2017) traffic counts extrapolated to the year 2024 using a 1% annual growth rate on Cherry Point Road and Pearlstine Drive
 - Historic (2017) traffic counts extrapolated to the year 2024 using a 5.5% annual growth rate on SC 170
 - The Osprey Point PUD and River Oaks PUD development traffic were included in the analysis

The assumptions listed above are reasonable and consistent with the analysis presented in the document. Overall, the subject TIA adheres to pertinent SCDOT and Beaufort County guidelines and standard practices. However, the following comments should be addressed as appropriate:



Study Area

 The TIA only considers the adjacent intersection. At a minimum the next signalized intersection to the south (Tidewatch Drive) should be included interval analysis as the majority of traffic is headed south.

Synchro Review

- The northbound right-turn at the intersection of SC 170 at Cherry Point Road appears to be coded as free as no delays are queues are shown in the HCM 6th Edition reports attached in the review. The northbound right-turn does have yield control, it recommended that since the northbound right-turn does not have an add lane, it be coded in with the signal operations.
- The intersection delays are during the AM peak hour are anticipated to operate at LOS F during all 2024 future build conditions. An analysis that shows the mitigation necessary to get the intersection to operate at LOS D or better is recommended. It appears additional signal timing adjustments could be made to improve the LOS during both the AM and PM peak hours. This would require a review of the actual Synchro files and not just the HCM 6 printouts.
- O An additional Synchro model should be developed showing the intersection operations with the Lowcountry Council of Government (LCOG) SC 170 Access Management Study implemented. Although, it has not been fully adopted by Beaufort County, the memo should consider the impact the SC 170 Access Management Study could have on this intersection. The traffic flow and mobility to/from the site could be affected by changes to the SC 170 at Cherry Point Road intersection as proposed in the SC 170 Access Management Study.

Volume Development

- The traffic volumes do not balance between the intersections of SC 170 at Cherry Point road and Cherry Point Road at C4 Access during the PM peak hour.
 - There are 31 vehicles missing heading eastbound on Cherry Point Road
 - There are 3 vehicles missing heading westbound on Cherry Point Road
- Was the 0.75 PHF calculated or assumed on Cherry Point Road? A weighted peak hour factor should be calculated given the influence of the Okatie Elementary School

Recommendations

- The TIA Review recommendations state that the development could be responsible for:
 - Restriping of the westbound approach into a shared through-right turn lane
 - Installation of a second left-turn lane on Cherry Point Road
 - Optimization of the signal timings
- It is recommended that an analysis without the volume impacts of adjacent (not constructed) developments to determine if the site would be responsible of the improvements above, due to the unknown construction timelines of the analyzed development and Osprey Point and River Oaks PUD's.



CONCLUSIONS

Based on a technical review of the *Parcel R600-013-000-0369-0000 Chery Point Rezoning* – *Transportation Review* (Bihl Engineering, January 2021) as submitted, the analysis represents an accurate depiction of the anticipated impacts of the proposed development. It is recommended that an addendum to the traffic impact analysis be developed to address the comments outlined above.

Please contact me at (843) 737-6390 or <u>jonathan.guy@kimley-horn.com</u> should you have any questions regarding this analysis.

Sincerely,

Jonathan Guy, PE, AICP, PTOE

Vice President



January 27, 2021

Robert Merchant Community Development Deputy Director Beaufort County Community Development Department P.O. Drawer 1228 Beaufort, SC 29901-1228

RE: Zoning Map Amendment/Rezoning Request for 17.92 acres at the Intersection of Okatie Highway and Cherry Point Road

Mr. Merchant,

The Beaufort County School District been made aware of the zoning change request made by Jamie Crosby for the property located at the corner of Hwy 170 and Cherry Point Rd. We have also been provided a copy of the traffic impact analysis completed by Bihl Engineering dated January 14, 2021

There are several concerns that the school district has related to the rezoning of this property:

- 1. The District does not have excess capacity to address the potential increase in the number of students that this neighborhood could generate on top of the ones anticipated by Malind Bluff neighborhood (Osprey Point PUD) and River Oaks PUD adjacent to Okatie Elementary. The school is currently functioning at 84% capacity but that number has been greatly reduced due to COVID19 from the previous year's 92% capacity. This development would also attend May River High school, with 84% capacity usage this year due to COVID19 and the opening of an additional classroom wing. We optimistically expect both schools to return to their previous % capacity usage when the pandemic subsides.
- 2. There is also confusion on the number of residential units being requested. The traffic analysis states that "the C3 portion of the site is planned for 250 mid-rise multifamily units with an expected buildout year of 2024", while the Beaufort County staff memo we received states that the applicant C3NMU area on this property would allow for 80 multi-family dwelling units and 25 single family dwelling units. We would like an understanding of exactly what is being proposed on the site. The difference in the number of residential dwelling units will have a huge potential impact on the schools' ability to handle additional students.
- 3. Both Malind Bluff and River Oaks PUDs were approved with school impact fees that would help generate funds for additional classrooms. As of this date, the school district has seen nothing to indicate that this development would have similar fees for approval. We propose that the county incorporate that discussion into this approval.

4. The traffic that would be generated by both the proposed commercial and residential units at this site would put undue stress on an already poorly functioning road, that has yet to see any impact of the River Oaks development. A traffic analysis completed while our schools still have students attending virtually, does not give the full picture of the impact this neighborhood will have on traffic. We concur with the recommendation of a formal traffic impact analysis be completed when the plans for the site are more defined.

We respectfully request that this zoning change for the residential portion of the request be postponed until the developer's plans are more defined and the confusion about the number of residential dwelling units they are actually seeking is determined so that a formal traffic impact analysis can be completed as recommended by the traffic engineer.

Beaufort County School District staff would be more than welcome to discuss with the developer our concerns about this project. To date we have had no contact or inquiries.

Sincerely,

Robert S. Oetting, PE Chief Operations Officer

Beaufort County School District

cc: Dr. Frank Rodriguez, Superintendent BCSD Carol Crutchfield, Planning Coordinator BCSD



MEMORANDUM

To: Beaufort County Planning Commission

From: Robert Merchant, AICP, Acting Director, Department of Planning and Zoning

Subject: Fill Standards and Coastal Resilience Overlay District

Date: March 1, 2021

STAFF REPORT:

Case No. ZTA 2021-01

Applicant: Planning and Zoning Department

Proposed Text Change: Text amendment to Article 5 adding a new division 5.13

titled "Fill Standards" to limit the amount of fill on low-lying

areas.

Case No. ZTA 2021-02

Applicant: Planning and Zoning Department

Proposed Text Change: Text amendment to Section 3.4.90 of the Community

Development Code to add a Coastal Resilience Overlay District to require real estate disclosure when property is

transferred in low-lying areas.

A. BACKGROUND. The two proposed amendments address making future development more resilient to the impacts of coastal flooding and sea level rise. Beaufort County like many coastal areas in the southeast faces the challenge of increasing population (more people and more assets in harm's way) compounded by an increased potential for flooding and other due to sea level rise. Beaufort County, South Carolina, is a low-lying coastal county with a high sensitivity to tidal flooding and storm surge. Just over half of Beaufort County is open water, sounds, marshes, and estuaries and much of its upland is located within a flood zone.

The impacts of a changing climate, which include sea level rise, present significant future challenges to Beaufort County. Coastal flooding is the primary concern. Beaufort County's low elevation combined with its 6 to 10 foot tidal range make it very vulnerable to any increase in mean sea level. A rise of 1 to 2 feet may not at first appear to have a significant impact on the county's landscape, but combined with semi-regular extreme high tide events, up to 9,000 acres of urban and residential land could regularly experience flooding. In addition to the built environment, saltmarshes which will struggle to migrate upland to keep pace with sea level rise. In places where marsh migration is impeded by development, marsh acreage may be lost. The impact of coastal flooding is compounded by extreme rain events, which are projected to occur at greater frequency due to climate change.

The two proposed amendments originally came from recommendation from the Lady's Island Plan. Since they would have an impact well beyond Lady's Island, the Planning Department set up a Sea Level Rise Task Force made up of county and municipal planners, stormwater managers, flood officials, environmental experts and members of the development community. The Task Force oversaw the development of these two amendments along with looking at larger policy issues related to coastal flooding and sea level rise.

The draft ordinances were reviewed and endorsed by the Lady's Island Plan Implementation Committee and the Northern Beaufort County Plan Implementation Committee. Port Royal Town Council and Beaufort City Council were also briefed with the intent of each local jurisdiction moving forward on parallel routes for adopting the amendments.

- **B. Fill Standards.** The Fill Standards are designed to promote public health, safety and general welfare by preserving Beaufort County's natural floodplain and drainage patterns to minimize the impacts of development within the floodplain on neighboring properties. The ordinance applies to property situated at an elevation of 10 feet above sea level or lower and limits fill to 3 feet.
- C. Coastal Resilience Overlay District: The Coastal Resilience Overlay Zone is established to provide for the general health, safety and welfare by requiring notification at all real estate closings of the vulnerability of low-lying property to sea level rise and coastal flooding. This provision is specifically designed to assist individuals in making decisions that involve investments that will last at least 30 years in light of projected coastal flooding conditions in that time frame. This ordinance applies to elevations of 10 feet or lower.
- **E. RECOMMENDATION:** Staff recommends approval.
- H. ATTACHMENTS:
 - Fill Standards
 - Coastal Resilience Overlay District

Division 5.13: Fill Standards

Sections:

5.13.10 Purpose5.13.20 Fill Restrictions5.13.30 Administration

5.13.10 Purpose

To promote public health, safety and general welfare by preserving Beaufort County's natural floodplain and drainage patterns to minimize the impacts of development within the floodplain on neighboring properties.

5.13.20 Fill Restrictions

The following restrictions apply to all lands located at an elevation of 10 feet above sea level or less (North American Vertical Datum of 1988):

- A. The amount of allowable fill must not increase the existing natural grade of the property by more than three vertical feet under the area of development.
- B. The only portion of the property that may be filled is the area underneath the elevated structure, together with driveway and walkway access to the structure. Fill shall taper at a maximum slope of 1:3 from a five foot perimeter around the outer foundation to the existing site elevation.
- C. If the lot area is 20 acres or more, in no case shall the maximum lot area of the property filled exceed 33.33 percent of the total area of the lot.
- D. If a new or reconstructed structure is to be elevated utilizing fill material, any required building elevation standard exceeding the three-foot fill limitation as referenced in section 5.13.20.B must be achieved through the use of elevation foundations, piers or similar structural elevation techniques that are in compliance with then-applicable county building code requirements as certified by a structural engineer.
- E. Non-conforming structures may utilize fill to expand up 15% of the gross floor area in accordance with Division 8.3 of the Community Development Code.
- F. Fill is allowed for property maintenance. For purposes of this subsection, the term "property maintenance purposes" means landscaping, gardening or farming activities, erosion control, and filling in of washed-out sections of land. Property maintenance purposes shall only include the placement of such quantities of fill not to exceed the limitations specified herein and that do not inhibit the free flow of water. Said limited amounts of fill for property maintenance purposes need not be compensated by an equivalent amount of excavation area as specified in 5.13.20.C. Exemptions from fill requirements for erosion control purposes must be accompanied by a stabilization plan

- and narrative approved by the Public Works Director providing reasoning why fill is necessary to solve an erosion issue.
- G. Filling on public property is prohibited with the exception of property maintenance purposes of public facilities, upon approval of the Director coordinating with the appropriate department head or governmental agency. Exemptions for Public Improvements: Public roads, pump stations, stormwater management improvements, levees, and other public facilities that are necessary to provide for health, safety, and public welfare needs are exempt from the requirements of this section.
- H. Any fill project must be designed to limit negative impacts upon adjacent and affected upstream and downstream property owners during flood events to the maximum extent practicable.
- I. No fill project shall fill in or obstruct any local drainage channels without an alternative drainage plan design, and shall limit soil erosion and water runoff onto adjacent properties to the maximum practicable extent, and in compliances with the NPDES standards and with the Beaufort County Manual for Stormwater Best Management and Design Practices.
- J. All fill material that is brought in from offsite and will be placed at elevations below the seasonal high water table or within 1ft above the seasonal high water table will be required to meet the following clean fill requirements. Offsite soils brought in for use as fill shall be tested for Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) and full Toxicity Characteristic Leaching Procedure (TCLP) including ignitability, corrosivity and reactivity. Fill shall contain a maximum of 100 parts per million (ppm) of total petroleum hydrocarbons (TPH) and a maximum of 10 ppm of the sum of Benzene, Toluene, Ethyl Benzene, and Xylene and shall pass the TCPL test. Determine TPH concentrations by using EPA 600/4-79/020 method 418.1. Determine BTEX concentrations by using EPA SW-846. 3- 3 Method 5030/8020. Perform TCLP in accordance with TCLP from a composite sample of material from the borrow site, with at least one test from each borrow site. Within 24 hours of conclusion of physical tests, submit 3 copies of test results, including calibration curves and results of calibration tests. Fill material shall not be brought on site until tests have been approved by the Stormwater Department.
- K. Modulation from Fill Requirements: The Director may grant flexibility from the fill requirements in the following cases:
 - 1. Lots 3 acres or less and all single-family residential lots with sloping terrain may provide greater than 3 feet of fill to provide a level foundation as long as the average fill does not exceed 3 feet.
 - 2. Where no other suitable site configuration is practicable, depressions, sinkholes, and borrow pits that are not part of the natural drainage of the site that are not delineated as tidal or non-tidal wetlands may be filled to provide for a level foundation.

3. Single-family residential structures utilizing raised slabs with a masonry or concrete curtain wall may contain more than 3 feet of fill if it is limited to the footprint of the building.

5.13.30 Administration

Fill activities in accordance with this section may be permitted upon approval by the Director. All fill application permits shall be valid for a period of six months from the date of issuance, may be renewed only upon filing of an application for renewal with the Community Development Department, and then may only be renewed upon a showing of demonstrated progress towards completion of the fill activity. All fill application permits must be accompanied by a detailed plan describing the area to be filled, the estimated amount of fill to be used and the purpose of the fill project. A professional engineer registered in the state must also submit elevation and topographic data illustrating changes in the topography and estimating impacts upon local flood flows. Except as provided in sections 5.13.20.F and 5.13.G, adjacent property owners shall be identified and notified of the fill project by the applicant with proof of notification provided to the Director.

3.4.90 Coastal Resilience Overlay (CRO) Zone Standards

a. Coastal Resilience Overlay Disclosure Form

A. Purpose - The Coastal Resilience Overlay Zone is established to provide for the general health, safety and welfare by requiring notification at all real estate closings of the vulnerability of low-lying property to sea level rise and coastal flooding. This provision is specifically designed to assist individuals in making decisions that involve investments that will last at least 30 years in light of projected coastal flooding conditions in that time frame.

Sections of Beaufort County are low lying with elevations of 10 feet or less making them vulnerable to coastal flooding caused by increasingly intense storm events, king tides, and rising sea level. Coastal flooding caused by these types of events significantly affects private property, public infrastructure, and the natural environment. The impacts of sea level rise will only increase in the future. Since 1935, sea level has risen approximately 1 foot and is projected to rise between an additional 4 and 9 feet before the year 2100.

The Coastal Resilience Overlay (CRO) shall overlay other zoning classifications that shall be referred to as base zoning. The CRO District includes all lands within an established footprint affected by sea level rise.

B. District Boundaries - The district boundaries of the Coastal Resilience Overlay Zone is defined as all lands located at an elevation of 10 feet above sea level or less (North American Vertical Datum of 1988).

C. Notification

- 1. At all real estate closings involving a property in the CRO district, the buyer, seller and witnesses shall sign the following form which shall be filed with the deed and/or plat at the Beaufort County Register of Deeds Office.
 - The property at ______ (address/location) is located at 10 feet or less in elevation (North American Vertical Datum of 1988). Beaufort County has determined that the property on the premises have the potential to be subject to flooding and/or significant damage to property as a result of coastal flooding caused by increasingly intense storm events, king tides, and rising sea level. The County has placed a requirement of disclosure within these areas.

b. Certification

As the owner of the subject property, I hereby certify that I have informed
, as a prospective purchaser, that the subject property is located in the
Coastal Resilience Overlay District.
•
Dated this,
Witness Owner

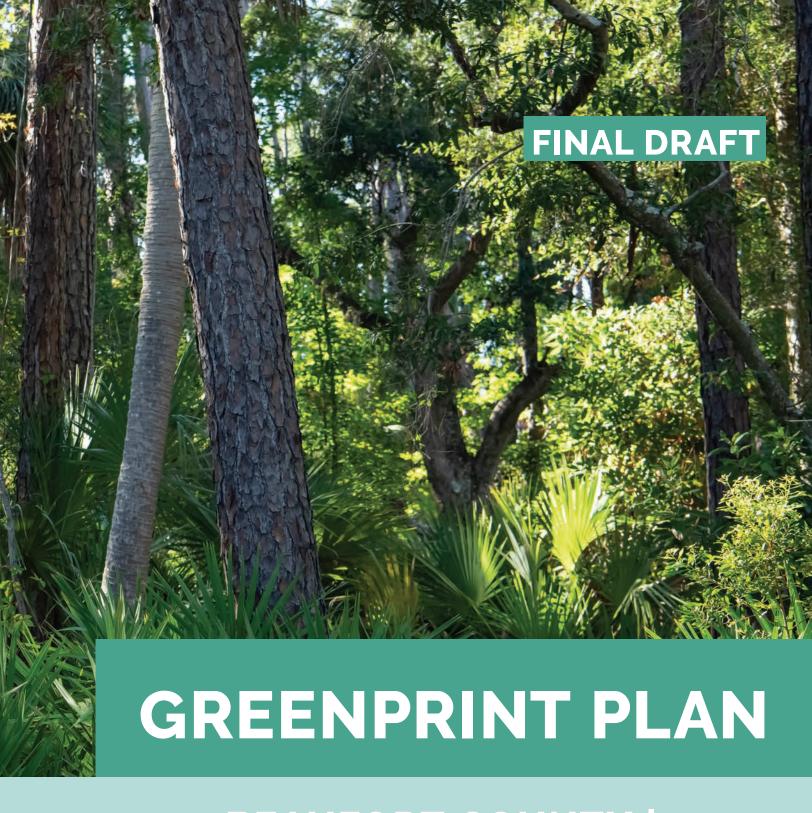
As a prospective purchaser of the subject property, I hereby certify that I have been informed that the subject property is in the Coastal Resilience Overlay District, and I understand the potential for sea level rise related flooding on the subject property.

Dated this	day of	,
Witness	Purch	haser

- 2. All prospective renters signing a commercial or residential lease shall be notified by the property owner through a written provision contained in the lease agreement if the leased property is located within the Coastal Resilience Overlay District.
- 3. All subdivision plats, planned unit development plats, townhouse plats, and/or condominium documents shall contain the following disclosure statement:
 - a. Coastal Resilience Overlay Disclosure Form

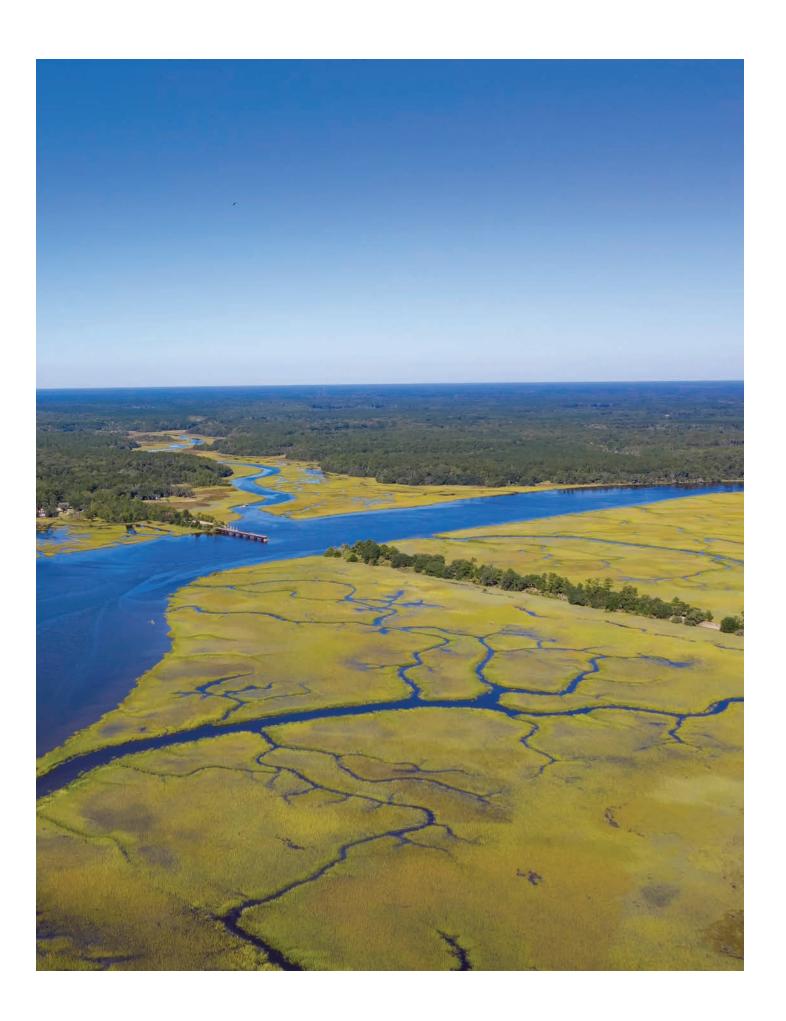
The property lies within the Coastal Resilience Overlay District, which applies to property at 10 feet or less in elevation (North American Vertical Datum of 1988). Beaufort County has determined that the property on the premises have the potential to be subject to flooding and/or significant damage to property as a result of coastal flooding caused by increasingly intense storm events, king tides, and rising sea level. Purchasers are required to sign a Disclosure Form per Division 3.4.90 of the Beaufort County Community Development Code and file the form with the deed and/or plat at the Beaufort County Register of Deeds Office.

4. In the case of new construction, a signed Coastal Resilience Overlay Disclosure Statement shall accompany the building permit application.



BEAUFORT COUNTY | 2020





ACKNOWLEDGMENTS

Many thanks to the following organizations for their generous contribution of time and expertise.

Beaufort County Open Land Trust

Beaufort County Passive Parks Department

Beaufort County Planning Department

Beaufort County Rural and Critical Land Preservation Program Board

Beaufort County Sea Level Rise Task Force

Friends of the Spanish Moss Trail

Gullah/Geechee Sea Island Coalition

Port Royal Sound Foundation

Spring Island Trust

South Carolina Coastal Conservation League

South Carolina Department of Health and Environmental Control

South Carolina Department of Natural Resources

The Nature Conservancy

U.S. Department of Defense

Consultant: Design Workshop, Inc.

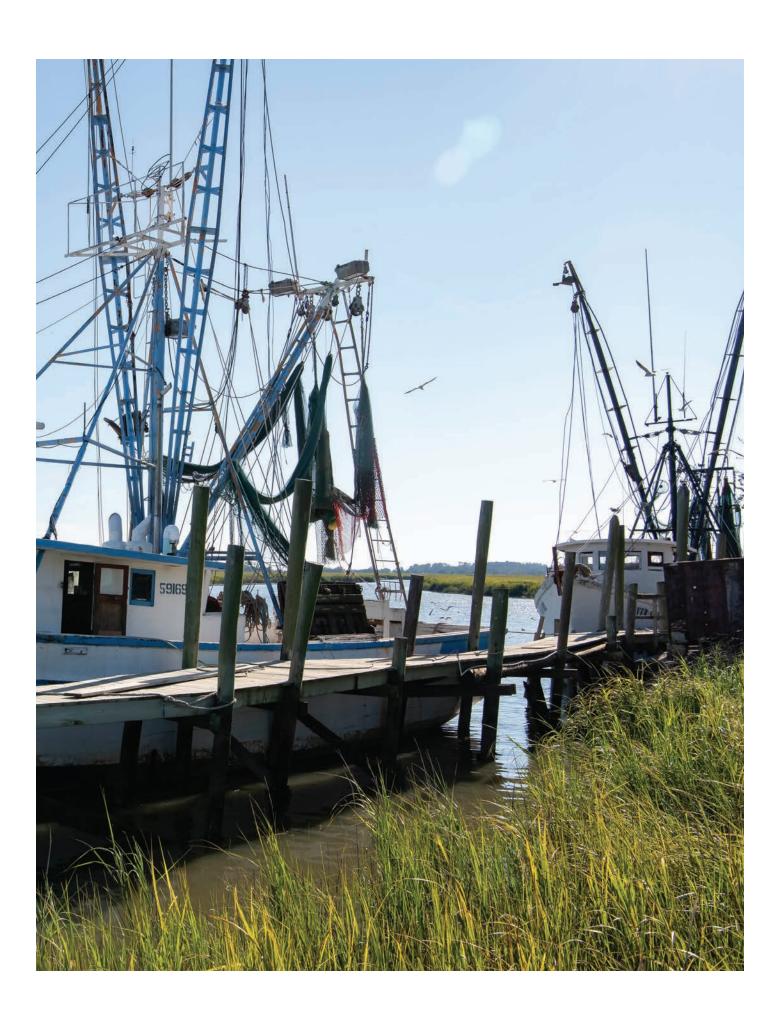


TABLE OF CONTENTS

Exe	ecutive Summary	6
1/	2020 Greenprint Plan Introduction to Greenprint Mapping Cultural Landscapes Water Quality Critical Habitat Resiliency Connectivity	18 20 24 28 32
2 /	Conservation Toolkit	40
	Rural and Critical Land Preservation Program Land Preservation Toolkit Prioritization Model. Regional Open Space Partners Long-Term Land Stewardship.	44 48 50
3 /	Crosswalk to the Comprehensive Plan	56
	Connecting the Two Plans	60
4 /	How the Plan Was Made	66
	Overall Approach Public Meetings and Materials Public Survey Results Foundational Greenprint Planning	70 72
Glo	ossary of Terms	78
Аp	pendices	82
	Appendix A: Greenprint Prioritization Model Criteria and Weighting Appendix B: 'Paving' of the Crosswalk to the Comprehensive Plan Appendix C: Full Greenprint Survey Results Appendix D: Passive Recreation Priority Map	



INTRODUCTION

What Is the Greenprint Plan?

The Greenprint Plan promotes ecological health and cultural landscape preservation in Beaufort County. It is a plan to strategically preserve and protect Beaufort County's land for the betterment of its ecology, economy and quality of life.

Previously the Greenprint Plan identified potential candidates for conservation through the Rural and Critical Land Preservation Program.

The 2020 update also includes:

- More detailed maps of priority land organized by the five conservation values of Cultural Landscapes, Water Quality, Critical Habitat, Resiliency and Open Space Connectivity;
- Discussion of varied conservation tools, with broad public support, that can be used by public and private entities to strategically protect important open space; and
- Recommendations for incorporating the strategic land conservation focus of the Greenprint Plan within the county's comprehensive plan and other local and regional planning efforts.

The purpose of the 2020 Greenprint Plan is to:

Create awareness about the importance of land conservation.

- Define natural resource, cultural resource and open space types that are important to Beaufort County residents.
- Prioritize conservation efforts so that they are strategic and fulfill the County's needs.
- Align open space preservation with growth management strategies to promote balance.
- Advance passive recreation opportunities.
- Promote equitable access, use and enjoyment.
- Protect the Beaufort County community against environmental hazards.
- Promote a broad use of effective tools and methods to enable conservation.
- Inspire surrounding jurisdictions.

Why Is It Important?

Beaufort County's unique natural environment and cultural landscape are essential to the county's sense of place, way of life, community and ecosystem health, and economic sustainability (Fig. 0.1). It is a dynamic environment that will continue to change over time due to natural forces – such as flooding, storm surge and king tides – and human forces – such as development. The pressure that these natural and human forces exert on the Beaufort County landscape and its residents will only grow in intensity as sea levels rise and the County's population continues to grow.

\$28

in agricultural products produced every year by the county's 137 farms



50%TAX DEDUCTION

for qualified landowners donating partial or full value of a conservation easement



70% STORMWATER

MILLION

spent annually by visitors who

come to Beaufort County for its

parks, trails and open spaces

captured on-site by the county's parks and open spaces, keeping runoff out of pipes and waterways



\$12

total property value increase for county homes that are within 500' of parks, trails and open spaces



\$317K

and structural costs saved annually due to air pollutants removed by county open spaces



Figure 0.1: The impact of open space in Beaufort County according to a 2018 report from The Trust for Public Land.

In the face of those pressures, the Greenprint Plan is an opportunity for Beaufort County residents to identify the types of land that are most important to them, whether and how those lands are at risk, and strategies for protecting those lands for future generations.

Who Is Involved?

Beaufort County residents decide the land conservation priorities of the Greenprint Plan during the public engagement process. In the past, those priorities and the plan's strategies have been a tool used by County staff to inform the land







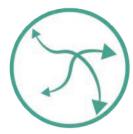
WATER QUALITY



CRITICAL HABITAT



RESILIENCY



OPEN SPACE CONNECTIVITY

conservation recommendations of the Rural and Critical Land Preservation Program (RCLPP) Board, a Council-appointed body that considers how to spend public dollars to protect priority lands, either through outright purchase or the purchase of the land's development rights. The RCLPP Board makes recommendations to Beaufort County Council, which is the ultimate decision-making body.

The 2020 update of the Greenprint Plan is intended to offer a broader array of strategies to more effectively promote the County's open space goals and support the work of both public and private organizations.

About the Planning Process

After a review of existing plans and the wealth of data available from public and private organizations regarding land conservation priorities in the Lowcountry, the planning team met with stakeholders from Beaufort County and conservation organizations to further understand local and regional open space issues and opportunities. Public engagement was largely conducted online due to the COVID-19 pandemic; it included two virtual workshops, live polling, an ArcGIS StoryMap, interactive web maps, social media posts, e-mail blasts and an online survey, which was also printed and mailed to those who requested it. Seventy-two people attended the virtual workshops, and 938 completed the survey.

In addition to the conservation priorities and the preference for private ownership of conserved land shown in Figure 0.2, survey respondents offered feedback on the different conservation tools they see as most appropriate to meet different conservation goals. They also expressed concern about development sprawl, and 77% said the land conservation focus of the Greenprint Plan should influence growth management planning and development restrictions in Beaufort County.

This process offered insight into the conservation values and priorities of Beaufort County residents.

It influenced the structure and recommendations of this document – including the priority mapping themes and criteria, the diversity of conservation tools discussed, and the focus on tying the Greenprint Plan findings to the comprehensive plan and other growth management and resiliency efforts.



The economic benefits of parks, trails, and conserved open spaces in Beaufort County, South Carolina, The Trust for Public Land, 2018 (external URL)



KEY TAKEAWAYS

- The Greenprint Plan and its priority maps should be a point of reference for County and municipal planners as they develop growth management strategies and evaluate development ordinances and proposals.
- The Rural and Critical Land program should prioritize conservation easements that permanently protect open space while keeping the land and its long-term stewardship under private control.
- Whether publicly or privately owned, land protection is a first step and must be followed by long-term stewardship to ensure that conservation goals are realized and upheld.
- Further and ongoing study is needed to inform conservation and land stewardship strategies.
- Transparency for the Rural and Critical Land program and public education about the impact of land conservation are critical to ensure

- continued public support. Beaufort County residents should be given every opportunity whether through media, volunteerism, citizen science or passive recreation to interact with open space and its benefits.
- Coordinated institutional partnerships are necessary to realize the maximum benefits of land conservation.
- Land conservation to promote water quality, critical habitat health and resiliency should not stop at political borders. Lowcountry governments should coordinate their efforts and develop regional open space strategies.

More Information

Appendix C: Full Greenprint Survey Results



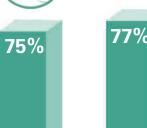
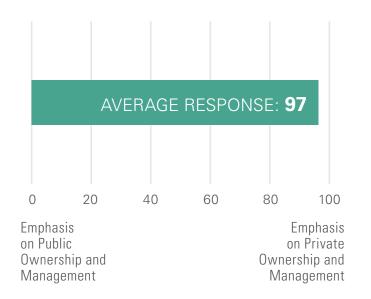


Figure 0.2: Partial results of the 2020 Greenprint Survey.

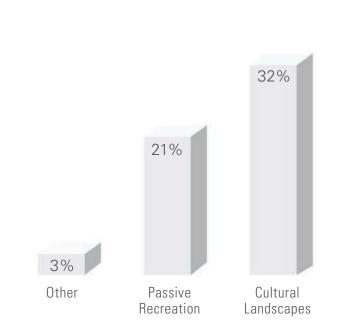
On a scale of 0 to 100 — with 0 being total emphasis on public ownership and management, and 100 being total emphasis on private ownership and management

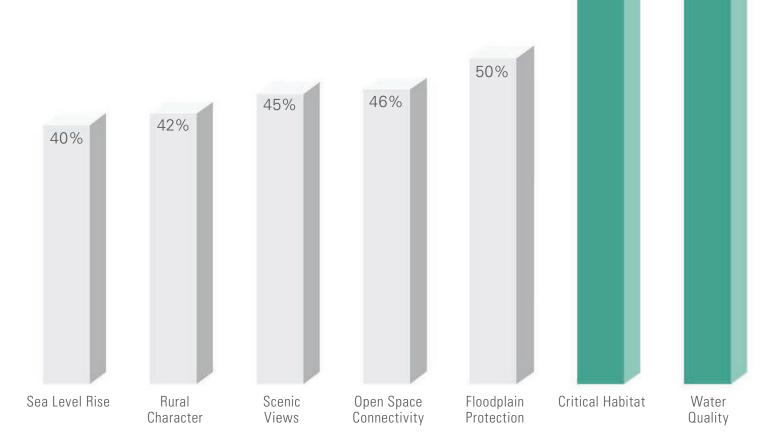
- how would you strike a balance between public and private ownership of conserved land?



What would you choose as the highest conservation priorities for Beaufort County?

(Percent of all respondents for which the listed priority was one of their top five.)





HOW TO USE THIS DOCUMENT

CHAPTER 1

2020 Greenprint Plan

IDENTIFYING THE PRIORITY CONSERVATION LAND

Look here for detailed maps that identify priority conservation land, with a focus on countywide Cultural Landscapes, Water Quality, Critical Habitat, Resiliency, and Open Space Connectivity.

This section also lists the local and regional data that was collected or created to generate each priority map. Use these external links to visit the interactive web maps, which allow for zooming and panning across the county in order to explore each priority land map in greater detail:

- » 2020 Greenprint Priority Land Maps by Theme
- » 2020 Greenprint Composite Priority Land Map

Potential Users

- Rural and Critical Land Preservation Program Board and consultants, to inform decisions about acquisition and purchase of land and development rights.
- Beaufort County and municipal planners, to inform growth management planning and the evaluation of development proposals.
- County and local parks departments, to inform passive park and trail planning.
- Local and state transportation officials, to explore opportunities to align trail and transportation planning with open space connectivity goals.

- Public Works and Stormwater Management, to inform local and regional stormwater and green infrastructure planning.
- Private conservation groups, to inform planning efforts and encourage coordination across public and private conservation entities.
- Private landowners, to become better informed about their properties and the various conservation and stewardship practices that might position those properties to promote cultural and environmental landscape health in Beaufort County.

CHAPTER 2

Conservation Toolkit

HOW TO PROTECT THE PRIORITY LAND

This section lists a variety of land conservation tools that have broad public support for the protection of different types of open space.

Potential Users

- County and municipal planners, to inform development of diverse land conservation strategies and partnerships.
- Private conservation groups, to identify partnership opportunities, adapt the priority land maps with different criteria, and advocate for land conservation strategies that have broad public support.
- Private individuals who own priority conservation land, to explore how they might protect that land and receive payment or tax benefits in return.
- Developers, to explore conservation development practices that protect open space while increasing property values and decreasing infrastructure costs.

CHAPTER 3

Crosswalk to the Comprehensive Plan

HOW THE PLAN CAN INFORM OTHER EFFORTS

This section explores how the priority land mapping and conservation tools can inform the Beaufort County Comprehensive Plan.

Potential Users

 County and municipal planners, to explore how land conservation priorities can inform longrange planning and development ordinances, striking a balance between environmental protection and growth.



Glossary of Terms

How the Plan Was Made



INTRODUCTION TO GREENPRINT MAPPING



LANDSCAPES









WATER QUALITY

CRITICAL HABITAT

RESILIENCY

OPEN SPACE CONNECTIVITY

Since 2006 the Beaufort County Greenprint Plan has used mapping to identify lands that should be targeted for preservation.

The 2020 Greenprint
Plan uses a new mapping
methodology that is driven
by data and public input.
The result is a series of
detailed maps that identify
priority land based on five
conservation values.

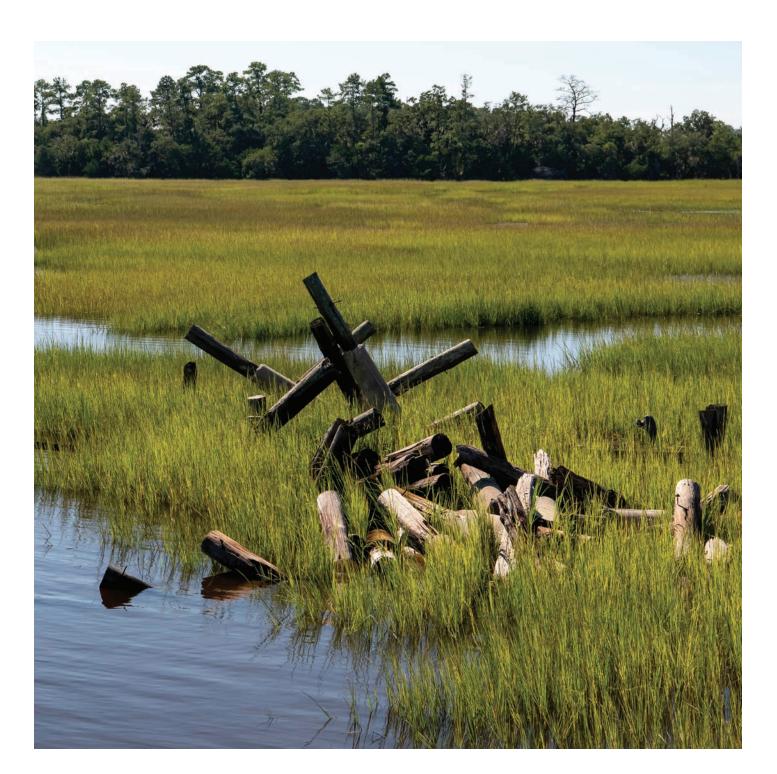
These maps can inform the land preservation strategies of Beaufort County's Rural and Critical Land Preservation Program. They can also inform property owners about the relative conservation value of their own land, and they can be a starting point for public-private coordination on county and regional conservation priorities.

The goal is not to automatically protect all the priority areas shown on every map, but rather

to work with willing landowners and – through targeted tools and policis – create opportunities to protect and preserve land over time.

A few notes about the priority mapping:

- The priority maps on the following pages are based on GIS inventory and community input.
 The highest-quality available data and the most recent data was utilized in all cases; however, correcting inaccuracies and field verification of the data were not a part of the scope of work.
- The data inputs were of various scales and resolution. Data was interpolated/reformatted to be at a resolution of 20'x20' cell size/resolution; some inaccuracies or over-generalizations may be embedded in the priority output data.
- Because they are already under state protection, estuarine and marine wetlands were excluded from the mapping.
- The priority mapping may change over time as the state of land conservation and community priorities evolve; regular mapping updates will be important using the same data-driven process.





Greenprint Prioritization Mapping Model

Interactive Web Map: Greenprint Priority Lands by Theme (external URL)

Interactive Web Map: Greenprint Composite Priority Land (external URL)

CULTURAL LANDSCAPES

Beaufort County's cultural landscape is unique, varied, and deeply treasured by residents and visitors.

It is vital to the local economy and sense of place. The County and its partners must anticipate the climate- and development-related threats to this cultural landscape and develop a multi-layered strategy for its protection. The land preservation strategies of the Greenprint Plan are an important part of a larger local, state and federal policy toolkit.

The Cultural Landscape Foundation states: "A cultural landscape can be associated with a person or event. It can be thousands of acres or a tiny homestead. It can be a grand estate, industrial site, park, garden cemetery, campus and more. Collectively, cultural landscapes are works of art, narratives of culture, and expressions of regional identity."

The Greenprint Plan divides Beaufort County's cultural landscapes into three general categories:

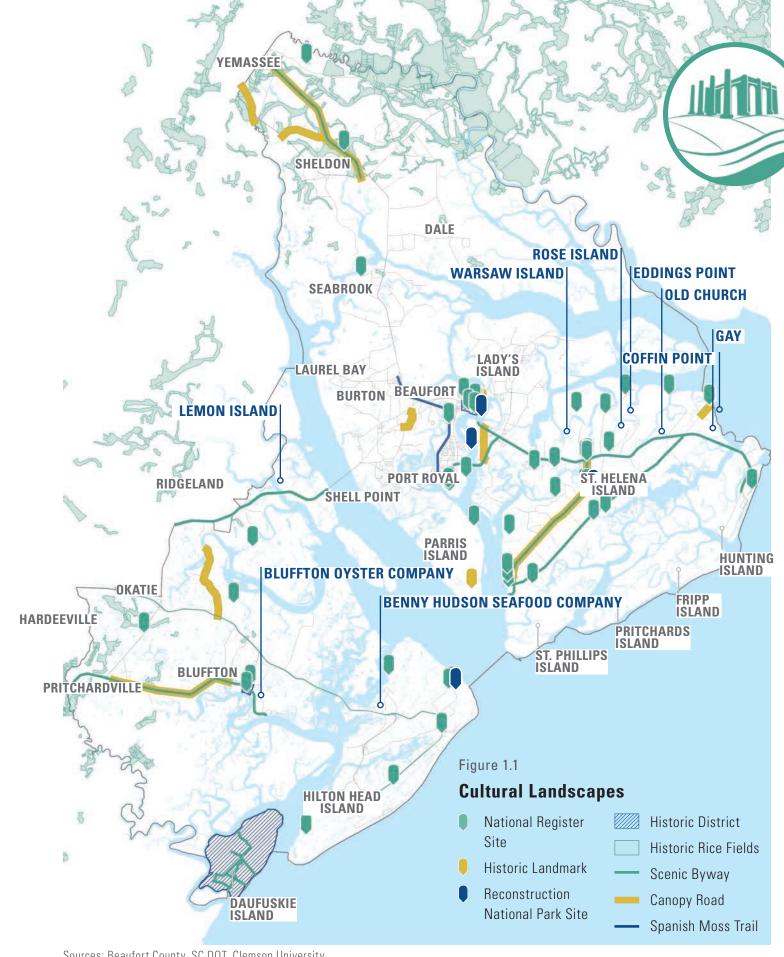
- Sites and landscapes that have been classified as historic, such as National Register sites, local historic landmarks and historic districts
- Sites and landscapes that are critical to Beaufort County cultural lifeways, such as farmland, forests, working waterfronts, and the complex cultural landscape of the Gullah/ Geechee Nation.
- Scenic views, including canopy roads, scenic byways and critical viewsheds, especially at key entry points to the county, town centers and historic districts such as the Corners Community Preservation District.

The full list of data used to generate the Greenprint Plan's Cultural Landscapes Priority Map is shown on the following spread, with many of the elements shown in Figure 1.1.

OBJECTIVES

- Protection of places throughout the county that are essential to cultural lifeways - including farmland, working waterfronts, public and traditional water access and areas identified as important to the Gullah/Geechee Nation.
- Protection and long-term management of scenic views and roadways.

- Comprehensive study and coordinated plans to protect cultural landscapes from the impacts of sea level rise and climate change.
- Continued and strengthened partnerships with private and public entities to inventory important and complex cultural landscapes, assess their vulnerability, and protect them through targeted land conservation, funding, policy and public education efforts.



Sources: Beaufort County, SC DOT, Clemson University

Cultural Landscape Mapping Inputs

- » Historic Landmarks and Districts
- » St. Helena Cultural Overlay District
- » Commercial Fishing Village Overlay
- » Historical Rice Fields
- » Heirs' Property
- » Rural Zoning
- » English Plantation
- » Tabby Structure
- » Colonial Church
- » European-American Fort
- » Colonial Ferry Crossing
- » Yemassee Town

- » Working Agricultural Land
- » Scenic Drives and Byways
- » Canopy Roads
- » Spanish Moss Trail

Summary of Approach

• Known and inventoried cultural and historical features of significance, including their viewsheds, were included in the analysis.

Summary of Limitations

 Archaeological sites and other potentially sensitive cultural sites are unknown and not included in the analysis.

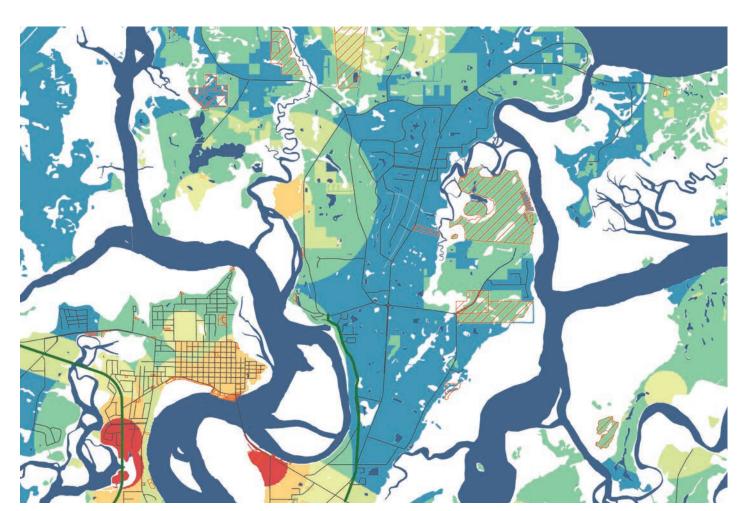
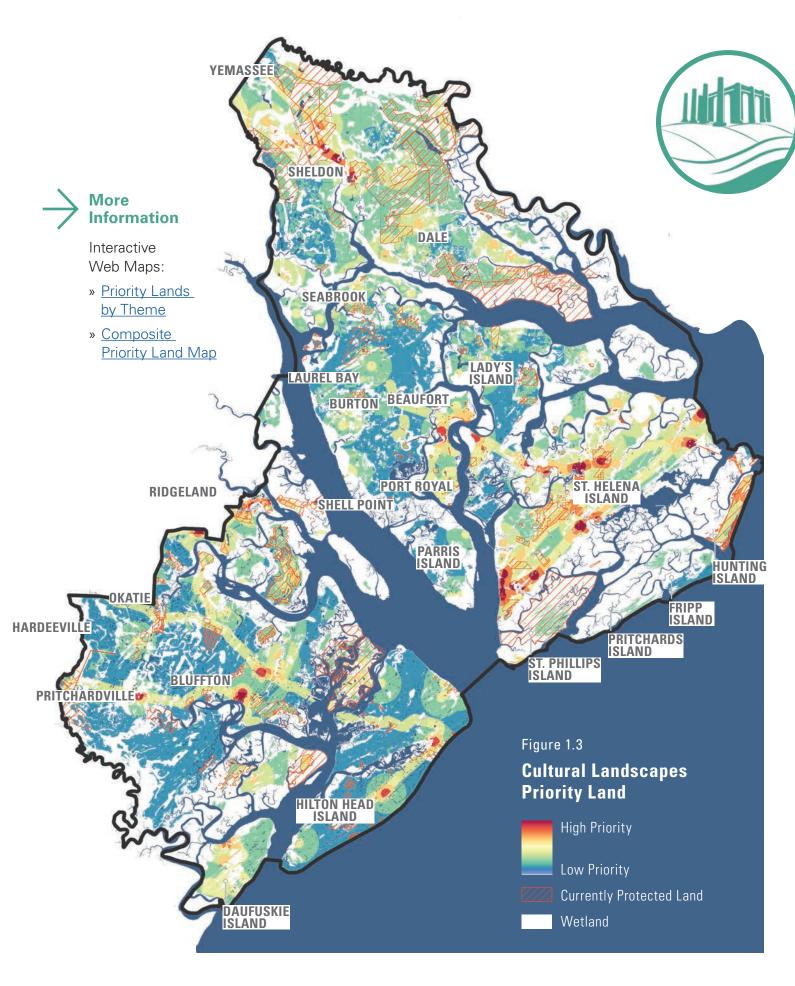


Figure 1.2: Sample enlargement map of Cultural Landscapes Priority Land in the vicinity of Lady's Island.



WATER QUALITY

Beaufort County has a powerful connection to its waters – the rivers, estuaries, wetlands and ocean that define the county's sense of place and support its wildlife habitat, recreation, economy and way of life.

More than half of the county's 468,000 acres are tidally influenced rivers, creeks or marshes, and the protection of these waters has been the focus of much of the RCLPP and other conservation organizations' work in Beaufort County.

Twelve waterbodies in Beaufort County are classified by the state as Outstanding Resource Waters, meaning that they constitute an outstanding recreational or ecological resource. But several of the county's waterbodies are prohibited for shellfish harvesting due to pollution (Fig. 1.3),

and three watersheds are monitored for Total Maximum Daily Loads due to their pollutant levels.

Water quality in Beaufort County is impacted by stormwater runoff from development and from land uses such as agriculture, with contaminants of concern including phosphorus, sediment, nitrogen, bacteria and metals. By identifying potential open space acquisitions within critical drainage areas, the land conservation strategies of the Greenprint Plan can work alongside local development ordinances and regional stormwater management strategies to protect and improve water quality in Beaufort County.

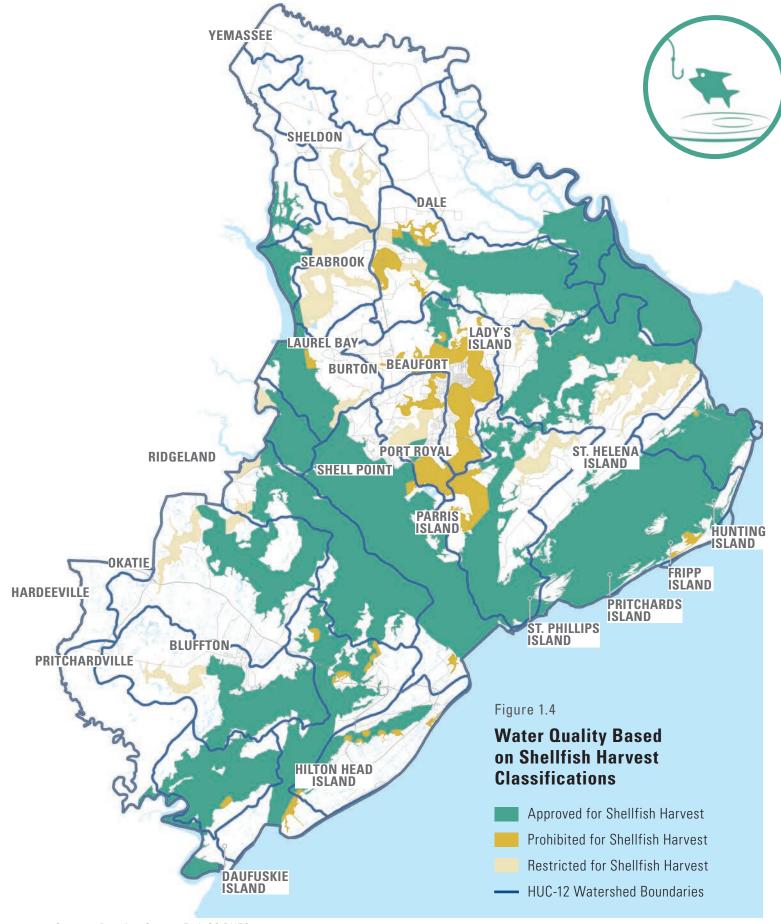
The 2020 Greenprint Plan uses the Port Royal Sound Water Quality Index created by The Nature Conservancy in partnership with the Port Royal Sound Watershed Initiative.

OBJECTIVES



Watershed-level analysis to identify land conservation priorities to support the protection and restoration of the county's rivers and sounds.

- Identification of Green Stormwater Infrastructure opportunities to connect recommendations to the Comprehensive Plan.
- Connecting Greenprint Plan recommendations to those of the Southern Lowcountry Stormwater Ordinance and Design Manual and the Sea Level Rise Task Force.



Sources: Beaufort County, Esri, SC DHEC

Water Quality Mapping Inputs

» Port Royal Sound Water Quality Priority Index

Summary of Approach

- The Port Royal Sound Water Quality Priority Index was developed by The Nature Conservancy to identify land that could be targeted for protection in order to promote water quality in the Port Royal Sound.
- The watershed analysis considers the potential impact on water quality should currently protected lands be sold and developed.

 It also considers important locations to allow for saltmarshes to migrate inward in the face of sea level rise.

Summary of Limitations

 The focus is of this study is the Port Royal Sound watershed, which allows for an important regional perspective but does not cover the northernmost and southernmost portions of Beaufort County.

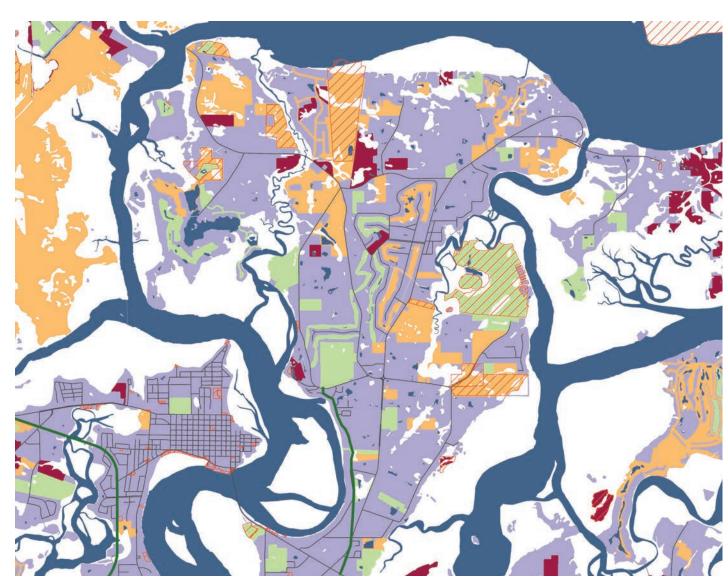
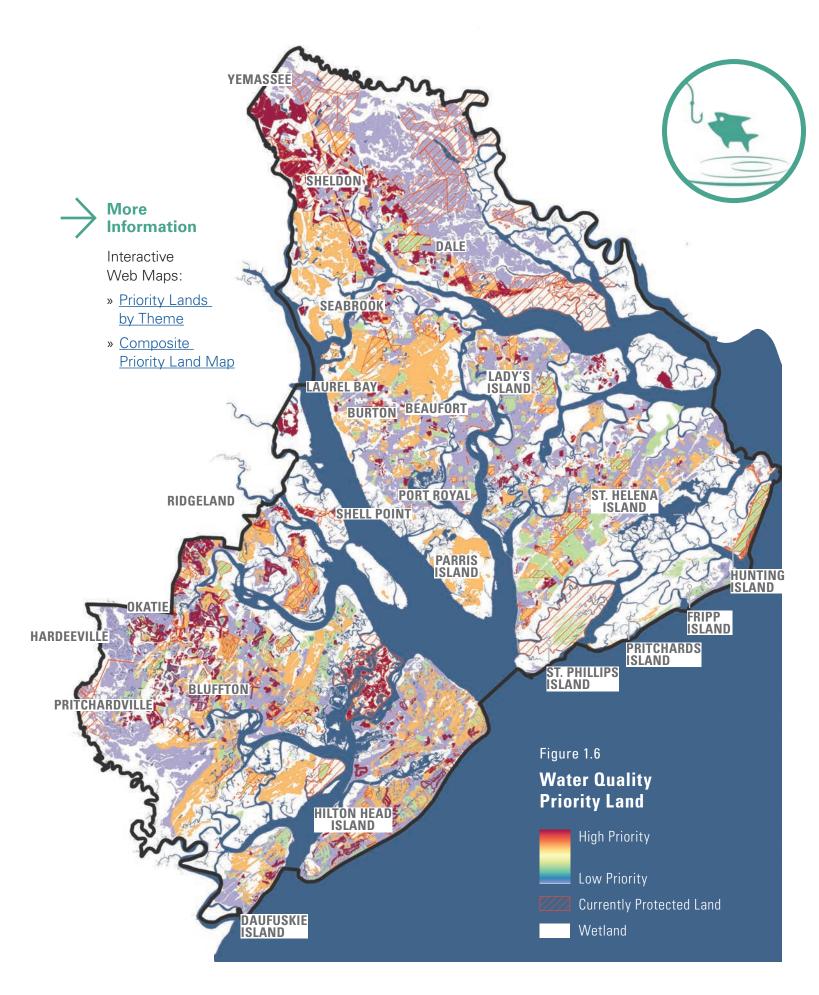


Figure 1.5: Sample enlargement map of Water Quality Priority Land in the vicinity of Lady's Island.



CRITICAL HABITAT



Critical habitat lands provide food and shelter for local wildlife and are inseparable from the overall ecosystem health of Beaufort County.

Local stakeholders helped to develop a Greenprint methodology for identifying critical habitat based on the land's importance to regional ecosystem health and the immediacy of the threat posed to it by development and climate change.

The result is a slight emphasis on higher-elevation lands, given that those areas:

- Face greater development pressure,
- Lack other forms of federal and local protection afforded low-lying lands such as wetlands and the floodplain, and

 Will be essential to accommodate future ecosystem shifts – such as marsh migration – precipitated by climate change.

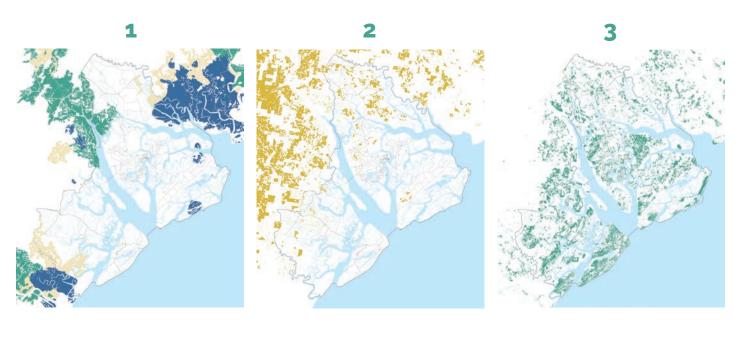
That methodology prioritizes the following habitat types for protection, in order from high to low:

- Conservation corridors as identified by The Nature Conservancy
- 2. Mature pine forests, especially those maintained by prescribed burns
- 3. Mature maritime forest, especially those above 10 feet in elevation
- 4. Mature freshwater wetlands
- 5. Marsh islands

The Greenprint Plan prioritization model also gives weight to Important Bird Areas identified by the Audubon Society; Resilient Biodiversity Hotspots from the South Atlantic Landscape Conservation Collaborative; High Priority Lands from the South Carolina Conservation Bank; and sites that are home to rare, threatened or endangered species.

OBJECTIVES

- Protection of Beaufort County's 33 endangered, threatened and imperiled species, which are threatened primarily by habitat loss.
- Protection and stewardship of remaining highintegrity beaches, dunes, estuarine systems and other ecosystems with strong ecological function and biodiversity.
- Diverse and targeted strategies for the protection of priority open space, including active restoration and ongoing stewardship where needed to protect at-risk ecosystems.
- Connecting the Greenprint Plan recommendations to those of the Comprehensive Plan, Sea Level Rise Task Force, and ongoing efforts of groups such as The Nature Conservancy, Audubon Society and S.C. Conservation Bank.



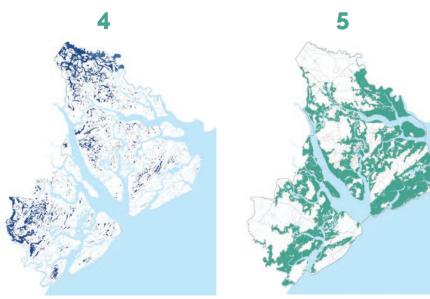


Figure 1.7 **Critical Habitat Areas**

- 1 Conservation Corridors
- 2 Pine Forest
- 3 Maritime Forest
- 4 Freshwater Wetland
- 5 Marsh Islands

Sources: The Nature Conservancy, SC Gap Analysis Project, Beaufort County, Audubon Society

Critical Habitat Mapping Inputs

- » Evergreen, mixed, managed and high-integrity Pine forest
- » Upland hardwood forest
- » Maritime forest
- » Forested wetland
- » Estuarine marsh
- » High-integrity beaches and dunes
- » Freshwater marsh
- » Above Average Resilience and Diversity (The Nature Conservancy)
- » Marsh migration corridor
- » Important Bird Areas (Audubon Society)
- » Tidal creek buffers
- » Parcel size

Summary of Approach

 Prioritizing habitat types is difficult, since all plant habitat types play a critical role in the overall ecological health of the county.

- Habitat indicators for targeted species, as identified by local and national conservation groups, were prioritized.
- Habitat types that were more scarce based on proportion of protected land were prioritized, in addition to habitat types identified as most at threat by local ecologists.
- Larger areas can be more economical for purchase per an acre; more ideal for ecological conservation, particularly for species such as forest interior birds; and more ideal for conservation-based agricultural activities, such as sustainable forestry and carbon offsets. A parcel analysis is shown in Figure 1.6.

Summary of Limitations

 Some of the data sources utilized landcover data from 2011. Although the data was corrected as a part of this process with landcover data from 2016, landcover may have changed and not be accurately reflected.

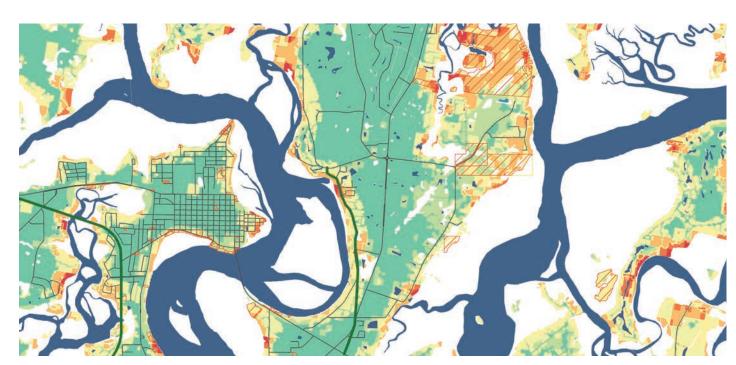
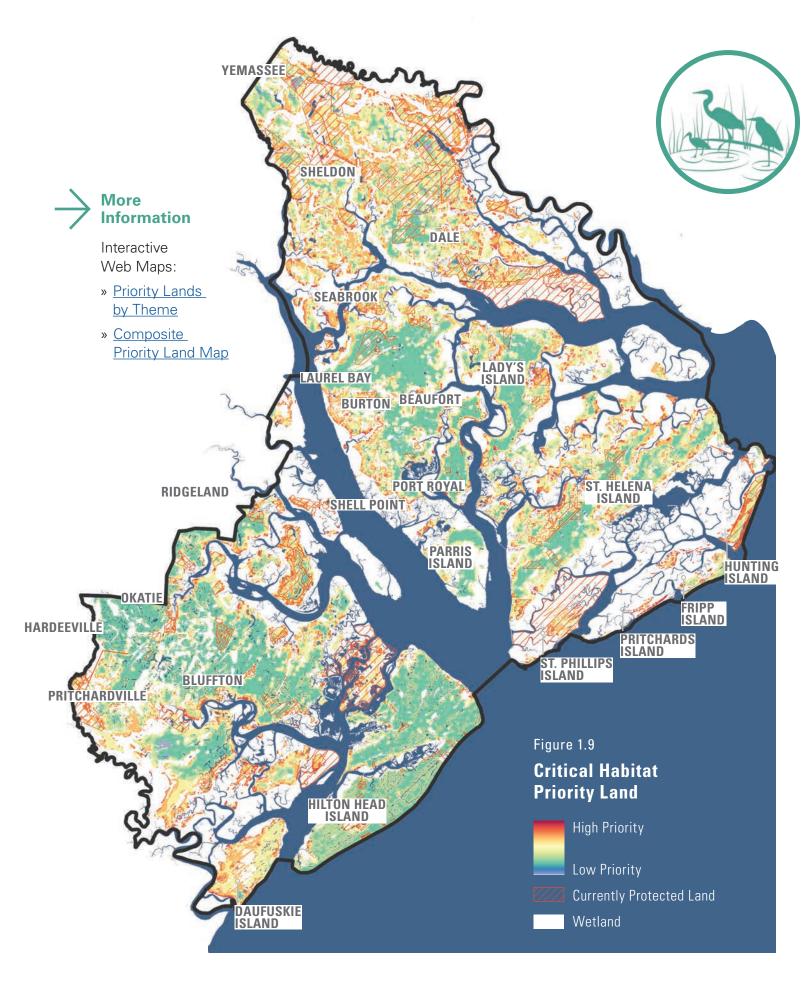


Figure 1.8: Sample enlargement map of Critical Habitat Priority Land in the vicinity of Lady's Island.



RESILIENCY

Resiliency is the ability of a landscape to recover, adapt and thrive – including in the face of climate change and sea level rise.

The Greenprint Plan is one of multiple efforts that should be aligned to build Beaufort County's environmental, social and economic resiliency.

Best practices in resiliency planning call for a tiered approach to adaptation measures, breaking them into the three general categories of protection, accommodation and managed retreat.

Protection implies the construction of physical barriers or other systems to prevent sea level rise and increased flooding and storm surge from affecting historic, heavily populated and other significant areas.

The recommendations of the Greenprint Plan are geared more toward the strategies of accommodation and retreat – enhancing the

resiliency of cultural landscapes and the natural environment through measures such as open space protection, Green Stormwater Infrastructure and ecological restoration.

The Greenprint Plan's prioritization model identifies priority lands for this theme through consideration of hazard areas – or those parts of the county considered vulnerable due to floodplain locations, sea level rise projections (Figure 1.8) and storm surge impacts during hurricanes. It also includes areas identified by The Nature Conservancy as resiliency corridors, which can allow the upland migration and adaptation of local ecosystems in response to sea level rise.

The result is a priority map that identifies land that should be protected to secure human lives and property in addition to Beaufort County's unique ecosystems.

At-risk ecosystems and cultural landscapes should be the subject of more comprehensive water studies that identify site-specific risks and more targeted protection, green infrastructure and land conservation strategies – all of which should be coordinated with public, private, local, regional and national partners.

OBJECTIVES



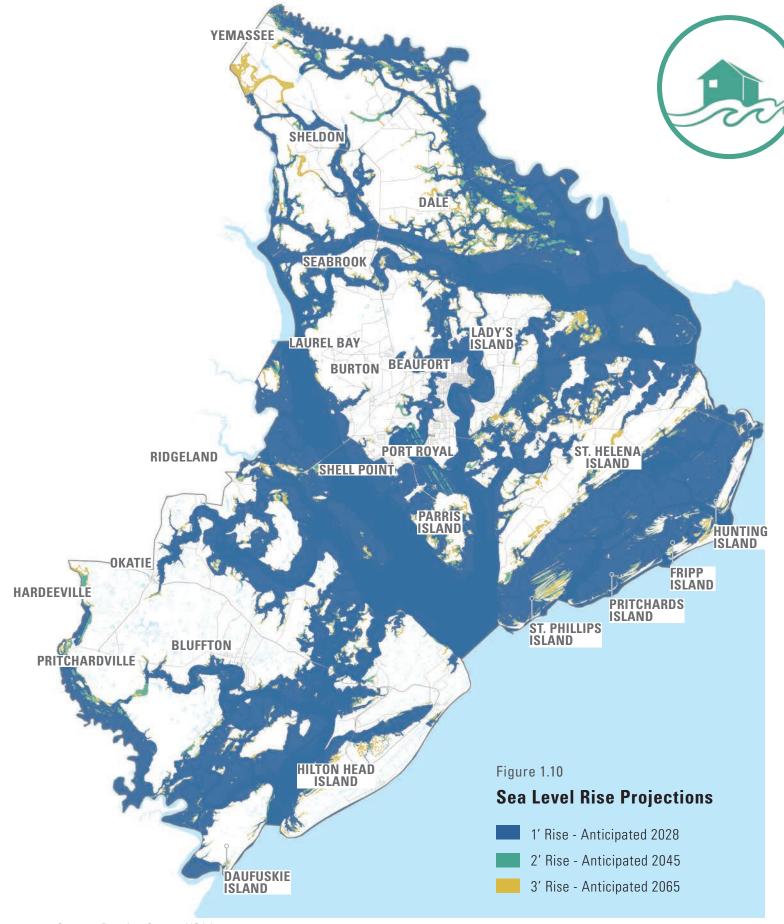
Deploying land conservation as part of a larger coordinated strategy to protect against pluvial, tidal and storm flooding.



Identification, protection and restoration of at-risk ecosystems, including saltmarsh and marsh migration corridors.



Communication and education strategies to make residents aware of risks and promote best practices.



Sources: Beaufort County, NOAA

Resiliency Mapping Inputs

- » 100-year floodplain
- » Projected sea level rise of 1'
- » Projected sea level rise of 2'
- » Projected sea level rise of 3'
- » Resilient and Connected Networks (The Nature Conservancy)
- » Areas of storm surge impact during Category 1 hurricane

Summary of Approach

• The latest projections on storm surge and sealevel rise were utilized to identify areas for conservation that could be a part of a larger

- strategy for lessening the impact of disasters on people and property.
- Near-term projections were weighted more heavily than long-term projections.
- Corridors that have been identified for migration of habitats upland as sea levels rise were included in the analysis.

Summary of Limitations

- The projections used are models, or best guesses, and are subject to change over time as datasets are updated.
- These models may or may not take into account events such as King Tides.

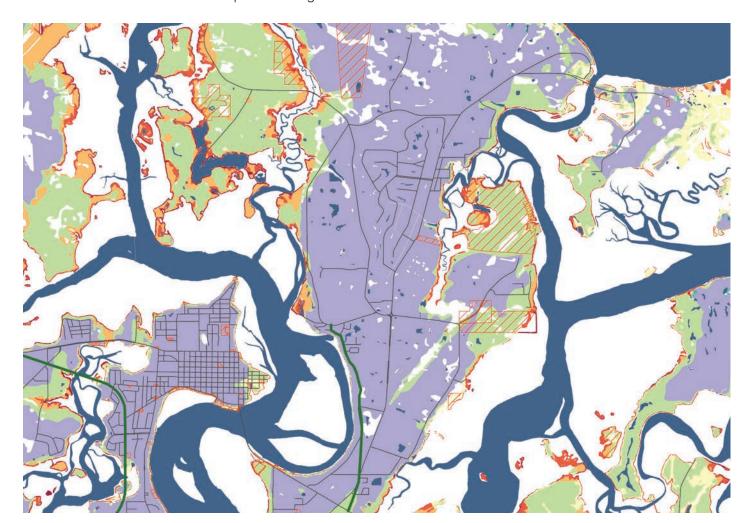
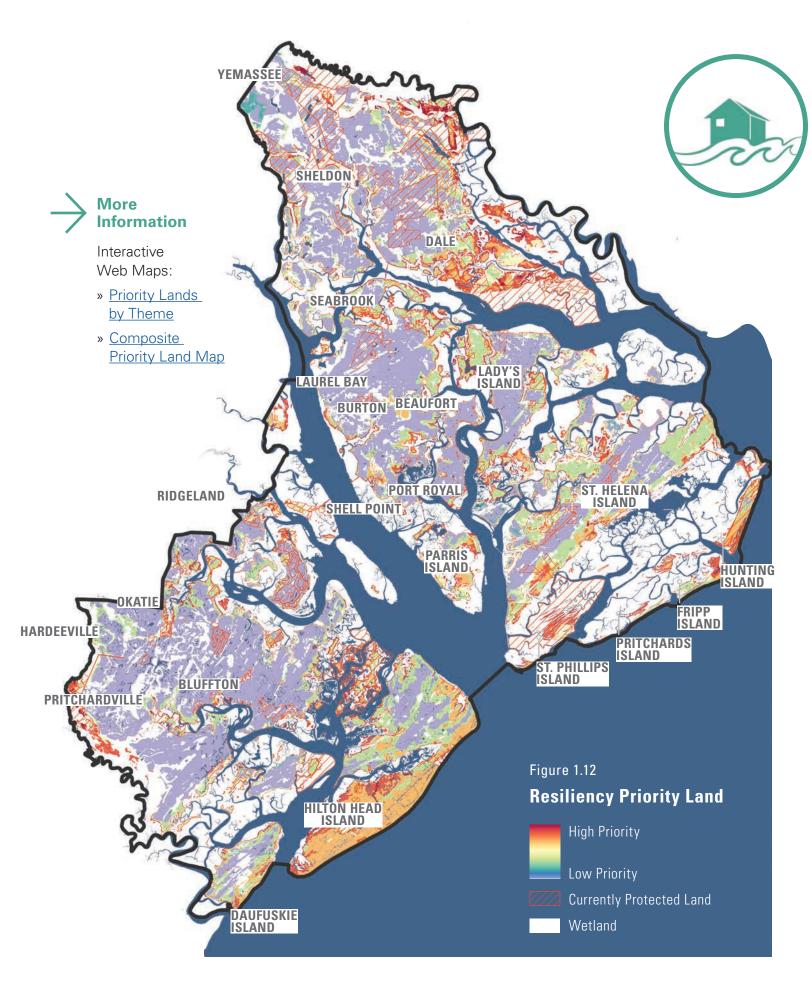


Figure 1.11: Sample enlargement map of Resiliency Priority Land in the vicinity of Lady's Island.



CONNECTIVITY

Open space connectivity is vital for ecological health and for public access and recreation.

From an ecological standpoint, landscape connectivity is "the degree to which the landscape facilitates or impedes movement among resource patches." The optimal level of connectivity is defined relative to the requirements of local species, but generally speaking the better connected the landscape, the better it's able to protect biodiversity and accommodate species and ecosystem adaptation in the face of climate change and other threats. In Beaufort County, landscape connectivity is a key element of other open space priorities, including the protection of habitat and water quality.

From a public access and recreational standpoint, connectivity refers to how easily Beaufort County residents can reach the county's public open spaces by way of a system of trails, greenways, blueways, sidewalks and roads. Trails are important recreational amenities themselves, and trail connectivity can make it easier for residents to take advantage of public open spaces and recreational amenities more broadly. The protection of open space for trail alignment can also have multiple benefits, including the protection of ecological connectivity, habitat and water quality.

To take both ecological and trail connectivity into account, the Greenprint Plan prioritization model identifies priority lands based on their proximity to currently protected lands, scenic roads, canopy roads, existing greenways and blueways, proposed trails, and military installations.

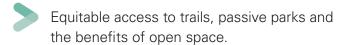
OBJECTIVES



Landscape connectivity for biodiversity and the resiliency of species and ecosystems.

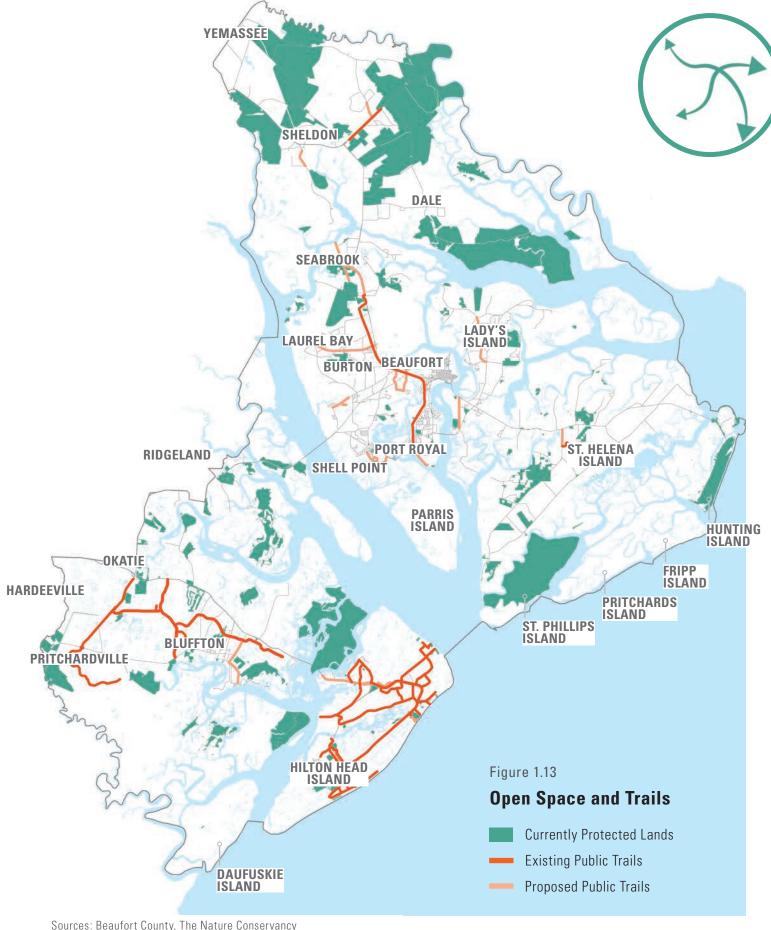


Trail connectivity for recreation public access to open space.





Connections between the Greenprint Plan and the Beaufort County Comprehensive Plan and Bicycle and Pedestrian Task Force.



Connectivity Mapping Inputs

Proximity to protected lands, military installations, scenic roads, canopy roads, greenways and blueways, measured in increments of:

- » 0.25 miles
- » 0.5 miles
- » 1 mile
- » 2 miles
- » 3 miles
- » 4 miles
- » 5 miles

Summary of Approach

• Proximity to existing ecological and man-made corridors were considered in the analysis.

Summary of Limitations

- Small drainage areas and their buffers could be considered in the future.
- Groundwater availability and disaster preparedness were not considered in this analysis.

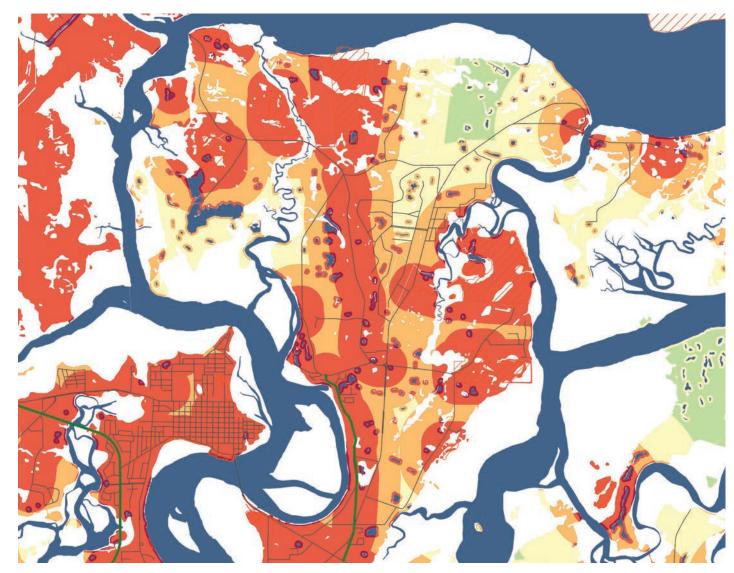
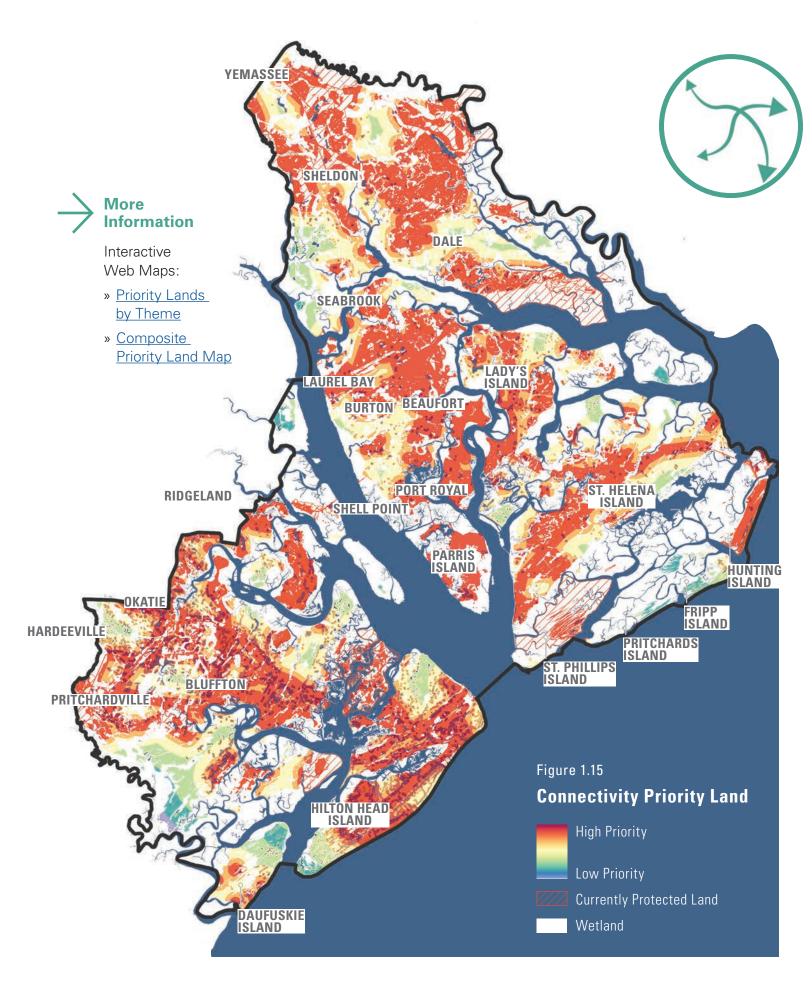


Figure 1.14: Sample enlargement map of Connectivity Priority Land in the vicinity of Lady's Island.





RURAL AND CRITICAL LAND PRESERVATION PROGRAM

The Rural and Critical Land Preservation Program (RCLPP) is a publicly funded and administered program that protects priority lands in Beaufort County. The Greenprint Plan informs the work of the RCLPP to acquire conservation land and development rights.

The RCLPP was established in 1999 following the adoption of the first Beaufort County Comprehensive Plan. In 2002, Beaufort County voters approved a \$40 million bond referendum to fund land purchases through the program. Four more referenda followed during the next 17 years, raising \$160 million to protect almost 24,000 acres of land.

RCLPP properties are secured either through feesimple purchase – where the county buys, owns and manages the property – or through the donation or purchase of development rights. In the latter scenario, the land continues to be privately owned and managed, and a conservation easement is negotiated that describes how the land's open space values will be protected in perpetuity.

RCLPP lands owned by Beaufort County are managed by the county's Passive Parks Manager. Private lands with conservation easements are overseen by various entities including Beaufort County, Beaufort County Open Land Trust and The Nature Conservancy.



Rural and Critical Land Preservation
Program website (external URL)

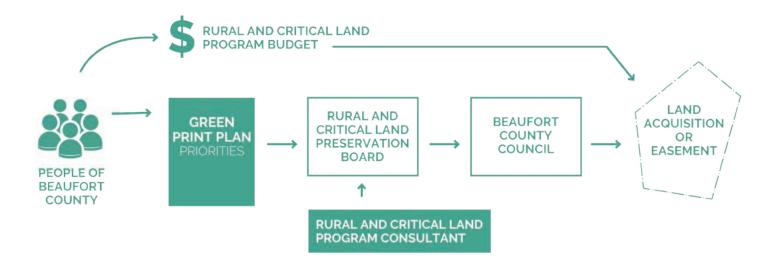
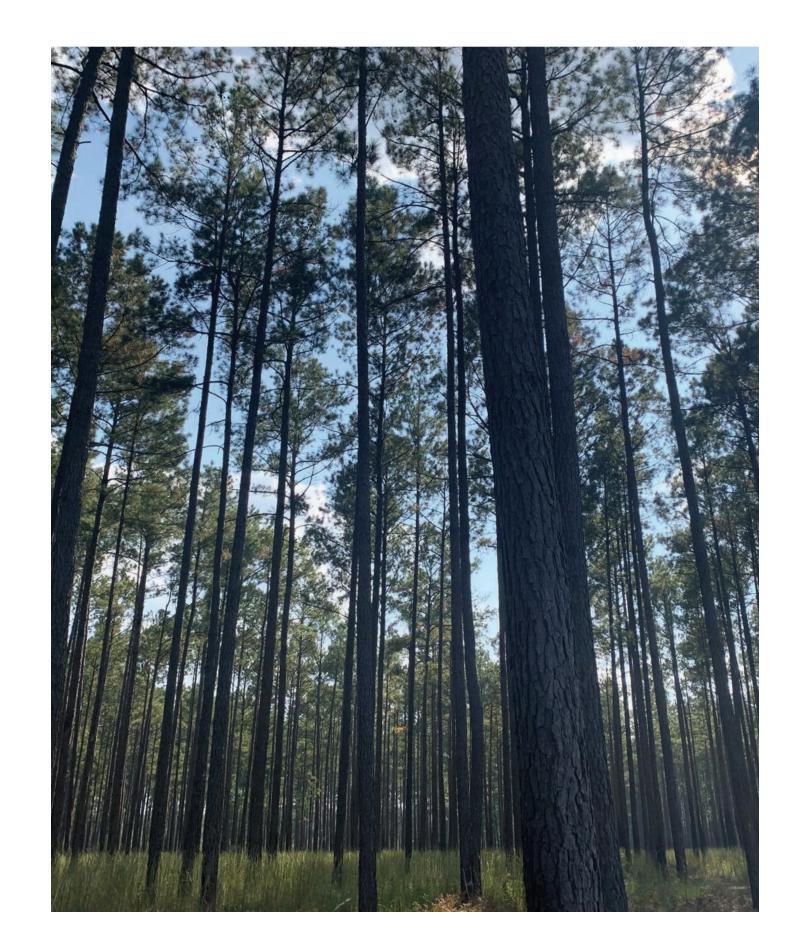


Figure 2.1: Rural and Critical Land Preservation Program process and constituents.



LAND PRESERVATION TOOLKIT

Previously the Greenprint Plan focused only on acquisition – either of priority land outright, or the acquisition of a property's development rights.

This plan addresses a broader land preservation toolkit that can be used by public and private entities, individually or in partnership.

There are pros and cons to the various acquisition, legal and policy tools that can be used to protect

priority lands. Figure 2.2 shows how Greenprint survey respondents saw different tools as being more or less appropriate for achieving different land conservation goals. Those tools and their tradeoffs are described below.

Traditional Tools of the Rural and Critical Land Preservation Program

PUBLIC OWNERSHIP OF LAND

When Beaufort County purchases priority land through the Rural and Critical Land Preservation Program (RCLPP), the county owns and manages the land. Often the land can be made available for public access and recreation. Because future county leaders could choose to sell the land, it legally has no permanent protection.

PERMANENT CONSERVATION EASEMENT

Publicly owned land can be protected by a conservation easement, which is specific to every property and describes how the land must be protected and managed. The easement can still allow public access, and it guarantees the land's permanent protection.

Private landowners can also donate conservation easements to a land trust or similar organization, guaranteeing specific land protections in return for individual tax benefits. The land continues to be owned and managed by the private landowners, and the land is permanently protected. The easement

can allow for limited development – for example, so that future generations can continue to live on the property. Permanent easements are also a tool of the RCLPP.

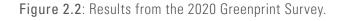
PURCHASE OF DEVELOPMENT RIGHTS

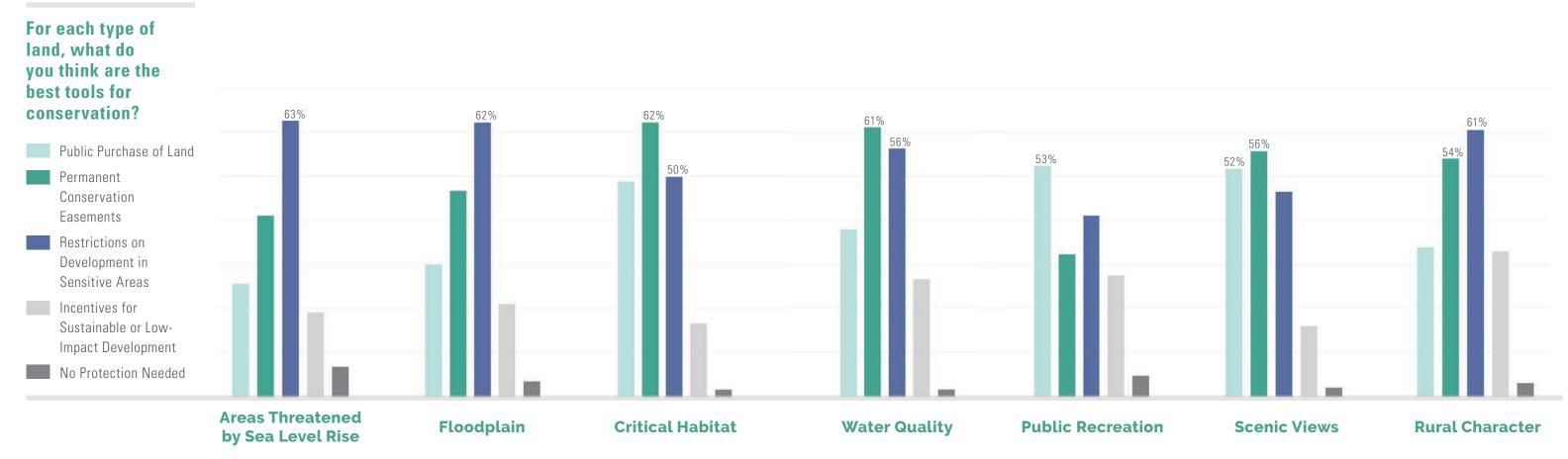
Under Purchase of Development Rights programs, the owner of land in a priority conservation area can sell their land's development rights, maintaining ownership while guaranteeing some permanent level of protection. This is another tool of the RCLPP.

Zoning and Policy Tools

TRANSFER OF DEVELOPMENT RIGHTS

Under Transfer of Development Rights programs, a market is created whereby the owner of land in a priority conservation area can transfer their land's





development rights to someone with land in a nonpriority area. Establishing this type of program begins with careful analysis of a development market to define "sending" and "receiving" areas and to gauge whether such a program could be supported.

LOW-DENSITY ZONING

A more traditional tool is the use of low-density zoning, whereby local governments define limits on the type and amount of development that can happen in certain areas. Beaufort County's Rural and Natural Preserve zoning are current examples.

The County's comprehensive plan examines whether there are opportunities to adjust the density requirements of County zones to better meet land conservation goals and promote the protection of rural character.

DEVELOPMENT ORDINANCES

Low-impact development requirements can also be applied to certain areas through zoning to ensure some level of open space and environmental protection in every development project.

Often open space requirements – whereby natural features of a property are left undisturbed – are expressed as a minimum proportion of the overall property size. Buffer requirements can protect land along waterways or scenic roadways or between different land uses. Green stormwater infrastructure requirements can differ according to their context and can promote ecological integrity while protecting against flooding.

CONSERVATION DEVELOPMENT

Governing bodies can use development ordinances to require or incentivize conservation developments – communities or subdivisions designed and managed to preserve landscapes with some combination of environmental, cultural, agricultural, historical or aesthetic values.

Conservation development begins with the delineation of conservation land – ideally 30 to 70 percent of a site's buildable area – that is set aside for permanent protection under a conservation easement. This open space must be connected and typically occurs along drainage ways.

In the land area beyond the conservation areas, new development is often tightly clustered, resulting in a development that accommodates growth while strategically preserving open space.

Ongoing Study and Partnerships

Ongoing cultural, ecological and climate studies will inform new understandings of priority conservation

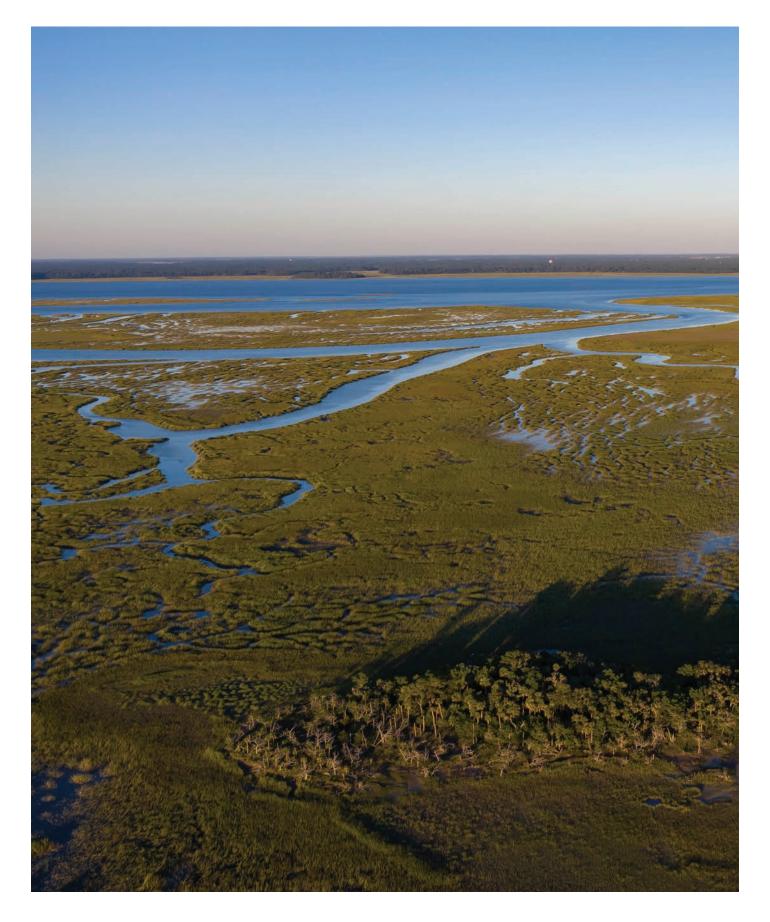


Glossary of Terms

Acquisition Tools: Fee Title
Acquisition or Conservation
Easement, Rural and Critical Land
Preservation Program (external
URL)

<u>Transfer of Development Rights,</u> Wetlands Watch (external URL)

Conservation Subdivision
Handbook: A Guide for North
Carolina Communities in the Use
of Conservation Design for Land
Use Planning, NC State University
(external URL)



PRIORITIZATION MODEL

A priority model is a living decision-making tool that aims to map - and highlight - land areas that have overlapping and multiple benefits to the community, and/or have high values within their respective land priority theme.

The land priority themes – and the data used to define and map each – are shown in the diagram on the following page. They include Cultural Landscapes, Water Quality, Critical Habitat, Resiliency and Connectivity.

The Greenprint prioritization model was built using ModelBuilder in ArcGIS Pro, allowing for various weighted scenarios to identify land areas to be targeted for protection of the natural and cultural resources of Beaufort County. Priorities can be weighted within each individual theme, and/or across multiple themes.

For example, users who are most interested in cultural landscapes can refine the mapping of areas identified within that category – perhaps choosing to weight historic districts and overlays more heavily than historical agricultural or archaeological sites - in addition to refining how the overall Cultural Landscapes category is weighted in a composite map, relative to the other categories.

This is a living tool. As land areas and priorities change over time, data can be reanalyzed through the model to identify new areas for conservation strategies. And as described above, various public and private partners can adapt the tool for their use. These users could include:

- Rural and Critical Land Board and consultants, to inform decisions about acquisition and purchase of land and development rights.
- Beaufort County and municipal planners, to inform growth management planning and the evaluation of development proposals.
- County and local parks departments, to inform passive park and trail planning.
- Local and state transportation officials, to explore opportunities to align trail and transportation planning with open space connectivity goals.
- Public Works and Stormwater Management, to inform regional stormwater and green infrastructure planning.
- Private conservation groups, to inform planning efforts and encourage coordination across public and private conservation entities.
- Hazard mitigation planners, to explore how open space can support larger resiliency planning efforts.
- U.S. Department of Defense, to align open space and buffer planning with local and regional land conservation goals.



Composite Greenprint Priority Land Map

Appendix B: Full Prioritization Model Criteria and Weighting

PRIORITY MAP INPUTS BY THEME

CULTURAL LANDSCAPES

National Register St. Helena Overlay Fishing Village Historic Rice Field

Heirs' Property Rural Zoning **English Plantation** Tabby Structure

Colonial Church European-American Fort Colonial Ferry Crossing

Working Agricultural Land Scenic Drives & Byways

Canopy Road Spanish Moss Trail Yemassee Town

WATER QUALITY

Port Royal Sound Water Quality Priority Index

CRITICAL HABITAT

Evergreen, Mixed. Managed and High-Integrity Pine Forest Upland Hardwood Forest Maritime Forest Forested Wetland Estuarine Marsh

TNC Resilience and Diversity Above Average Beaches and Dunes

Audubon Important Bird Freshwater Marsh Area Tidal Creek Buffers

Marsh Migration Corridor Parcels

RESILIENCY

100-Year Floodplain 2' SLR Projection 1' SLR Projection 3' SLR Projection TNC Resilient and Connected Networks

Storm Surge Category 1

CONNECTIVITY

Proximity to protected lands, military installations, scenic roads, canopy roads, greenways and blueways

0.25 miles 1 mile 3 miles 5 miles

0.5 miles 2 miles 4 miles

COMPOSITE GREENPRINT PRIORITY LAND MAP

REGIONAL OPEN SPACE PARTNERS

The Rural and Critical Land
Preservation Program is just
one of the well-regarded
conservation programs,
both public and private,
that seek to protect open
space for current and future
generations of Beaufort
County residents.

These organizations and their broad land conservation goals are described below.

Land Trusts

Land trusts are private non-profit organizations working to conserve land with open space value by securing conservation easements, advocating for strategic land conservation and overseeing or supporting long-term land stewardship.

Land trusts operating in the region include Beaufort County Open Land Trust, Ducks Unlimited, Lowcountry Land Trust, The Conservation Fund, The Nature Conservancy, Open Space Institute and Hilton Head Land Trust.

State Conservation Programs

The South Carolina Conservation Bank, created in 2000, seeks to broaden the state's open space efforts beyond the protection of critical wildlife habitat, to include the protection of greenways, parks and other open space lands that are critical to

South Carolina residents' wellbeing and quality of life. The Conservation Bank grants funds to land trusts, state agencies and local governments – though not counties – for the purchase of land outright or the purchase of easements on land with conservation value. The Conservation Bank has granted more than \$2.5 million to help protect more than 5,800 acres of land in Beaufort County.

The South Carolina Department of Natural Resources (DNR) has a land acquisition program informed by the State Wildlife Action Plan. The state's Heritage Trust Program, established in 1976, also seeks to prevent habitat loss through strategic land acquisition. Protected lands are set aside by DNR, in partnership with other state agencies, as heritage preserves. The state owns and manages about 3,400 acres in Beaufort County through its heritage preserve program.

The state's Conservation Incentives Act entitles landowners to income tax credits in exchange for donating easements or fee title to local governments or certain non-profits for conservation purposes – including the protection of air and water quality and of open spaces with natural, scenic, agricultural, forest, recreational, educational, historical, archaeological or cultural value.

State and Federal Land

The Pinckney Island National Wildlife Refuge and ACE Basin National Wildlife Refuge, part of the U.S. Fish and Wildlife Service Refuge System, total almost 9,000 acres of federally protected land in Beaufort County.

South Carolina Department of Parks, Recreation and Tourism owns Hunting Island State Park and St. Phillips Island, totaling almost 10,000 acres of protected state parkland in the county. The University of South Carolina Beaufort owns Pritchards and Old Islands.

U.S. Department of Defense

The Readiness and Environmental Protection Initiative dedicates federal funds to purchase conservation easements and create buffers near military installations to prevent encroachment. The program requires a local match; every year, administrators of the RCLPP and the Marine Corps Air Station work together to identify target properties for preservation, and the RCLPP provides the local match.

Role of the Greenprint Plan

The biggest driver of land conservation efforts in Beaufort County has been the perception that

population growth and development are threatening the farmland, waterbodies, cultural lifeways and sensitive environments that make the county unique. There continues to be broad public support for the Rural and Critical Land Preservation Program and its efforts to protect open space through the purchase of land and development rights.

Given the county's rapid population growth and public concern about sprawl, a challenge for the RCLPP and its conservation partners is to avoid conservation efforts that are reactionary – for example, purchasing a property to prevent a specific proposed development.

The Greenprint Plan can help public-private conservation efforts to be proactive and coordinated, making the most of limited conservation dollars and ensuring that the highest-impact lands are targeted using the most appropriate tool.



LONG-TERM LAND STEWARDSHIP

Open space stewardship entails a comprehensive, sustainable and adaptable approach to land management that secures a property's conservation values over time.

Given the complexity of Beaufort County's cultural and ecological landscapes, effective stewardship of the county's open space requires well-defined goals and metrics and an ongoing process of assessment and revision to ensure those goals are met and the land's conservation values protected.

The Beaufort County Passive Parks and Facilities department is responsible for the stewardship of county-owned open space, most of which has been purchased through the Rural and Critical Land Preservation Program. The Passive Parks definition of stewardship highlights three goals: to safeguard the conservation value and natural integrity of open space lands; to make open space lands available to multiple user groups; and to generate revenue from the land, where possible, to fund ongoing stewardship efforts.

County-owned open space accounts for approximately 11,000 acres of the more than 23,500 acres protected through the Rural and Critical Land Preservation Program. The Passive Parks department is currently updating its stewardship plan to identify the best approach for each property along with the

funding, personnel and partnerships needed for ongoing implementation and stewardship.

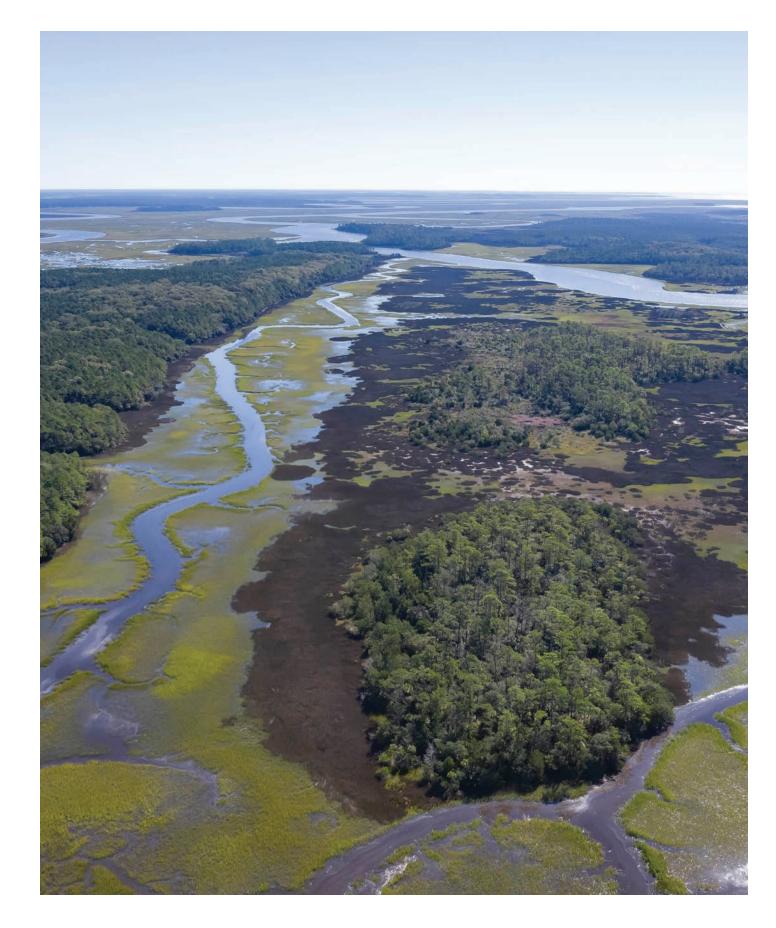
The remaining Rural and Critical Land acreage – more than half of the total – is protected by conservation easements on land that remains privately owned and therefore outside the reach of the county's stewardship plans.

Beaufort County Open Land Trust holds most of these conservation easements; that organization carefully considers the restrictions placed on each property by its easement, based on that property's characteristics and the conservation goals that are sought by way of its protection. For example, an easement for a property that is protected to allow for marsh migration might set strict limits on impervious surfaces and require a 300' setback from waterways.

Challenges & Opportunities

For publicly owned open space, funding is the biggest stewardship challenge. Careful stewardship of diverse protected lands – some of which also offer facilities for public access – requires a deep bench of planning and facilities staff along with a significant annual budget to fund the maintenance, restoration work and site amenities needed to protect properties' conservation values while making them available to the Beaufort County public. The Passive Parks department's stewardship plan identifies funding and revenue generation opportunities along with management partners – such as site-specific Friends Groups.

In the Greenprint survey, respondents were asked whether they thought open space conservation efforts in Beaufort County should focus more on



public ownership and management of protected land, or more on private ownership and management. On a scale of 0 to 100 – with 0 representing an emphasis solely on public ownership and 100 representing an emphasis solely on private ownership – the average response was 97, indicating a strong local preference for conservation efforts that leave protected land in private ownership and outside the realm of public management responsibility.

Given that preference for private protected land and the importance of protected open space to Beaufort County's economy and way of life, the county and its conservation partners should consider possible avenues for strengthening stewardship standards for private open space – whether under a conservation easement or protected by another policy tool.

Public Land Stewardship Strategies

- Continue to support efforts of the Beaufort
 County Passive Parks department to classify
 open space stewardship needs and identify
 potential funding sources and partnerships.
 Establish a schedule to assess and revise the
 stewardship plan on an ongoing basis to reflect
 changing conditions and public priorities.
- Create a Passive Parks Advisory Body with specific expertise in land development, engineering and/or conservation to further support the efforts and capacity of the Passive Parks department.
- Informed by property-specific needs assessments, consider how to build expertise and efficiencies by comprehensively addressing management and care needs such as invasive species, erosion control, and management by land typology such as pine forest, maritime forest, saltmarsh and wetland.
- For each land typology of publicly owned Rural and Critical lands, continue to identify industry standards that can guide ongoing stewardship plans and practices – such as the American

Forest Foundation Standards of Sustainability, the National Sustainable Agriculture Standard, the management principles of the Sustainable SITES Initiative, and restoration practices defined by the U.S. Forest Service, U.S. Environmental Protection Agency and others.

- Consider developing a specialized parks team of natural area managers supported by trained volunteers, and outsourcing open space maintenance needs that are less specialized.
- Establish an asset management system that allows staff to manage data about park and trail conditions and maintenance over time. This will help staff to track current maintenance needs in addition to strengthening the department's ability to anticipate future funding and phasing needs.
- As part of the countywide parks and trails plan, create a visitor plan that establishes program, amenities and regulations to create a positive visitor experience while encouraging responsible visitor behaviors.

Private Land Stewardship Strategies

- For properties placed under a conservation
 easement through the Rural and Critical Land
 Preservation program, develop restrictions
 and management requirements that are
 specific to each property's land typology and
 conservation goals. Work with other public and
 private conservation organizations to develop
 management requirements that are data-driven
 and respond to Beaufort County's unique
 conservation goals and cultural and ecological
 conditions. Promote the regional use of the
 management requirements and revisit them
 regularly to ensure conservation easements are
 serving the public interest and meeting their stated
 conservation goals.
- For land protected by open space and buffer requirements, define clear management standards and incentivize landowners to follow them.

The Nature Conservancy National Easement Study: Issues, Insights and Tips for Practitioners

In 2005, The Nature Conservancy conducted a study of its easements – at that time, more than 2,100 easements totaling 2.7 million acres – that characterized their original purpose and identified problems with implementation. The Conservancy used that study to develop easement best practices for its own use as a land trust and for sharing with other conservation practitioners.

Below are some of the key tips related to best practices in management requirements.

- » TIP: Avoid sticking to "boiler plate" language. Use site-specific, purpose-based drafting. If the purpose of the easement is either too vague or too descriptive, it could create problems for design of monitoring.
- TIP: If the easement serves as a buffer or corridor area for off-site resources, clearly reference these broader functions in the documentation, to ensure they continue to be enforceable even if off-site conditions change. This will become even more important given the expected impacts of climate change.
- » TIP: Link purpose to restrictions to baseline to monitoring. Once a purpose is determined, cross-check to insure the purpose is covered across all documentation – from the restrictions, to the baseline data, to the design of the site monitoring.
- » TIP: Ask "Why do we care?" Focus on outcomes, and where possible define outcomes that can be quantitatively measured. For example, efforts by the City of Austin, Texas, to protect aquifers, natural communities and domestic water supplies

are focused on reducing surface alteration and soil and water degradation. In addition to restrictions on certain activities that can cause these problems, local easements also manage the impacts of new structures quantitatively by limiting impervious cover to a percentage of the total site acreage or a maximum square footage.

- » **TIP:** Use objective, research-based criteria and identify the means for measuring whether those criteria are being met. In the California grasslands, there is a methodology to use aerial imagery to measure Residual Dry Matter (RDM), material left standing for its wildlife value. RDM is a widely recognized grazing standard, and biodiversity targets differ in their preferred grass height depending on the ecological function served by the RDM – for example, whether to promote the habitat of the San Joaquine Kit Fox, to protect ground nesting birds, or to sustain soil productivity and prevent erosion. Easements should be written to meet the ecological needs of specific targets, and then identify the methodology and standard by which the easement's effectiveness will be
- » TIP: Consider a "Choice" alternative for example, a forestry easement can allow the landowner to follow the specific prescriptions of the easement, or to become certified under Forest Stewardship Certification.



Full report from The Nature Conservancy (external URL)



CONNECTING THE TWO PLANS

The Comprehensive Plan is a requirement under state law and gives planning commissioners, local officials and residents the opportunity to map out their community's future.

Within its Comprehensive Plan, Beaufort County must understand, address and make plans for the protection of natural and cultural resources, among other state-required elements. The Comprehensive Plan provides a road map for the county to pursue its community-derived vision and integrate the required elements into a holistic plan that will guide the county's actions over the next ten years.

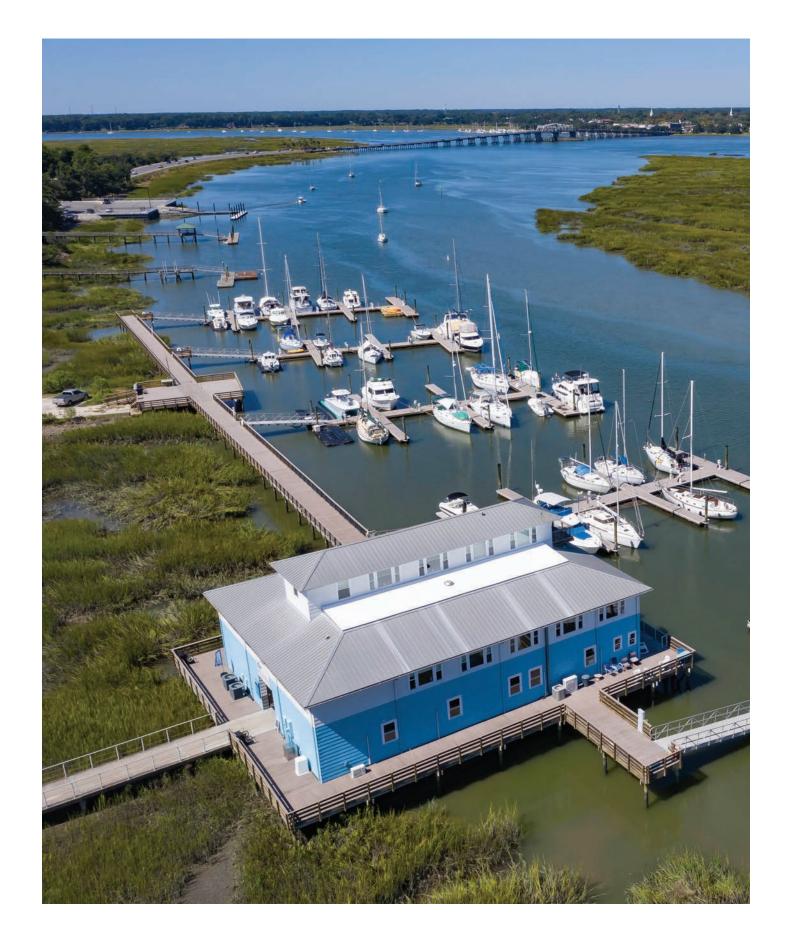
Establishing a clear link between the Greenprint Plan and the Comprehensive Plan can create harmony between land that is protected and land that is promoted for development.

There are powerful interrelationships between land conservation and growth management, future land use, transportation, housing and economic development. Creating a spatial and technical link between the Greenprint Plan and the Comprehensive Plan offers Beaufort County a unique opportunity to:

• Clearly show how future growth and the natural environment can coexist harmoniously.

- Develop common or complementary criteria for the Rural and Critical Land program and the County to evaluate conservation and development proposals.
- Enable landowners, developers and builders to be better informed about how various areas of the county are prioritized from a growth or preservation standpoint.
- Influence how and where transportation, housing, future land uses, economic development and public facilities get located.
- Influence design and development criteria that will enable development to coexist with the natural environment.
- Become the starting point for more criteria, prioritization, policies and programs that encourage preservation as well as achieving economic benefits from owning and developing land.
- Inform regional conservation efforts.

By using the Greenprint Plan as the basis for the Comprehensive Plan, Beaufort County has an opportunity to shape its future to accommodate environmental hazards associated with rising sea levels and increased flooding; promote development in places where it will best work with the natural environment; visibly show those areas of the county that are precious from an environmental and cultural standpoint and in need of protection; and remind all that a strong part of the community vision for the Comprehensive Plan is to establish balance and harmony between the built and natural environment.



TRANSECT PLANNING

Beaufort County and the local municipalities use an urban-to-rural transect (Fig. 3.2) to organize planning strategies and development ordinances.

Transect planning acknowledges that different development patterns are appropriate in different parts of the jurisdiction – with the highest

development density expected in the urban core, progressively lower densities in suburban and rural areas, and very limited to no development in surrounding natural areas.

Similarly, the 2020 Greenprint Plan creates a Beaufort County ecological transect (Fig. 3.1) based on the region's unique ecology and its transition from the Carolina Flatwood uplands to the Sea Island lowlands.

Just as the urban-to-rural transect (Fig. 3.2) is overlaid on the County map in zones, so can the

ecological transect be overlaid on the County map through the delineation of ecological systems. And just as planning zones inform the types of development that can happen at different points in the County, so can the ecological transect zones inform various ordinances and incentive programs.

For example, a site's ecological transect zones could inform the Green Stormwater Infrastructure improvements that the County recommends or incentivizes, as shown in Figure 3.5. The ecological transect zones also could correspond to zone-specific design standards that protect or create high-quality and connected habitat for target species that are indicators of broader ecosystem health, also shown in Figure 3.5.

This approach would allow for the priorities of the Greenprint Plan to be reflected at the site level, expanding the ecological impact beyond what could be achieved through land conservation alone.

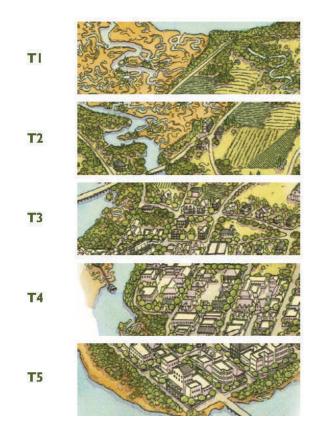


Figure 3.2: Beaufort County urban-to-rural planning transect.

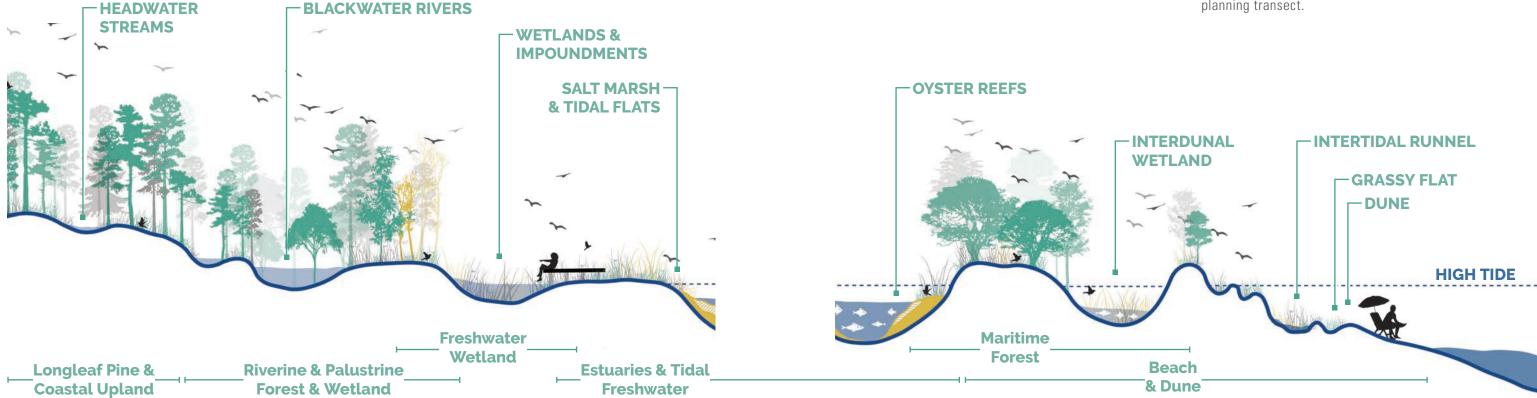


Figure 3.1: Illustration of the Beaufort County ecological transect.

GREENPRINT OVERLAY

The Greenprint Plan informs the Beaufort County Comprehensive Plan through the recommendation of a Greenprint Overlay derived from a composite priority land map (Fig. 3.6).

The Greenprint Overlay adds a conservation lens to development ordinances by defining zones on the map for which the ecological and planning transects can form a matrix, as illustrated in Figure 3.4. This allows local planners to craft conservation, stormwater and growth management policies that are informed by the intersection of Beaufort County's built environment and ecosystems.

Under this approach, permanent conservation and land stewardship efforts are concentrated in Rural and Natural Preserve zones. Suburban areas in the middle of the planning transect would accommodate conservation-oriented development, allowing growth while strategically protecting critical habitat and ecosystem functions. In urban areas where land conservation becomes less feasible, there are additional options for promoting ecological health through the use of Green

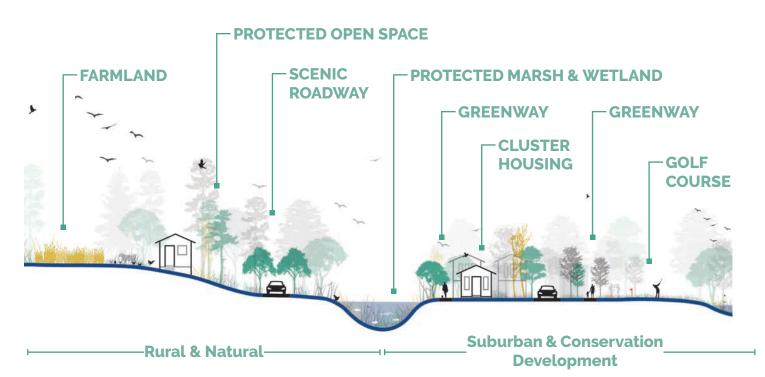


Figure 3.3: Illustration of the Beaufort County cultural landscape.

	T1-T2	T3-T4	T5 (Municipalities Only)			
Cross Ecosystem and Urban Transect Approach	Wetland Protection Native Species Planting Stream Buffers Impervious Limits Floodplain Protection Steep Slope Protection	Stormwater Management (Paving, Channeling, Storage, Filtration) Historic Trees and Tree Groves Protection				
Priority Conservation Strategy Per Transect	Protected Land Public ownership of land Permanent conservation easement	Protected Land + Conservation Overlay Transfer of Development Rights Low-Density Zoning Open Space and Buffer Requirements Conservation Development Incentives	Protected Land + Conservation Overlay + Green Stormwater Infrastructure and Urban Forestry Best Management Practices			

Figure 3.4: Matrix of ecological and urban-to-rural transect planning.



Stormwater Infrastructure and urban forestry best management practices.

The Greenprint Overlay and its gradations in the Beaufort County Comprehensive Plan are based on the composite map for priority conservation land shown in Figure 3.6.

This map is informed by GIS data and community input. It was built using the Greenprint Prioritization Model, with the relative themes weighted based on the public open space priorities of Greenprint survey respondents.

The result is a map that reflects the open space values of Beaufort County residents. It is a powerful tool to guide future land use and growth management planning and the development of

strategies, policies, plans and overlays that define appropriate development types, densities and standards within and adjacent to the priority areas.

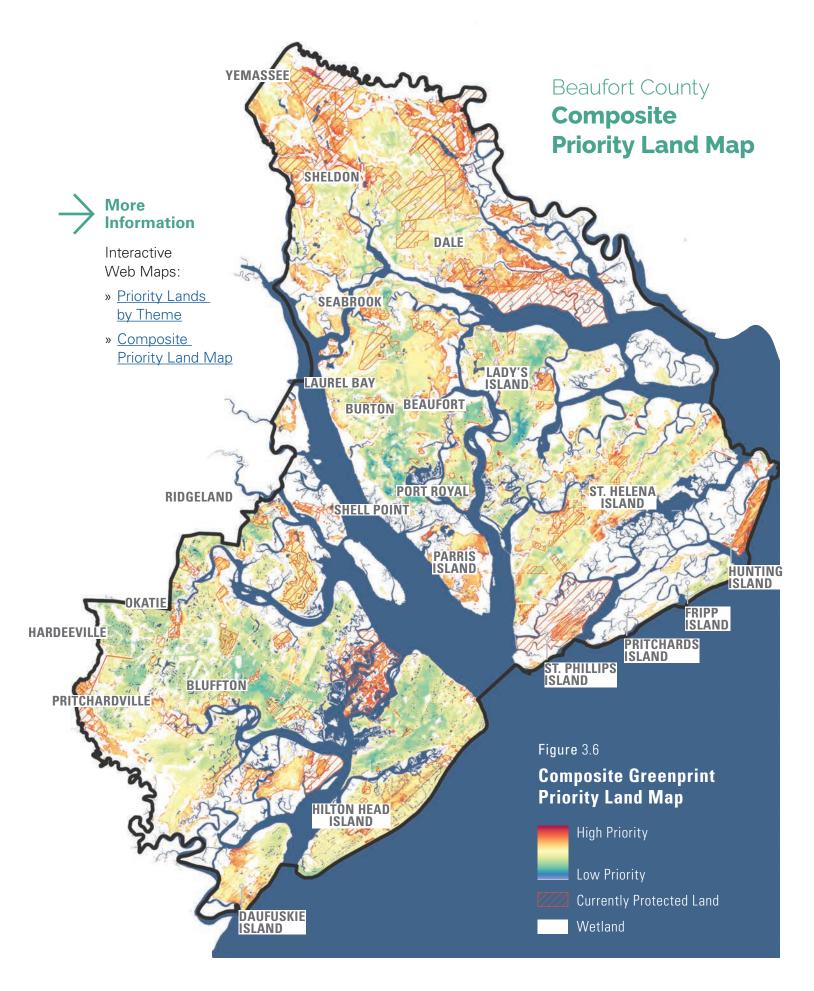


Appendix A: 'Paving' of the Crosswalk – Related Beaufort County Comprehensive Plan Strategies

Appendix B: Full Prioritization Model Criteria and Weighting

Ecological System	GSI Improvements	Target Species for Habitat Protection
Longleaf Pine and Coastal Upland	Aquifer recharge and infiltration / Permanent conservation easement	Pine Snake / Southern Hognose Snake / Bachman's Sparrow / Red-Cockaded Woodpecker
Riverine and Palustrine Forest and Wetlands	Floodplain capacity and storage /River buffers	Wood Thrush / Hooded Warbler / Red-Eyed Vireo / Acadian Flycatcher / Eastern King Snake
Freshwater Wetland	Wetland performance for water quality	Comet Darner Dragonfly / Marbled Salamander / Mole Salamander / Newt / Barking Tree Frog / Hyla Femoralis / Hyla Chryscoleses / Nesting Woodstork / Nesting Anhinga / Nesting Egret
Estuaries and Tidal Freshwater	Impervious limits / Water quality / Buffers	Painted Bunting / Bald Eagle
Maritime Forest	Impervious limits / Water Quality / Buffers	Swallow-Tailed Kite / Kentucky Warbler / Swainson's Warbler / Long-Eared Bat
Beach and Dune	Impervious limits / Water Quality / Buffers	Diamondback Rattlesnake / Least Terns / Black Skimmer / Gull-Billed Tern / American Oystercatcher / Red Knot / Nesting Wilson's Plover

Figure 3.5: Green Stormwater Infrastructure improvements and target species by Beaufort County ecological system.





OVERALL APPROACH

The 2020 Greenprint Plan builds upon the considerable work already done to promote open space planning in Beaufort County and the Lowcountry.

The Greenprint planning process began with a review of existing and in-progress local and regional plans and mapping exercises, in tandem with the collection of GIS data from the county, state and non-profit conservation partners.

After a preliminary review, the project team met with stakeholders to gain a deeper understanding of open space and land conservation issues and opportunities in Beaufort County.

Next the team prepared materials to share with Beaufort County residents what the team had learned, initial thoughts about priority lands and appropriate conservation tools, and a survey to collect residents' reactions and input.

That public input guided the creation of a prioritization mapping model and a conservation toolkit. It also drove the decision to illustrate how the land conservation strategies of the Greenprint Plan could inform other planning efforts.

Connection to the Comprehensive Plan

The Beaufort County Comprehensive Plan update was developed concurrently with the 2020 Greenprint Plan, creating an exciting opportunity to coordinate efforts. The result is a Greenprint Plan that directly addresses growth management,

and a Comprehensive Plan with open space and conservation at the core of its growth management framework.

Essential Stakeholders

Groups like Spring Island Trust, Beaufort County Open Land Trust, the Gullah/Geechee Sea Island Coalition, The Nature Conservancy, Port Royal Sound Foundation, South Carolina Coastal Conservation League, local municipalities, and the Beaufort County Planning and Passive Parks departments were instrumental in providing information, context and feedback.

Planning Approach Based on Community Input

Following are the key takeaways that informed development of the Greenprint Plan priority maps and recommendations:

- Balance growth with natural and cultural resource protection.
- Embed resiliency planning in the Greenprint Plan and Comprehensive Plan.
- Establish values and key themes.
- Create a clear and transparent decision-making framework that is replicable.
- Expand conservation tools beyond public land purchases.
- Explore how context-specific strategies might be connected to the county's rural-to-urban planning transect (Fig. 3.2).
- Embed management and stewardship considerations in the plan.

LITERATURE REVIEW

Existing and inprogress local and regional plans and best practices

GIS ANALYSIS & SUITABILITY MODELING

Preliminary analysis of existing conditions

STAKEHOLDER INTERVIEWS

Benefiting from the expertise of County staff and regional conservation organizations

PUBLIC OUTREACH

Virtual meetings, recordings, ArcGIS StoryMap and online survey to gauge public opinion about priority lands and conservation tools

RESULTS & PRIORITIZATION

Analyzing public input to guide recommendations and identification of priority land

CONSOLIDATED MAPPING BY RESOURCE TYPE

Development
of priority land
maps based on
prioritization mode

PEER & STAKEHOLDER REVIEW

Feedback and critique on approach and methodology

CREATION OF STRATEGIES & PLANS

Final draft documents for review by County staff and RCLPP Board

PUBLIC MEETINGS & MATERIALS

Public input was critical to inform and refine the 2020 Greenprint Plan's identification of priority lands and conservation toolkit.

Due to the COVID-19 pandemic and social distancing requirements, public engagement for the 2020 Greenprint Plan was conducted almost entirely online. The planning team reviewed best practices for digital engagement and created a multi-pronged approach that gave Beaufort County residents the option to get the information and share their feedback in multiple formats, depending on their device and personal preference.

The team hosted two virtual meetings using GoToWebinar and had 72 attendees. The meetings shared information about land conservation and its importance in Beaufort County, introduced the priority land types, and shared information about the pros and cons of various conservation tools. Each webinar included a Q&A along with live polling via Mentimeter. Both virtual meetings were recorded, and the recordings were posted to the project website, www.envisionbeaufortcounty.com.

To allow people to access the same information and survey at their own pace and in a different format, the planning team created an ArcGIS StoryMap that featured the same content shared in the live meetings, with a link to an online SurveyMonkey survey. As of early November 2020, the StoryMap

had garnered 1,974 page views, and 938 people had completed the survey.

All maps shared in the presentation and in a static format on the StoryMap were also made available through an ArcGIS interactive web map, which allowed people to turn layers on and off and to zoom in and out of the map for more information and context about the priority land types.

The virtual meetings, StoryMap and online survey were distributed by Beaufort County social media and press release; e-mail blasts sent from stakeholders to their respective distribution lists; and e-mail blasts to county churches, civic organizations and HOAs.

The Greenprint Plan survey was also made available in printed format for residents to fill out and return by mail or in person to the County.

In late October, the planning team for the Beaufort County Comprehensive Plan update held three inperson workshops with social distancing and masks required. These workshops – in Burton, Bluffton and St. Helena Island – offered an additional opportunity to seek input for the Greenprint Plan.



Interactive Web Map: Base
Conditions for Priority Conservation
Land Types (external URL)



Image: October public meeting at the Buckwalter Recreation Center in Bluffton.



What is the Green Print Plan? Why is it important? How can the public weigh in?

What is the Green Print Plan?

Keen scrolling down to move through the images

Figure 4.1: Screenshot of Greenprint StoryMap.



Figure 4.2: Screenshot of interactive web map.

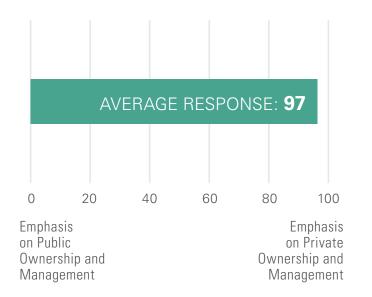
PUBLIC SURVEY RESULTS

More than 900 Beaufort County residents took the Greenprint survey.

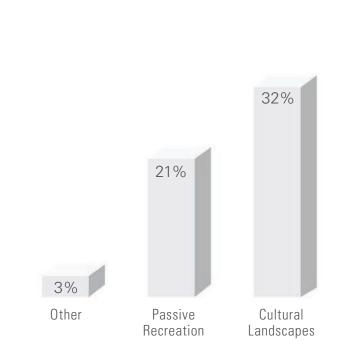
Their highest land conservation priorities were the protection of critical habitat and water quality. They felt different conservation tools were appropriate for different types of priority land – that breakdown is on the following spread. And respondents expressed a strong preference for private ownership and management of protected land.

On a scale of 0 to 100 — with 0 being total emphasis on public ownership and management, and 100 being total emphasis on private ownership and management

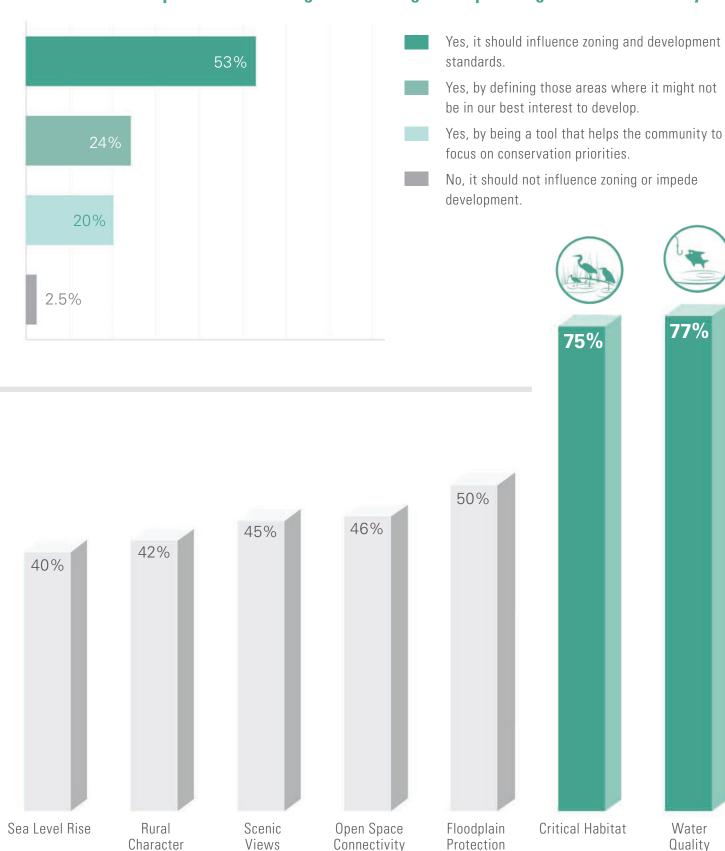
– how would you strike a balance between public and private ownership of conserved land?

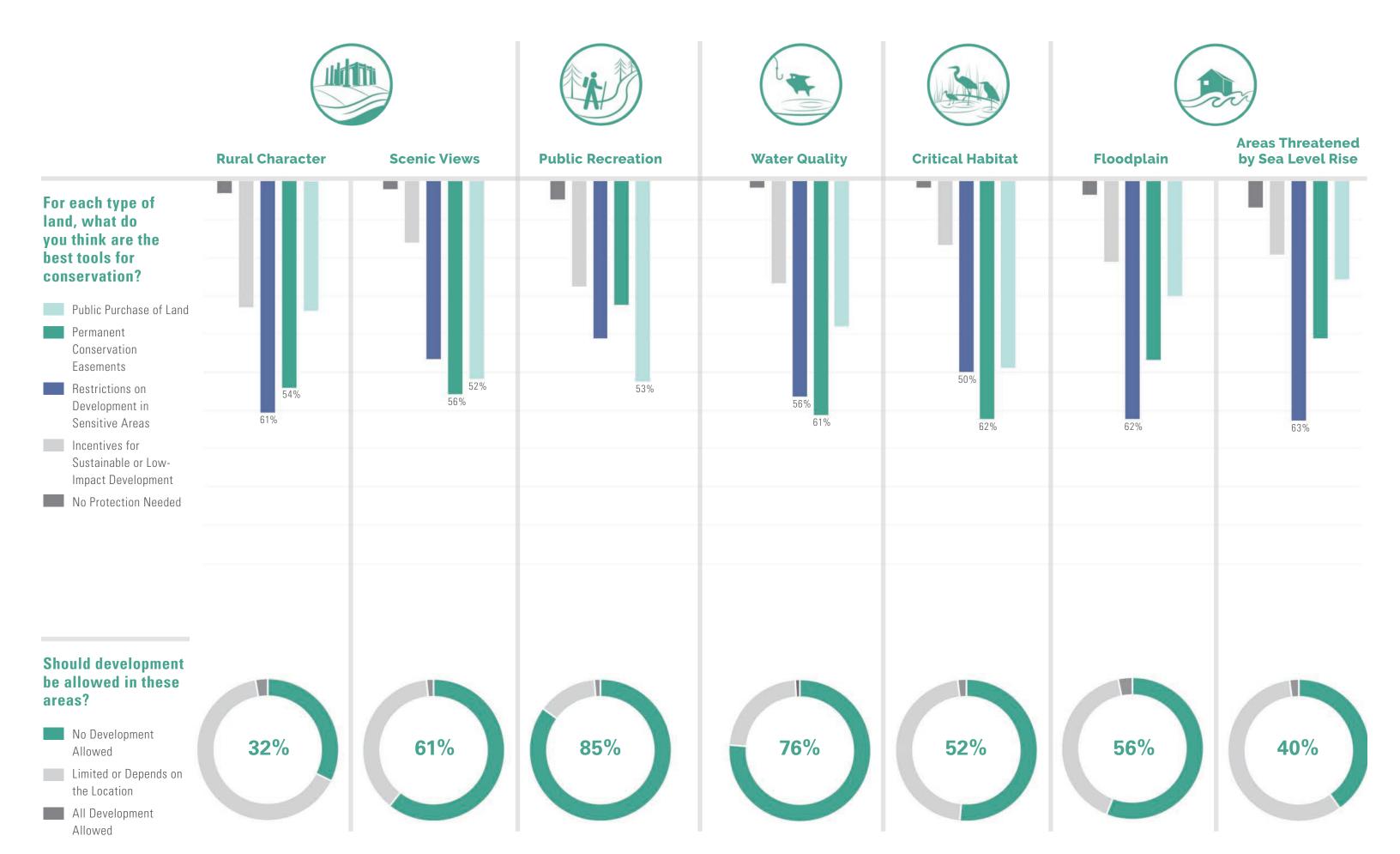






Should the Greenprint Plan inform growth management planning in Beaufort County?





FOUNDATIONAL GREENPRINT PLANNING

The first Beaufort County Greenprint Plan was created in 2006 to help guide future land acquisitions of the Rural and Critical Land Preservation Program.

Before then, the RCLPP mostly targeted rural acquisitions. The first Greenprint Plan, created by The Trust for Public Land and Ecological Solutions, recommended focused conservation based on a range of environmental factors – such as protection of waterbodies and wetlands – in addition to economic and cultural factors – such as proximity to military installations, schools, and existing and proposed trails.

The 2014 Greenprint Plan, prepared by Beaufort County Open Land Trust, organized its open space priorities and strategies by the planning areas of Beaufort/Port Royal, Northern Beaufort County, Lady's Island, St. Helena Island, Bluffton, Okatie, Daufuskie Island and Hilton Head Island.

Across planning areas, the expanded 2014 Greenprint priorities included:

- Rural Landscapes and Farmland
- Passive Parks and Trail Connections
- Water Quality
- Scenic Roadways and Views
- Growth Management and Traffic Alleviation
- Coordination with the Marine Corps Air Station

- Beach Access
- Ecotourism Opportunities
- Historic and Cultural Landscapes
- Public and Traditional Water Access

In 2019 the RCLPP Board, with Planning staff and the program consultant, updated its formal weighted criteria to guide acquisition decisions and further develop the effectiveness and accountability of the program's land and development right purchases. Those weighted criteria – split between Critical Land Criteria and Rural Land Criteria – are shown in Figures 4.3 and 4.4.

A primary objective of the 2020 Greenprint Plan is to support the 2019 rubric and the RCLPP land identification process through the creation of a data-driven priority mapping model.

The planning process has resulted in the identification of metrics for each of the criteria, listed in the <u>Prioritization Model</u>. This supports the Board's efforts to maximize program impact by rooting decisions in data that capture both the existing cultural and ecological conditions of the County and the projected impacts of climate change.

The priority model was created in GIS and is a living tool that can be adapted by the RCLPP, the County and other stakeholders to create priority land maps using various weighted scenarios. It's envisioned as a starting point to ground conservation discussions in science and to support decision-making processes that are further informed by the rubric and parcel-specific considerations.

25%	Property Characteristics
25%	Level of threat
20%	Uniqueness of property
15%	Historic or cultural features
20%	Proximity to other protected land
20%	Consistency with applicable Comprehensive Plans
20%	Financial Considerations
40%	Bargain sale aspects
30%	Favorable post-sale costs
30%	Leverage of other funding
25%	Public Benefits
60%	Potential public access/passive recreation
20%	Vista protection
20%	Reduction in traffic congestion
30%	Environmental Benefits
25%	Protection of wildlife habitat
25%	Protection of wildlife corridors, buffers
25%	Water quality/groundwater recharge
25%	Flood control/marsh migration

Figure 4.3: Critical Land Criteria, 2019

In recognition of the pressing importance of land conservation efforts in Beaufort County and the fact that RCLPP is one of several public and private entities operating in this realm, the 2020 Greenprint Plan also broadens the scope of its recommendations compared to previous Greenprint Plans by identifying big-picture partnership and policy opportunities in addition to updated priority land maps, organized by the five conservation themes of Cultural Landscapes,

20%	Property Soil Type/Use
50%	USDA-designated prime, important or unique
30%	Currently in agricultural or timber production
20%	Current use of BMPs, erosion and soil management
20%	Threat of Conversion from Rural to Developed
40%	Rapidly developing area
30%	Changing land regulations/zoning
30%	Competing land transaction pending/ threatened
20%	Sufficient Connections/Size to Ensure Stability
40%	Proximity to other protected lands
40%	Provides connections between rural land uses
20%	Sufficient size for stand-alone use
20%	Financial and Stewardship Considerations
45%	Bargain sale aspects
45%	Leverage of other funding
10%	Long-term management plan
20%	Environmental and Other Public Benefits
40%	Water quality/groundwater recharge
30%	Flood control/marsh migration
30%	Protection of wildlife habitat, corridors, buffers

Figure 4.4: Rural Land Criteria, 2019



GLOSSARY OF TERMS

Blueway – A designated water trail designed with launch points – and occasionally camp sites and other points of interest along the route – for recreational use with canoes, kayaks and paddle boards.

Connectivity – From an ecological standpoint, connectivity is the degree to which a landscape facilitates or impedes movement among resource patches. Generally speaking, the better connected the landscape, the better it's able to protect biodiversity and accommodate species and ecosystem adaptation to climate change and other threats. From a recreational standpoint, connectivity refers to how easily people can reach accessible recreation destinations by way of a system of greenways, blueways, sidewalks and roads.

Conservation Development – Communities or subdivisions designed and managed to preserve landscapes with some combination of environmental, cultural, agricultural, historical or aesthetic values. Conservation development begins with the delineation of conservation land – ideally 30 to 70 percent of a site's buildable area – that is set aside for permanent protection under a conservation easement. This open space must be connected and typically occurs along drainage ways. In the land area beyond the conservation areas, new development is often tightly clustered, resulting in a development that accommodates growth while strategically preserving open space.

Conservation Easement – A restrictive easement that is specific to the property and describes how the land must be protected and managed over time. Private landowners can donate conservation easements to a land trust or similar organization, guaranteeing specific land protections in return for individual tax benefits. The land continues to be owned and managed by the private landowners, and the land is permanently protected. Easements can allow for public access and for limited development – for example, so that future generations can continue to live on the property.

Cultural Landscape – Historically and culturally significant places that are the result of human interaction with the physical environment. The Greenprint Plan defines cultural landscapes as sites and landscapes that have been classified as historic and that are critical to Beaufort County cultural lifeways – such as farmland, working waterfronts, scenic views, and the cultural landscape of the Gullah/Geechee Nation.

Floodplain – Any land area susceptible to being inundated by floodwaters.

Flood Zone – Flood hazard areas. The 100-year flood zone is defined as an area that has a 1% or greater chance of being inundated in any given year.

Green Stormwater Infrastructure – Measures that use plant or soil systems; landscaping; stormwater harvest and reuse; or permeable surfaces to store, infiltrate or evapotranspirate stormwater and reduce flows to sewer systems and surface waters. Green infrastructure reduces and treats stormwater at its source, reducing the chance of local flooding, while delivering environmental, social and economic benefits.

Greenway – Typically a shared-use path set aside for recreational use and environmental protection, often along stream and river corridors.

Habitat – Land and water that provides food, shelter, nesting grounds and migration corridors for local wildlife.

Land Trust – Private non-profit organizations working to conserve land with open space value by securing conservation easements, advocating for strategic land conservation and overseeing or supporting long-term land stewardship.

Marsh Migration – The process whereby tidal marshes, which are important ecosystems for both people and wildlife, are allowed to shift gradually inland in the face of sea level rise, onto formerly dry land.

Open Space – Undeveloped land that is protected for its natural, economic and/or cultural benefits.

Passive Recreation – Recreational programming – such as hiking trails and wildlife overlooks – that is relatively light on the land. This protects the habitat and stormwater functions of open space while allowing for public access and benefit.

Planning Transect – An urban-to-rural transect that allows planners to define different development patterns for different parts of the jurisdiction, with the highest development density expected in the urban core, progressively lower densities in suburban and rural areas, and very limited to no development in surrounding natural areas.

Prioritization Model – A mapping model with inputs and outputs. For the Greenprint prioritization model, the inputs are data that show on a map which land should be protected based on cultural and environmental conservation values. The model allows for the data to be weighted based on their relative importance and layered on top of each other, in order to produce composite maps that illustrate areas of low to high priority for protection.

Purchase of Development Rights – The owner of land in a priority conservation area can sell their land's development rights, maintaining ownership while guaranteeing some permanent level of protection for the land

Resiliency – The ability of a landscape to recover, adapt and thrive in the face of extreme weather events, climate change and other disruptions.

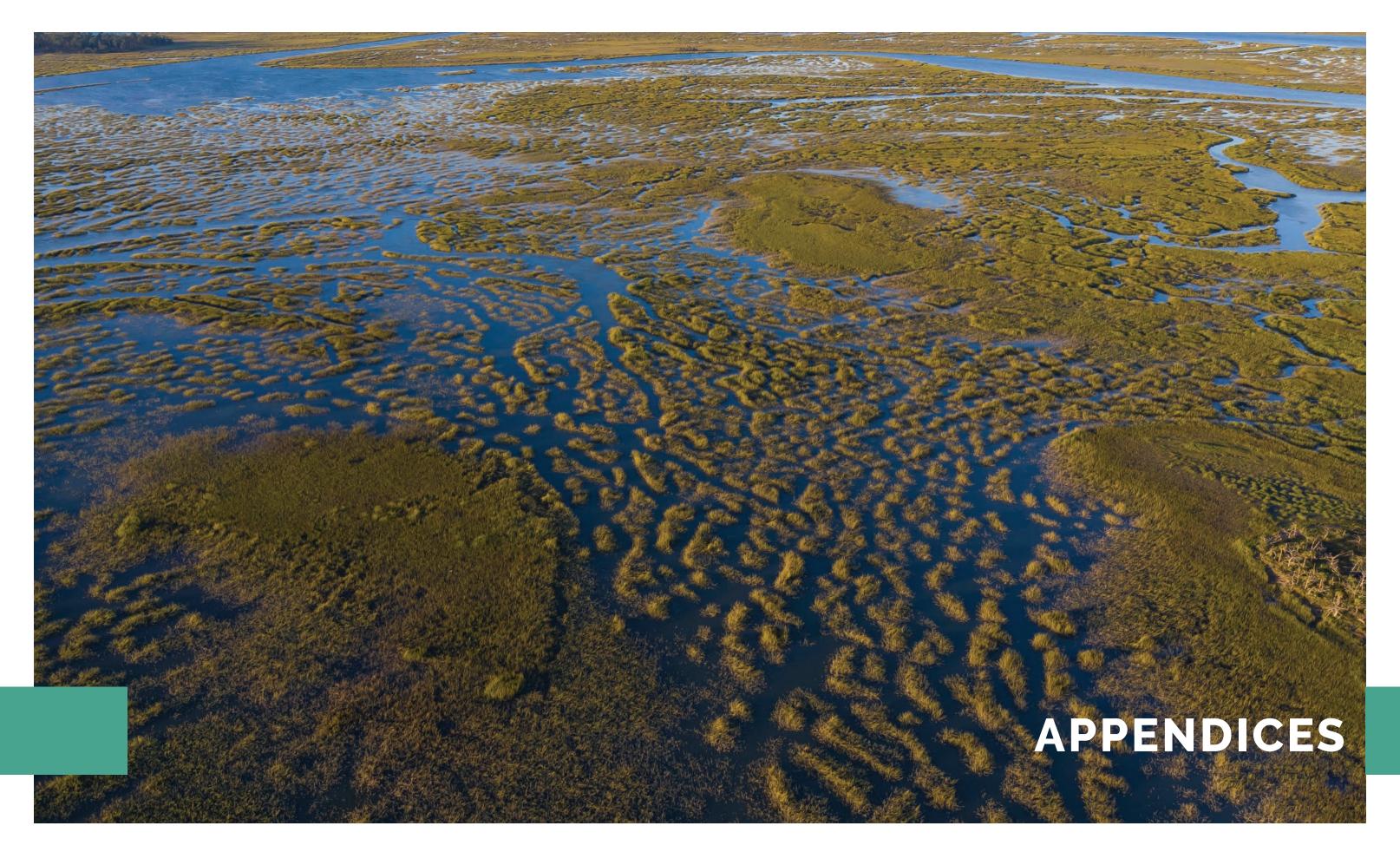
Riparian Buffer – A protected, vegetated area near a stream that promotes water quality by helping to protect the stream from the impacts of adjacent land uses.

Sea Level Rise – An increase in the average relative sea level over a period long enough to average out transients such as waves, tides and storms.

Transfer of Development Rights – A market is created whereby the owner of land in a priority conservation area can transfer their land's development rights to someone with land in a non-priority area. Establishing this type of program begins with careful analysis of a development market to define "sending" and "receiving" areas and gauge whether such a program could be supported.

Watershed – The total land area that drains to a specific waterbody.

Zoning – A planning method whereby governments divide land into areas called zones, each of which has its own set of regulations for new development.



APPENDIX A

'PAVING' OF THE CROSSWALK

RELATED BEAUFORT COUNTY COMPREHENSIVE PLAN STRATEGIES

CULTURAL LANDSCAPES

CULTURAL LANDSCAPES HISTORIC SITES & DISTRICTS Strategy/Recommendation	Re	imanant 10	Protection of the Protection o	on on the stand of
Identify important historical and cultural sites that are not currently protected by local or national historic designation, and work with local historical societies and other institutions to conduct the inventory and prepare the documentation needed to pursue such designation.			х	Gullah/Geechee Sea Island Coalition / S.C. Department of Archives and History / Local and regional historical societies, educational institutions and non- profits / National Park Service
Explore regional and national partnerships to take advantage of National Park Service and other initiatives to protect cultural landscapes against the impacts of climate change. Begin by conducting a documented baseline cultural resource inventory and vulnerability assessment to inform protection and stewardship practices for Gullah/Geechee communities. This cultural inventory and vulnerability assessment should be aligned with a St. Helena Island comprehensive water study and plan and should inform Rural and Critical Land priority purchases.			x	
Reconvene and make permanent the St. Helena Island Cultural Protection Overlay (CPO) District Committee. Identify ways to strengthen the CPO, which could become a vehicle for land use restrictions, design standards, tax credits and other policies outlined for the CPO in the Beaufort County Comprehensive Plan.		x	x	St. Helena Island Cultural Protection Overlay District Committee
Define the Corners Community Preservation District as a hub of commerce and culture, and implement design guidelines and land conservation strategies to protect its character and create scenic buffers.	X	x		
Ensure that the Gullah/Geechee burial areas that were mapped in 1999 are platted and protected from development, storm water fee assessment, and taxation.	X	X		Local municipalities / Gullah/Geechee Sea Island Coalition

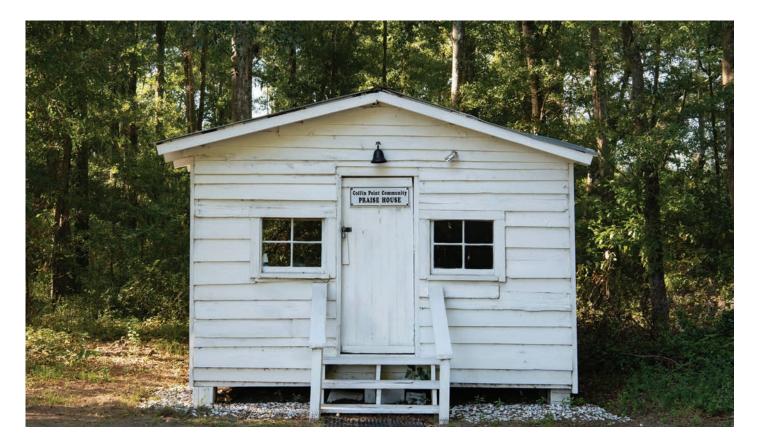
CULTURAL LANDSCAPES

SCENIC VIEWS

Strategy/Recommendation

Studies and Partnerships 10ning and Ordinances Relevant Planters

Assess where management and restoration is needed to protect the long-term health of the roadway canopy and other scenic features.		x	x	Beaufort County Comprehensive Plan / Local municipalities	
Design new roadways with landscaped edges that promote a culturally significant scenic quality.		Х			
Create a scenic byway plan for Highway 21/Sea Island Parkway that protects the natural resources and cultural landscape entering St. Helena Island via Chowan Creek Bridge and departing St. Helena for Harbor, Hunting, and Fripp Islands. Plan to submit a national scenic byway application for a national designation.	X	x	x	S.C. Department of Transportation	
Work regionally to create consistent signage and billboard standards to reduce visual clutter along roadways.		х		Lowcountry Council of Governments	



CULTURAL LANDSCAPES

CULTURAL LANDSCAPES CULTURAL LIFEWAYS Strategy/Recommendation	Q ^o	manent protections and street to the street	on on the stand of
In partnership with the Gullah/Geechee Sea Island Coalition and Gullah/Geechee Cultural Heritage Corridor, develop a heritage tourism plan that balances public access with private traditions, and economic development with the protection of cultural landscapes and lifeways. Explore land conservation strategies, development ordinances and grant programs that can support plan implementation.		X	Gullah/Geechee Sea Island Coalition / Gullah/ Geechee Sea Cultural Heritage Corridor / Local and regional educational institutions and non- profits / Local businesses
In partnership with the Gullah/Geechee Sea Island Coalition, heirs' property lawyers, the Center for Heirs' Property Preservation, and the Pan-African Family Empowerment and Land Preservation Network, develop a suite of policy, land conservation, land stewardship and incentive programs that offer greater protection to heirs' property under threat due to delinquent property taxes and heirs' property used for forestry and agriculture, regardless of the property acreage.	X	X	Beaufort County Comprehensive Plan / Gullah/Geechee Sea Island Coalition / Center for Heirs' Property Preservation / Heirs' property lawyers / Pan-African Family Empowerment and Land Preservation Network
Explore local and regional partnerships to support local farmers and create demonstration models for sustainable, culturally significant, and environmentally resilient farming practices. Examples include support for existing and new farmstands; creation of equipment-sharing programs; agricultural scholarship and mentorship programs; and establishment of a native plant propagation program whereby local farmers grow native plants for use in restoration projects.	х	X	Beaufort County Comprehensive Plan / USDA / S.C. Department of Agriculture / Cooperative Extension Service / Local educational institutions
Support existing organizations that promote cultural resource protection such as the South Carolina Coastal Community Development Corporation, the Gullah/Geechee Sea Island Coalition, the Gullah/Geechee Fishing Association, the Cultural Protection Overlay District Committee, the Lowcountry Alliance, and the Penn Center.		х	Beaufort County Comprehensive Plan

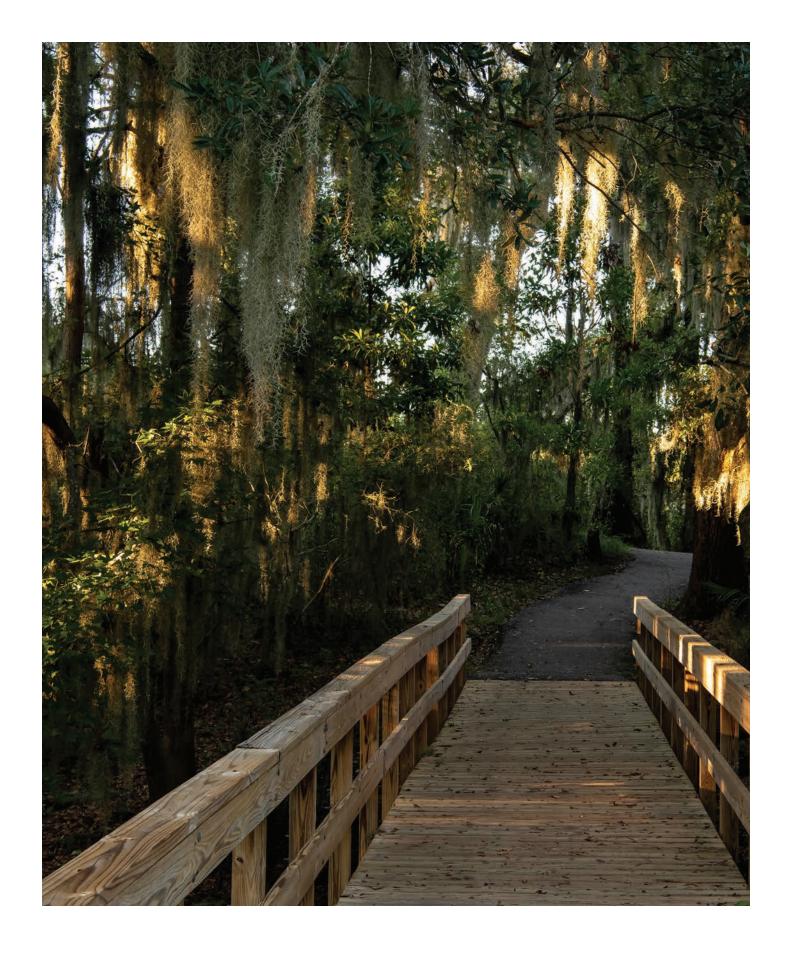
Stratogy/Posemmendation	Dermanent Protection dinance land Partners to 120 mind and Partners Released Partners
Strategy/Recommendation	101 Str 46 311
: ::: .:	

				/
In partnership with the Sea Level Rise Task For commission a comprehensive water study and Helena Island, to define with greater detail and risks posed by climate change and new develowith a range of strategies to protect against the This study should be aligned with countywide Geechee cultural inventory and vulnerability as	plan for St. granularity the pment along ese threats. Gullah/		x	Sea Level Rise Task Force Report / Southern Lowcountry Stormwater Ordinance and Design Manual / Gullah/Geechee Sea Island Coalition
Continue to recognize the importance of policies low-density rural zoning and family compounds and enhancing the traditional land use patterns Beaufort County and the Gullah/Geechee com	s in preserving of rural	x		Beaufort County Comprehensive Plan
Prioritize land conservation strategies and develor ordinances that protect the quality of waterboomare critical to Beaufort County cultural lifeways working waterfronts and public and traditional points. Work with the Gullah/Geechee Fishing protect and identify opportunities to improve where the first subsistence fishing and other traditional uses place conservation easements on these traditional access locations to protect them in perpetuity.	lies that - including water access Association to vater access es. Work to	x	x	Beaufort County Comprehensive Plan / S.C. Department of Natural Resources / S.C. Department of Health and Environmental Control / Gullah/Geechee Fishing Association / Private conservation organizations

PASS				
	IVE	REL	R F 41	

Strategy/Recommendation

3,7 1100011111011111111111111111111111111				
Based on the Passive Park Work Plan update currently underway, define the short- and long-term funding and personnel needs for stewardship of publicly accessible passive recreation lands. Identify public-private partnerships and funding sources, along with anticipated timelines for implementation. Share information with the public to ensure transparency and to bolster support for the County's passive recreation efforts and long-term goals.			X	Passive Park Public Use
Create a countywide parks and trails plan that prioritizes equitable access; ensures amenities where possible are accessible to people of all ages and disabilities; and ensures long-term system health through design, construction and maintenance guidelines along with other park and trail management best practices.			X	Work Plan / Beaufort County Parks and Recreation Master Plan
Given limited resources for stewardship of existing public open space, prioritize future acquisitions that fill existing access, equity and habitat connectivity gaps.	X			
Work with public and private conservation partners to identify opportunities for protected open space to support countywide trail connectivity. On privately held open space, work to secure public easements where they would allow for improved public greenway or blueway connectivity.	x	x	X	Beaufort County Parks and Recreation Master Plan / Local municipalities / Private conservation organizations
Require all new developments to provide open space that is at least partly accessible for passive recreation, along with a long-term stewardship plan.		X		Beaufort County Comprehensive Plan

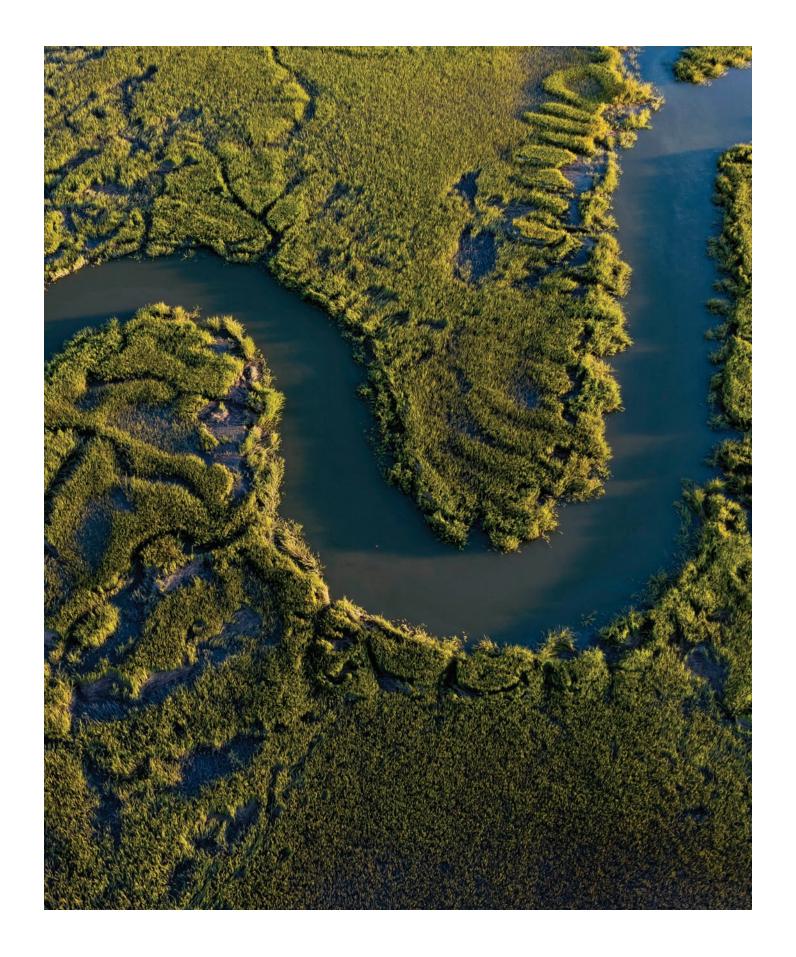


WATER QUALITY

smanent Protectit. Ordinari Partners

Strategy/Recommendation

Identify opportunities and set goals for the County and municipalities to reduce pollutants from public facilities.	х			
Promote the storage and use of recycled rainwater for landscape and golf course maintenance.	х	х	Х	Beaufort County Comprehensive Plan
Consider programs to assist property owners with the maintenance of their septic systems.		х		
Work with local agriculture and forestry operations to incorporate Best Management Practices that protect and build soil health, manage nutrients, protect habitat and beneficial insects, and secure stream buffers.	x	X	X	Beaufort County Comprehensive Plan / Cooperative Extension Service / USDA / S.C. Department of Agriculture / Local educational institutions
Use the Greenprint Plan prioritization model to inform evaluation of development proposals, to ensure that land is protected and Green Stormwater Infrastructure utilized where needed to promote water quality and stormwater mitigation.		х		
For all development proposals, define appropriate Green Stormwater Infrastructure goals per Beaufort County's unique ecological systems. See page 94 for details.		х		Beaufort County Comprehensive Plan / Southern Lowcountry Stormwater Ordinance
Identify opportunities for wetland restoration and for the retrofitting of existing stormwater ponds to function as natural wetland systems. Incentivize property owners to take advantage of such opportunities through educational programs and the provision of grants, tax credits and technical expertise.		х	x	and Design Manual / Local municipalities / Lowcountry Council of Governments / Local educational institutions
Strengthen tree protection and erosion control ordinances.		Х		



CRITICAL HABITAT

amanent Protection Ordinances the ships and Partiners Relevant Plans studies and Partiners

Strategy/Recommendation

Prioritize the pursuit of conservation easements for lands identified as critical habitat in the Greenprint Plan prioritization model.	х			Private conservation organizations
Identify private and public funding sources for the active restoration of critical habitat lands and develop public-private partnerships to maximize the impact of restoration efforts. Prioritize the restoration and ongoing stewardship of at-risk ecosystems and the habitat of endangered species.			x	S.C. Department of Natural Resources / USDA / Private conservation organizations / Clemson Master Naturalist Program / Local municipalities
Strengthen riparian buffer requirements countywide. Create buffer requirements between development and critical habitat areas.		х		
Consider changing the zoning of critical habitat areas to Natural Preserve to protect them from development.		X		Beaufort County Comprehensive Plan
Create a dark sky ordinance to protect night skies and mitigate the impact of anthropogenic light on wildlife and sensitive habitat areas.		х		/ Lowcountry Council of Government / Local municipalities
Consider ecosystem-specific design and development standards to protect critical habitat areas.		х		
Develop public education and incentive programs to promote the permanent protection and stewardship of privately owned critical habitat lands. See page 100 for more information.			X	Private conservation
Expand the number of golf courses and developments that are accredited by organizations such as the Audubon Society.			Х	organizations / Local municipalities / Local educational institutions
Work with partners to create public awareness campaigns that celebrate habitat success stories and promote wildlife-friendly landscapes and maintenance techniques.			X	and non-profits



-			-
RES	Ш	ΕN	CY

Strategy/Recommendation

Studies and Partnerships Loning and Ordinances Relevant Plans In consultation with the Sea Level Rise Task Force and Beaufort County residents, define zones based on areas' threat from sea level rise or existing elevation above local Sea Level Rise Task Force mean sea level. Create coordinated land conservation Report / Beaufort County Comprehensive Plan / strategies and development ordinances tailored for each X Southern Lowcountry zone, with a focus on protection and ecological restoration Stormwater Ordinance in the lowest-elevation zones most at risk; low-impact and and Design Manual / conservation development in intermediary zones; and higher-Lowcountry Council of density development with stormwater infiltration in the Governments / FEMA highest zones least at risk. / USDA / U.S. Army Corps of Engineers Protect or conserve floodplains and land adjacent to natural / U.S. Department infrastructure as open space and buffers. Prioritize properties X X of Defense / S.C. with strategic capacity to absorb floodwater and support Emergency Management ecosystem migration. / S.C. Department of Natural Resources / X Protect land and prohibit development along shorelines. Private conservation organizations / Local Conduct an inventory of Beaufort County shorelines and educational institutions identify stabilization strategies, with a focus on incentivizing X living shorelines, and retrofitting existing armored shorelines where possible to improve ecological function. Work with local universities and environmental non-profits to X develop targeted plans for marsh restoration and migration. Work with local universities, environmental non-profits and Sea Level Rise volunteers to establish environmental monitoring programs Task Force Report / that publicly track measures such as water quality, saltwater Private conservation intrusion, marsh health, flooding locations, sea level organizations / Local trends, erosion patterns, infrastructure vulnerabilities and educational institutions opportunities for marsh migration. and non-profits Create public education campaigns to prepare local officials X and residents for the impacts of climate change and sea level rise and to aid community planning and decision-making. S.C. Department of Identify at-risk transportation corridors – including evacuation X Transportation / S.C. routes – and strategies for protecting them. Emergency Management

	nanent protection dinances the ships of and partiners in a sand partiners	
Strategy/Recommendation	permanent to studies and the partners and partners	1
		1

Align land conservation and green infrastructure planning with the National Flood Insurance Program credit system to ensure efforts result in reduced premiums for Beaufort County policyholders.		x	Sea Level Rise Task Force Report / Beaufort County Comprehensive Plan / FEMA
Study whether the Beaufort County real estate market would support the creation of a Transfer of Development Rights program with a focus on promoting habitat protection, water quality and environmental resiliency.		x	Sea Level Rise Task Force Report / Beaufort County
Consider the creation of a Shoreline Adaptation Land Trust, whereby coastal property owners are allowed full use of their property during their lifetime, after which the land is donated for public use and environmental remediation.		х	Comprehensive Plan / Private conservation organizations
Study and test new avenues to boost resiliency and innovation on Beaufort County farmland. Studies should examine the potential for practices such as paludiculture, regenerative soil practices, carbon sequestration in agricultural fields, and techniques for removing greenhouse gas emissions from agricultural operations, including livestock.		x	Beaufort County Comprehensive Plan / Cooperative Extension Service / USDA / S.C. Department of Agriculture / Local educational institutions

APPENDIX B

GREENPRINT PRIORITIZATION MODEL

CRITERIA AND WEIGHTING

Beaufort County Green Print Plan Prioritization Model

		Theme Weight	Source
Water Or alth Disaste	4		The New Constitution of the Ne
' '			The Nature Conservancy
Index			
	3	2	
Total Weight			
A I I I I I I I I I I I I I I I I I I I		4	A delice Control
			Audubon Society
TNC conservation corridors		1	The Nature Conservancy
Floodplain corridor- 100		1	Beaufort County
Floodplain corridor- 500		1	Beaufort County
,	а	1	SC Gap Analysis
	b	.9	South Atlantic Landscape
with fire (Clarendon			Conservation Cooperative
Primary tidal creek buffers	С	.8	SC DNR
Mature maritime forest <10' elevation	d	.7	SC Gap Analysis
Mature freshwater wetlands	е	.6	SC Gap Analysis and National Wetland Inventory
Marsh islands	f	.5	SC Gap Analysis and The Nature Conservancy
Forested wetland buffers	g	.4	SC Gap Analysis
		1	South Atlantic Landscape
			Conservation Collaborative
		1	South Atlantic Landscape
			Conservation Collaborative
Unaltered beach		1	South Atlantic Landscape
			Conservation Collaborative
Rare, Threatened, Endangered Suitable Habitat		1	SC DNR
		1	SCCB
Resilient Biodiversity		1	South Atlantic Landscape
Hotspot			Conservation Collaborative
Managed land	1	.5	
	Floodplain corridor- 100 yr Floodplain corridor- 500 yr Old growth pine Mature pine managed with fire (Clarendon Plantation) Primary tidal creek buffers Mature maritime forest <10' elevation Mature freshwater wetlands Marsh islands Forested wetland buffers Beach and dune high integrity Estuarine high integrity Unaltered beach Rare, Threatened, Endangered Suitable Habitat SCCB Priority Area Resilient Biodiversity Hotspot	Total Weight Audubon IBAs TNC conservation corridors Floodplain corridor- 100 yr Floodplain corridor- 500 yr Old growth pine Mature pine managed with fire (Clarendon Plantation) Primary tidal creek buffers Mature maritime forest <10' elevation Mature freshwater wetlands Marsh islands f Forested wetland buffers Beach and dune high integrity Estuarine high integrity Unaltered beach Rare, Threatened, Endangered Suitable Habitat SCCB Priority Area Resilient Biodiversity Hotspot	Water Quality Priority Index

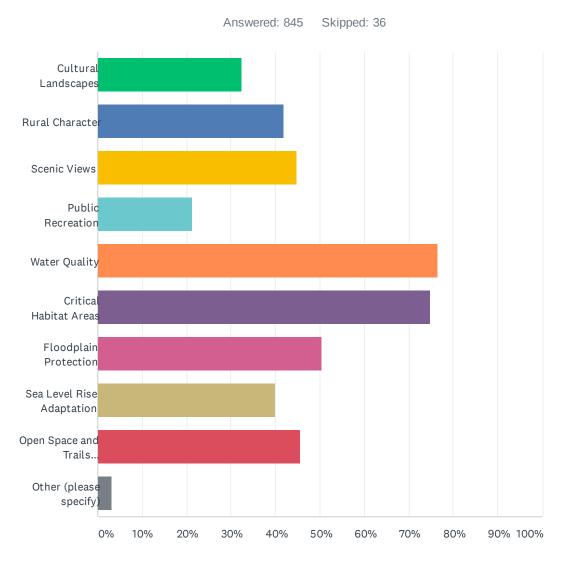
Theme		Theme Weight	Source
	Total Weight		
Large Parcels	Greater than 1000 acres	1	Beaufort County
	500-1000 acres	.5	Beaufort County
	Less than 500 acres	.25	Beaufort County
	Total Weight		
Carranathi	Total Weight		The Network Conservation Description
Connectivity: Proximity to protected lands, military installations, scenic byways/ highways, canopy roads, greenways and blueways, including regulated lands, proposed public trails	0-100 ft	1	The Nature Conservancy, Beaufort County
	100 – 1000 ft	.8	
	100 - 1000 11	.0	
	1000 ft – 1 mi	.6	
	1 – 5 mi	.4	
	5 mi+	.2	
	Total Weight		
Cultural and Historical Landscapes			
	National Register of Historic Places	1	Beaufort County
	Public and traditional water access	1	Beaufort County
	St. Helena Cultural Overlay District	1	Beaufort County
	Commercial Fishing Village Overlay District	1	Beaufort County
	Prime Farmland Soil	1	Beaufort County
	Historic Rice Fields	1	Clemson University
	Historic Canopy	1	

Theme			Theme	Source
meme			Weight	Source
		+	Weight	
	Historic Cotton		1	
	Plantations		1	
	Archaeological Sites		1	
		+	1	Desufart County
_	Heirs Property Rural Character- Rural		1	Beaufort County
			1	Beaufort County
	Zoning			5 () (
	Rural Character- Canopy		1	Beaufort County
	Roads			
	Working Waterfronts	1	1	Beaufort County
	Total Weight			
Resiliency	Floodplain	100-	1	Beaufort County
		500-	.5	
	Projected Sealevel Rise	1'	1	NOAA
		2'	.5	
		3'	.25	
	Marsh Migration		1	The Nature Conservancy
	Corridors			
	Resilient and Connected		1	South Atlantic Landscape
				Conservation Cooperative
	Storm Surge	1	1	NOAA
		2	.75	
		3	.5	
		4	.25	
	Total Weight			
Passive				
Recreation				
	Proposed public trails	1	1	Beaufort County
	Equity gaps		1	, , , , , , , , , , , , , , , , , , , ,
	Public access		1	Beaufort County
	Total Weight	+		
	Total Welgiit			

APPENDIX C

GREENPRINT SURVEY RESULTS

Q1 As Beaufort County and its conservation partners work with limited resources to protect important land, what would you choose as the highest conservation priorities? (Please choose five or fewer.) Visit the Green Print Plan StoryMap to learn more about each of these choices.

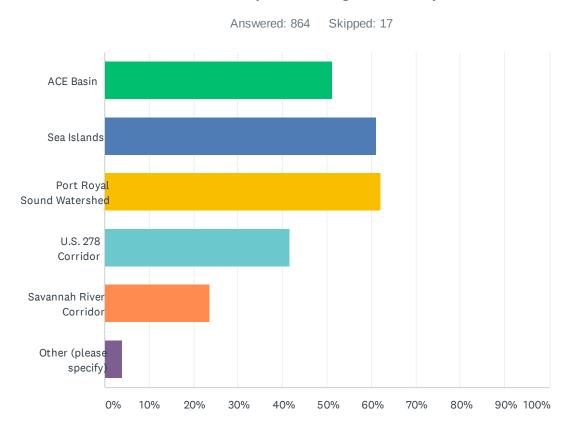


ANSWER CHOICES	RESPONSES	
Cultural Landscapes	32.43%	274
Rural Character	41.78%	353
Scenic Views	44.85%	379
Public Recreation	21.42%	181
Water Quality	76.57%	647
Critical Habitat Areas	74.91%	633
Floodplain Protection	50.41%	426
Sea Level Rise Adaptation	40.00%	338
Open Space and Trails Connectivity	45.56%	385
Other (please specify)	3.20%	27
Total Respondents: 845		

#	OTHER (PLEASE SPECIFY)	DATE
1	Bindon Plantation was established as a conservation easement in 2012. It was to create environmental education center i.e., botanical garden on 50 acres yet it stalled for 8 years. Why? It seems that before more land is acquired for the R&CL program that what we already have in the program must be pursued now.	9/23/2020 11:38 AM
2	Protecting the Rivers and Beaches	9/17/2020 10:44 AM
3	Anything that doesn't play to the global warming lie!	9/16/2020 2:16 PM
4	Traffic easing by by building the Northern Bypass bridge/tunnel and bring in needed infrastructure for smart growth! Bypass	9/15/2020 6:11 PM
5	Promote and protect contiguous forested areas	9/6/2020 10:27 PM
6	Rural character has been gone for 20 years	9/4/2020 10:25 AM
7	Save Baypoint Island	9/4/2020 7:27 AM
8	public access to beaches and waterfronts	9/3/2020 5:06 PM
9	Low density population, stop cutting down all the trees for new developments	9/3/2020 12:30 PM
10	Parks for dog and horse trails	9/3/2020 10:27 AM
11	Limit growth	9/2/2020 3:53 PM
12	Prevention of development on barrier islands like Bay Point	9/2/2020 3:14 PM
13	incompatible land uses	8/31/2020 1:55 PM
14	no "eco developement" near bay point	8/29/2020 8:52 PM
15	keeping areas from development to be used for public access, conservation, and enjoyment for the whole county- not just the wealthy	8/28/2020 6:16 PM
16	Protect Gullah Geechee communities	8/28/2020 3:31 PM
17	Cliement Protection	8/28/2020 2:00 PM
18	Gullah-Geechee Heirs Property protection	8/28/2020 10:55 AM
19	open space around MCAS Beaufort	8/28/2020 10:46 AM
20	Farms	8/28/2020 8:09 AM
21	Dog park	8/27/2020 5:39 PM
22	Koi	8/27/2020 4:53 PM
23	more county office space	8/24/2020 10:49 AM
24	Farm land	8/23/2020 9:40 PM
25	Build the Northern Bypass Bridge/tunnel!	8/23/2020 7:07 PM

26	Litter control	8/23/2020 7:03 PM
27	Bike paths	8/23/2020 6:54 PM

Q2 What areas of Beaufort County do you think are most important for targeted conservation efforts? (See image below.)

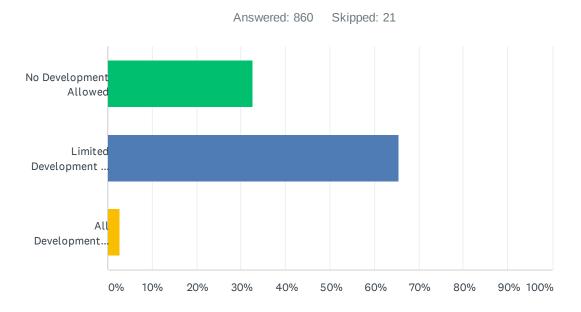


ANSWER CHOICES	RESPONSES	
ACE Basin	51.27%	443
Sea Islands	61.00%	527
Port Royal Sound Watershed	62.04%	536
U.S. 278 Corridor	41.67%	360
Savannah River Corridor	23.73%	205
Other (please specify)	3.94%	34
Total Respondents: 864		

#	OTHER (PLEASE SPECIFY)	DATE
1	Bindon Plantation was created more than 300 years ago and it has a legacy from Revolutionary War until today on 1,300 acres of land on a pristine watershed. Don't forget what we already have in the program. The credibility of the county is a stake - \$2,500,000 was paid for the conservation easement. This should be addressed in the Priority Investment Element and the Capital Improvements Program in the 2020 Comprehensive Plan.	9/23/2020 11:38 AM
2	all areas	9/8/2020 3:49 PM
3	May River	9/7/2020 1:37 PM
4	All watersheds and still intact woodlands around Bluffton	9/6/2020 10:27 PM
5	All are important	9/5/2020 5:23 PM
6	Р	9/5/2020 12:37 PM
7	St. Helena Island CPO	9/4/2020 11:24 PM
8	Hilton Head Island	9/3/2020 8:25 PM
9	Whitehall plantation	9/3/2020 5:15 PM
10	Hilton Head Island	9/3/2020 3:36 PM
11	Bay point	9/3/2020 1:18 PM
12	Greater Bluffton area due to growth pressures - Okatie, May, New Rivers headwaters	9/3/2020 1:16 PM
13	May River	9/3/2020 12:07 PM
14	Why is one more important than another?	9/3/2020 10:27 AM
15	Beaufort river	9/2/2020 7:39 PM
16	Lady's Island	9/2/2020 6:28 PM
17	Gullah culture	9/1/2020 8:47 AM
18	ALL OF THEM!	8/31/2020 10:47 AM
19	marshes everywhere	8/30/2020 11:11 AM
20	May River	8/30/2020 11:09 AM
21	Hunting Island needs more erosion protection	8/30/2020 7:50 AM
22	Lady's Island	8/29/2020 3:54 PM
23	Okatie	8/28/2020 6:57 PM
24	Bluffton Parkway	8/28/2020 2:43 PM
25	Gullah-Geechee Heirs Property	8/28/2020 10:55 AM

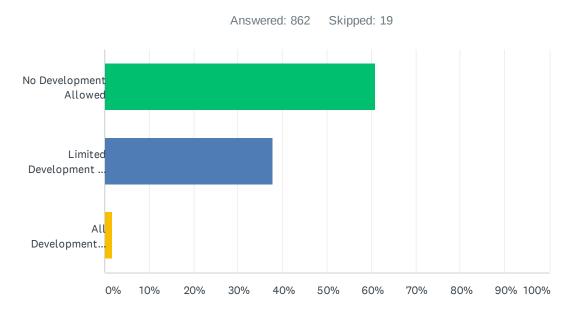
	8/24/2020 2:15 PM
	8/24/2020 1:53 PM
	8/23/2020 9:06 PM
	8/23/2020 6:54 PM
ias toward watershed orientation. My above checked boxes would make me select sties in all	8/20/2020 1:38 PM
	8/15/2020 12:36 PM
	8/12/2020 3:09 PM
ould be targeted for conservation.	8/11/2020 12:59 PM
	pias toward watershed orientation. My above checked boxes would make me select sties in all

Q3 Should development be allowed in areas where it would degrade rural character?



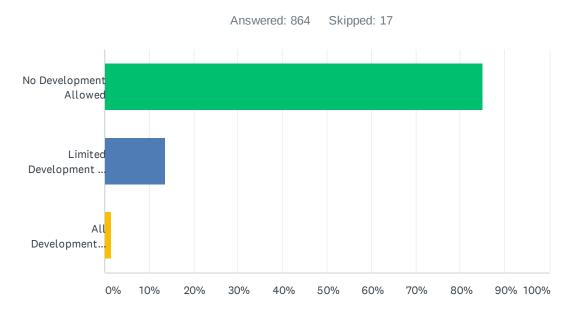
ANSWER CHOICES	RESPONSES	
No Development Allowed	32.56%	280
Limited Development or Depends on the Location	65.58%	564
All Development Allowed	2.79%	24
Total Respondents: 860		

Q4 Should development be allowed in areas where it would block important scenic views?



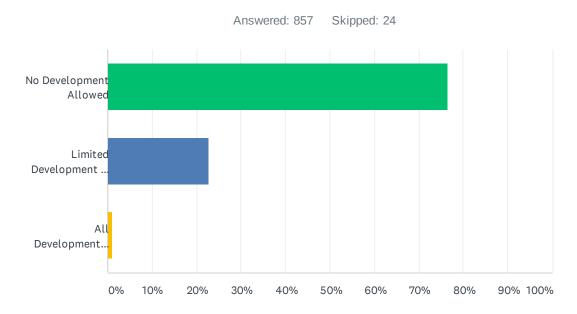
ANSWER CHOICES	RESPONSES	
No Development Allowed	60.90%	525
Limited Development or Depends on the Location	37.94%	327
All Development Allowed	1.62%	14
Total Respondents: 862		

Q5 Should development be allowed that would threaten water quality?



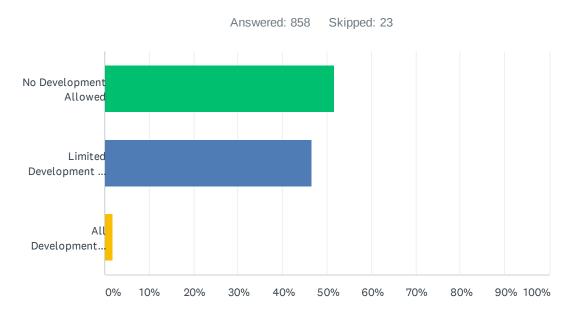
ANSWER CHOICES	RESPONSES	
No Development Allowed	85.19%	736
Limited Development or Depends on the Location	13.66%	118
All Development Allowed	1.39%	12
Total Respondents: 864		

Q6 Should development be allowed in critical habitat areas?



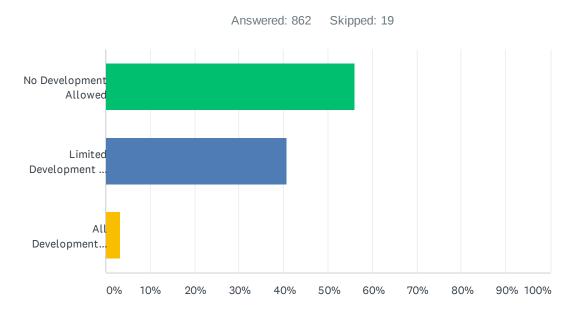
ANSWER CHOICES	RESPONSES	
No Development Allowed	76.55%	656
Limited Development or Depends on the Location	22.75%	195
All Development Allowed	1.05%	9
Total Respondents: 857		

Q7 Should development be allowed in the 100-year floodplain?



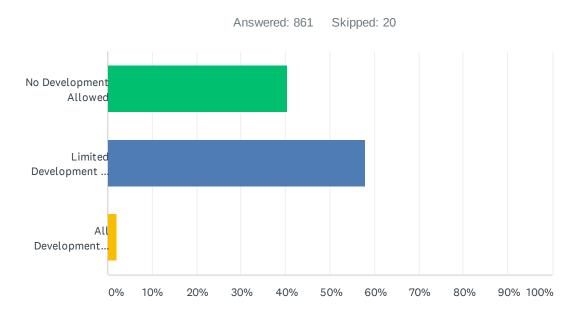
ANSWER CHOICES	RESPONSES	
No Development Allowed	51.63%	443
Limited Development or Depends on the Location	46.62%	400
All Development Allowed	1.98%	17
Total Respondents: 858		

Q8 Should development be allowed in areas projected to be impacted by sea level rise?



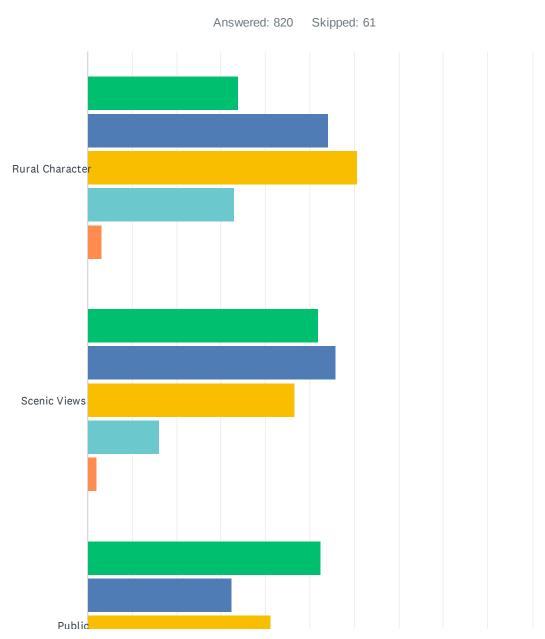
ANSWER CHOICES	RESPONSES	
No Development Allowed	56.03%	483
Limited Development or Depends on the Location	40.84%	352
All Development Allowed	3.25%	28
Total Respondents: 862		

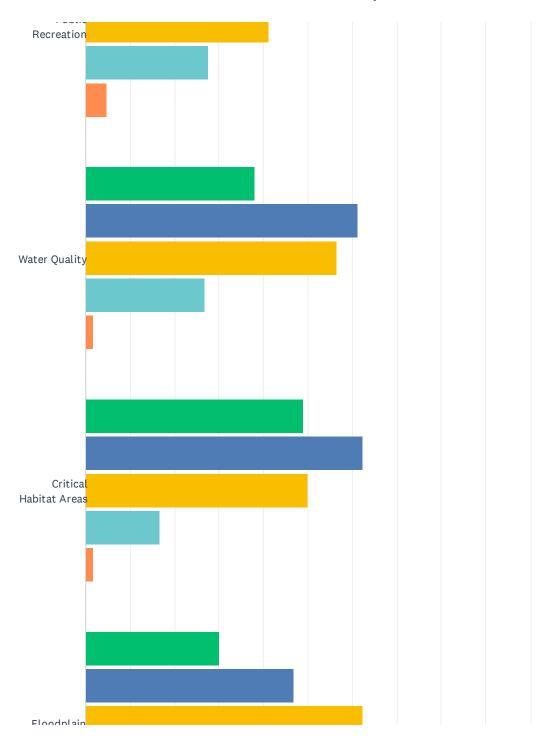
Q9 Should development be allowed in areas where it would impact open space and trail connections?

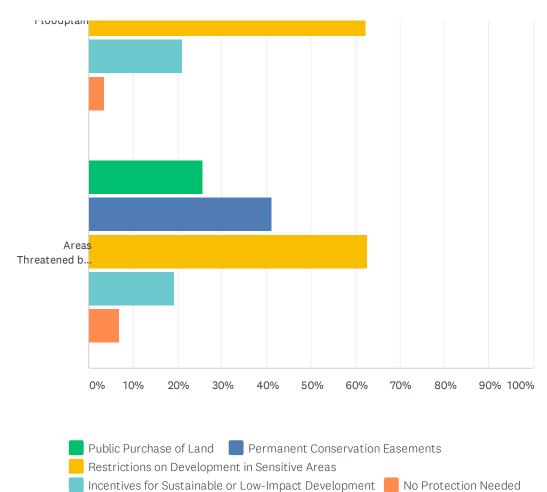


ANSWER CHOICES	RESPONSES	
No Development Allowed	40.30%	347
Limited Development or Depends on the Location	57.96%	499
All Development Allowed	2.09%	18
Total Respondents: 861		

Q10 For each type of land listed below, what do you think are the best tools for conservation? (Check all that apply.)

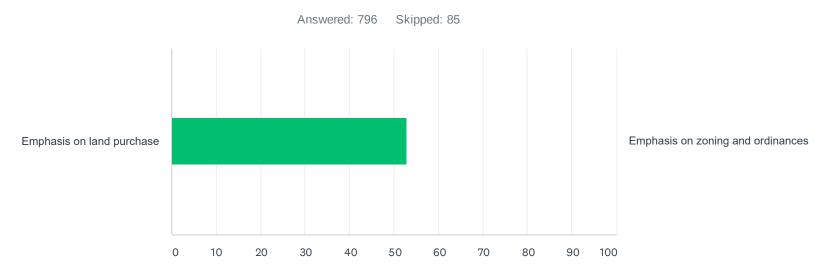






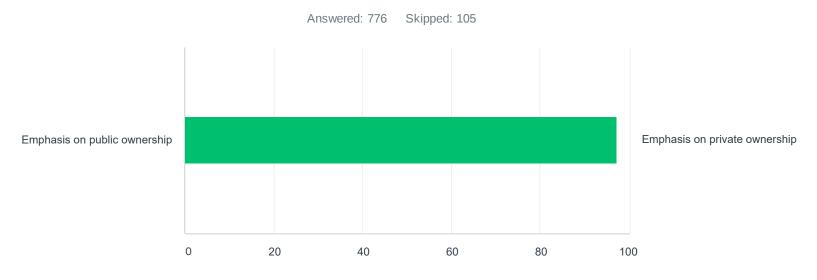
	PUBLIC PURCHASE OF LAND	PERMANENT CONSERVATION EASEMENTS	RESTRICTIONS ON DEVELOPMENT IN SENSITIVE AREAS	INCENTIVES FOR SUSTAINABLE OR LOW-IMPACT DEVELOPMENT	NO PROTECTION NEEDED	TOTAL RESPONDENTS
Rural Character	33.87% 274	54.14% 438	60.69% 491	33.00% 267	3.09% 25	809
Scenic Views	51.93% 417	55.79% 448	46.70% 375	16.06% 129	2.12% 17	803
Public Recreation	52.54% 413	32.44% 255	41.22% 324	27.61% 217	4.83% 38	786
Water Quality	38.10% 304	61.28% 489	56.39% 450	26.82% 214	1.63% 13	798
Critical Habitat Areas	48.96% 399	62.33% 508	49.94% 407	16.81% 137	1.60% 13	815
Floodplain	30.05% 244	46.92% 381	62.44% 507	21.06% 171	3.57% 29	812
Areas Threatened by Sea Level Rise	25.64% 209	41.23% 336	62.82% 512	19.26% 157	6.87% 56	815

Q11 As Beaufort County works with limited resources to protect important land, how would you strike a balance between the county purchasing priority land or the county using zoning and ordinances to limit development on priority land?



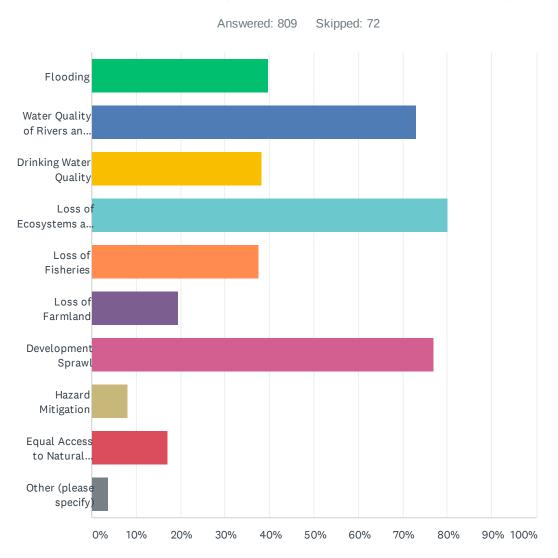
ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	53	42,197	796
Total Respondents: 796			

Q12 Within the larger community of public and private conservation organizations, how would you strike a balance between public and private ownership of conserved land?



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	97	75,418	776
Total Respondents: 776			

Q13 What would you choose as the most pressing environmental challenges facing Beaufort County today? (Please choose five or fewer.)

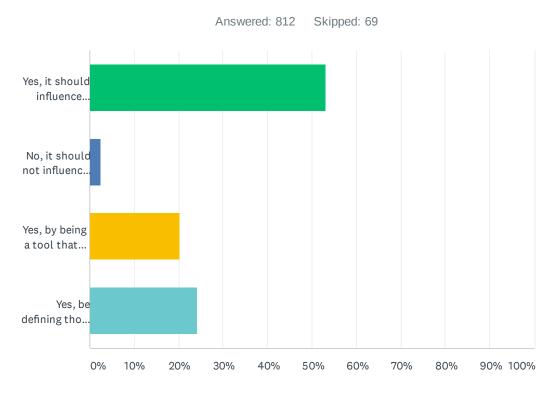


ANSWER CHOICES	RESPONSES	
Flooding	39.68%	321
Water Quality of Rivers and Sounds	72.93%	590
Drinking Water Quality	38.20%	309
Loss of Ecosystems and Habitats	80.10%	648
Loss of Fisheries	37.58%	304
Loss of Farmland	19.53%	158
Development Sprawl	77.01%	623
Hazard Mitigation	8.16%	66
Equal Access to Natural Environments	17.18%	139
Other (please specify)	3.71%	30
Total Respondents: 809		

#	OTHER (PLEASE SPECIFY)	DATE
1	Create techniques to funded future passive park program through things like aquaponics in a Botanical garden at Bindon Plantation.	9/23/2020 11:48 AM
2	do not develop Bay Point Island	9/23/2020 11:45 AM
3	Integrity of the area has already been lost with garbage mayor Billy, develop it till there is nothing left.	9/16/2020 2:25 PM
4	Traffic. Must build the Northern Bypass Bridge/tunnel as soon as possible!	9/15/2020 6:15 PM
5	Loss of forest and woodlands due to clear cutting for development	9/6/2020 10:32 PM
6	Infrastructure inadequate in many areas (Ladys Island)	9/6/2020 12:50 PM
7	Density	9/4/2020 8:02 AM
8	Stop cutting down all the trees for new developments	9/3/2020 12:33 PM
9	Growth	9/2/2020 3:58 PM
10	Too rapid growth with little regard for quality of life	9/2/2020 3:26 PM
11	Jet noise from MCAS-B	9/1/2020 7:21 AM
12	Big box stores especially storage facilities allowed practically in the streets with loss of trees to prevent water runoff.	8/29/2020 9:29 PM
13	Beaufort doesn't need more fast food restaurants at the expense of filling in the marshes	8/29/2020 11:40 AM
14	Sea Level Rise	8/28/2020 9:55 PM
15	Preserving Gullah communities & landmark	8/28/2020 3:37 PM
16	Sea Level Rise	8/28/2020 1:36 PM
17	Loss of historical Heirs Property to developers	8/28/2020 11:02 AM
18	Roads and traffic pre-planning	8/28/2020 10:54 AM
19	Uncontrolled and unplanned development	8/28/2020 10:14 AM
20	Loss of trees and green space	8/28/2020 9:58 AM
21	lack of infrastructure to support what is existing	8/28/2020 9:38 AM
22	Trying to make Lady's Island look like Bluffton or Mt. Pleasant	8/24/2020 6:02 PM
23	Poor planning and zoning for the future. It doesn't line up with high caliber private development. It seems there is no co- development nor linear thought-making. So disappointing to watch.	8/24/2020 5:06 PM
24	Trash management	8/24/2020 11:09 AM
25	out of control expanding county Government	8/24/2020 10:51 AM
26	Over development of land	8/24/2020 6:35 AM

27	Litter and the results of litter polluting the waters and clogging drainage	8/23/2020 7:09 PM
28	Decibel threshold for USMC jets. AICUZ false expectations	8/22/2020 8:19 AM
29	A few question ask whether protection against flooding is important. Land projection, at this scale, cannot stop climate change or projects homes from bing built in flood prone areas. The Green Plan ca not suggest purchasing all flood areas. House protection is up to State and county regulations, builders and ultimately homeowners not to build in sensitive areas.	8/20/2020 1:46 PM
30	None of the above	8/17/2020 8:56 AM

Q14 The Green Print Plan focuses on environmental and cultural criteria for strategic land conservation. Should the Green Print Plan also inform growth management planning in Beaufort County?



ANSWER CHOICES	RESPONSES	
Yes, it should influence zoning and development standards.	53.08%	431
No, it should not influence zoning or impede development.	2.46%	20
Yes, by being a tool that helps the community to focus on conservation priorities.	20.20%	164
Yes, be defining those areas where it might not be in our best interest to develop.	24.26%	197
TOTAL		812

Q15 Please let us know if you have other thoughts or comments about the Green Print Plan or land conservation in Beaufort County.

Answered: 232 Skipped: 649

#	RESPONSES	DATE
1	a must	10/5/2020 1:30 PM
2	29902	10/5/2020 1:24 PM
3	allow growth but protect natural habitats. we need to be more open minded about allowing new businesses, etc	10/5/2020 1:14 PM
4	Existing land owners and neighborhoods should be given priority input to what happens to their property, particularly where the Spanish Moss Trail connecting to downtown is concerned. Don't fix one problem and cause others. Thank you.	9/27/2020 1:51 PM
5	I am a strong believer in conservation efforts through public purchase. It helps keep land values high and incentivizes redevelopment/regentrification, which in turn avoids blight and helps ensure productive use of existing properties.	9/25/2020 10:01 AM
6	no Bay Point	9/23/2020 11:46 AM
7	Development is getting out of hand. Having moved here from an area that allowed unrelenting development, we hope not to see that happen here. We chose this area because it was pristine and not over built. Lately, it seems everywhere you turn, a new development is springing up.	9/16/2020 5:50 PM
8	Thank you for the fine job you are doing!	9/16/2020 10:57 AM
9	Build the Northern Bypass Bridge/tunnel that has been suggested since 1975 to reduce serious traffic issues, bring in needed infrastructure like, water, sewer, power, natural gas and communications, and provide better evacuation avenues during times of natural disasters and severe hurricanes. Remember the devastating hurricane of 1893 and the thousands of lives lost?	9/15/2020 6:19 PM
10	Thank you for asking my opinion	9/11/2020 3:14 PM
11	Growth should occur with the overall impact in mind. New developments causing new flooding issues to existing areas - the many unintended consequences that include water quality to quality of life.	9/10/2020 12:42 PM
12	Development of alternative energy sources, i.e. Solar, wind, etc.	9/10/2020 11:18 AM
13	Protect, protect protect	9/10/2020 10:07 AM
14	county should place easements on rural and critical lands which it owns fee simple	9/10/2020 9:35 AM
15	The community needs to be educated, especially people living on waterfront properties critical to preserving the quality of water habitat and inhabitants of the waterways. I think guidelines need to be established to help protect what exists and outline ways to preserve habitats with growing development. Restrictions should be adhered to on waterfront regarding fresh water run off and use of pesticides. Trees being removed should be replaced. Personally, I have lived with construction on either side of me for the past 3 1/2 years and there is no end in site. I live on the waterfront in a waterfront community. The number of trees removed is unbelievable with no replacements. There are no guidelines and rules being enforced. It's sad. The wildlife has no where to go	9/8/2020 4:06 PM
16	If Beaufort County continues to allow the widespread, clear cut urban sprawl, not only will it destroy the primary factor people want to come to the area, but it will eventually destroy the unbelievable natural beauty that defines the area. Please slow the ecological destruction - the way to maintain value in what we enjoy is to maximize scarcity value. The most desired and beautiful places in the world are where not everyone can live.	9/6/2020 10:39 PM
17	I am not an expert on the most pressing problems or the best means of achieving those priorities. But I believe the	9/6/2020 8:00 PM

character and natural resources of the area should be preserved.

18	Time is of the essencesome areas are being enormously overdeveloped very quickly.	9/6/2020 3:19 PM
19	There is compelling science regarding advertising and community health - please consider the impact/restriction of billboard advertising as part of a green print plan	9/6/2020 3:18 PM
20	Critical there be a plan and the future of Beaufort County be protected for future generations enjoyment.	9/6/2020 2:15 PM
21	Looking forward to Whitehall Park	9/6/2020 12:51 PM
22	A recycling center with Machine operated receptacles that give back a nickel for glass bottles and aluminum cans to positively reinforce the community to recycle would be a Spirited revolution in this dog eat dog world. An adjacent composting area where people can pick up a truck load of rich soil and earth to create their own homemade gardens to enrich the home life and teach the future how to farm, plant and grow their own nourishment would be an educational avenue Bluffton can peak interest. A community farm led by key community service leaders with expertise would be a great camaraderie tool To unite us through food and education.	9/6/2020 2:04 AM
23	Public transit upgrade is needed to reduce commuters to HHI and greenhouse gas emissions.	9/5/2020 7:59 PM
24	I think we should have a better definition / criteria for what land will be protected. How the protection will be enforced. Look especially at the Houston Texas flood plain issues with development in mind.	9/5/2020 2:33 PM
25	Greed has ruined enough of the so called United States (over 400yrs). Quit continuing to ruin African's lives. Enough is Enough!	9/5/2020 9:36 AM
26	Special emphasis needs to be placed on protecting Gullah/Geechee Family Compounds and furthering protection of the Cultural Protection Overlay District for St. Helena Island.	9/4/2020 11:29 PM
27	Stop all the crazy development	9/4/2020 10:45 PM
28	Your work is so critical. Keep up the good work!!	9/4/2020 4:03 PM
29	Stop all the building, construction and fix and reuse old property.	9/4/2020 3:40 PM
30	Learn from missteps in Charleston	9/4/2020 12:52 PM
31	Useful document	9/4/2020 11:09 AM
32	Ecological conservation enhances property values and living standards	9/4/2020 9:33 AM
33	As a professor of Ecology and aquatic conservation for over 20 yearsA resounding No to the Bay Point Development	9/4/2020 9:29 AM
34	People come here for the birds, fish and other wild life. We have to preserve the ocean integrity.	9/4/2020 8:22 AM
35	Bay Point Island has to be preserved. The wild life habitats that will be destroyed. To sell out is unconscionable.	9/4/2020 7:35 AM
36	Keep Gods Gift don't shoot yourself in the foot for money	9/4/2020 6:59 AM
37	When I came to Beaufort in the late 70s, I worked for the planning commission. One of the issues they worked on then was the county purchasing land on the ocean in Hilton Head for public beach access. That was important then and now. I am so glad that decision was made. When I ride by some of these areas, I am so thankful for the efforts made then, so people can	9/3/2020 10:15 PM

	enjoy the access now. I feel more of this should be done for other parts of the county to preserve land. It will be worth it to the future generations.	
38	Beaufort County is tremendously being over developed! Is anyone ever told no?	9/3/2020 9:09 PM
39	Please prevent more of our natural habitats, which flora and fauna depend on for survival, from being altered, destroyed, or contaminated.	9/3/2020 8:34 PM
40	Over development is threatening the wetlands in the Lowcountry. Every effort should be made to limit thisover development will be the downfall of this area.	9/3/2020 8:09 PM
41	LITTER!!! LITTER!!! LITTER!!!!	9/3/2020 7:52 PM
42	Beaufort is fully grown. No more building or paving. Enhance what we already have.	9/3/2020 7:03 PM
43	No	9/3/2020 5:24 PM
44	Our natural beauty is our greatest treasure - and tourism our biggest industry. We need to guard against widespread, irresponsible development that threatens both.	9/3/2020 5:12 PM
45	Might be almost too late. Beaufort County already over developed, with more large construction projects underway.	9/3/2020 4:37 PM
46	Believe town of hhi could allow purchase of development rights - which would help native islanders by giving incentives to keep land off of market.	9/3/2020 3:39 PM
47	278 corridor is a disaster	9/3/2020 3:18 PM
48	We need better stormwater and runoff management. We need a plan to encourage less use of herbicides and pesticides in recreational areas, or use of natural alternatives. Encourage development at the Community College and University level of programs that lead to careers in environmental management, fish and wildlife conservation, etc.	9/3/2020 2:43 PM
49	Conservation easements are by far the most efficient and cost effective way to ensure permanent land protection in the most rural and critical areas of Beaufort County.	9/3/2020 2:23 PM
50	nothing to add	9/3/2020 1:49 PM
51	Stop Bay point development. Also encourage neighboring counties to work on conservation	9/3/2020 1:23 PM
52	The Green Print Plan should inform area Comprehensive Plans as well as an addendum.	9/3/2020 1:23 PM
53	This organization needs more visual presence in the community. Maybe have volunteers go to First Friday and get people to fill out this survey	9/3/2020 1:14 PM
54	we must continue to be wise stewards of this beautiful place. The Green Print Plan is important to our future.	9/3/2020 12:51 PM
55	Stop cutting ALL the trees down in new community developments!	9/3/2020 12:34 PM
56	need to have county budget for upkeep of lands purchased as open space. No need for park or recreation facilities on every parcel of open space.	9/3/2020 12:07 PM
57	I am for purchasing ALL the land we can to protect our environment! I would pay a higher tax rate to do that!	9/3/2020 11:52 AM
58	I am very concerned about the ecology and water quality of the land. I think that it should be paramount in all decision	9/3/2020 11:50 AM

	making.	
59	It is of upmost importance to us that the beauty that drew us here should be maintained for posterity.	9/3/2020 11:44 AM
60	keep moving forward on conservation efforts	9/3/2020 11:32 AM
61	It is very important to preserve more of the existing forests and green space. Thanks for your efforts.	9/3/2020 11:26 AM
62	Dock building should be very strict with permitting. Once one is built everything seems to expand and we lose animal and bird populations.	9/3/2020 11:13 AM
63	Thank you for asking!!	9/3/2020 11:08 AM
64	Rural and critical should always be voted on and funded. The BCOLT is the best administrator of that program	9/3/2020 11:03 AM
65	The goal should be to protect the water system from algal blooms which bar known cause of neurological disorders and a major concern In places like Florida. Beaufort county should aim to not be like Florida.	9/3/2020 10:42 AM
66	Rampant development led to just houses, strip centers and condos in Fl. Look at the difference in like Santa Fe where it was controlled money comes in different ways and times. You need to stop the housing sprawl. This is a critical environmental area.	9/3/2020 10:32 AM
67	I tend to think the County should BUY the land, since restrictions on development seem to be ignored every time a big developer comes to town offering who-knows-what to the powers that rule the county. At that point, the restrictions are "released" time and again, this seems especially true when the governing bodies include real estate agents who have a vested interest in development as most any cost.	9/3/2020 10:14 AM
68	Protect what is left before urban sprawl consumes it. Maintain the environment that attracted people here in the first place. Oppose inappropriate development and reduce amount of land developed in the acreage, incorporating green space. Protect air, water and land.	9/3/2020 4:38 AM
69	No more buildings on water edge like those at Shelter Cove.	9/3/2020 2:04 AM
70	Get rid of Mike Covert and other unqualified decision makers!!! Find people with sustainability top of mind! Stop drawing people here from other parts of the country. Stop over fishing! I could go on all day! But decision-makers need to be qualified.	9/2/2020 6:33 PM
71	A complete moratorium on all growth of every kind he's our only hope since we have not learned how to live in harmony with our environment.	9/2/2020 4:01 PM
72	Thank you for the opportunity to comment.	9/2/2020 3:38 PM
73	Whether clean water or habitat, we should embrace what makes this area so great and not let it be destroyed from over development or lack of planning. Mother Earth should come first.	9/2/2020 3:28 PM
74	Please: less development, retain any rural character left, stop clear-cutting of trees, or Beaufort County will loss its identity.	9/2/2020 10:03 AM
75	It is critical that we attempt to conserve what is left of undeveloped Beaufort County.	9/1/2020 9:20 PM
76	Top priority and responsibility is protecting water, air, wildlife. Second, have zoning laws and building restrictions that prevent unsightly (think storage facilities) development that diminishes the charm of our community. We are stewards!	9/1/2020 8:42 AM
77	Jet noise is an increasing concern and negatively impacts the quality of life in northern Beaufort county. What good are	9/1/2020 7:25 AM

conservation efforts if we citizens cannot enjoy the beautiful outdoors?

78	It makes me sad to see the loss of beauty in our area - particularly the loss of tree shaded roadways such as SC 170 in the Bluffton area and clear-cutting land to make way for homes for humans.	8/31/2020 10:26 PM
79	Stop sprawl - slow, smart growth. Preserve the trees	8/31/2020 7:51 PM
80	more bike lanes would be very nice	8/31/2020 7:42 PM
81	Climate change is not a hoax. It is here and the County needs to act with urgency to adapt to the significant challenges ahead.	8/31/2020 6:48 PM
82	We need to take care of our land for future Generations it's a beautiful state	8/31/2020 6:48 PM
83	preserve the natural beauty and pristine nature of the lowcountry	8/31/2020 6:10 PM
84	Hilton Head is being way over-developed with problems of traffic congestion, excessive use of natural resources such as fresh water, creating of huge amounts of garbage, much of which is not biodegradable, and threat to natural wildlife. Is the tax revenue from tourists coming in worth the permanent destruction of the natural environment - ? I don't think so	8/31/2020 5:23 PM
85	It should include Jasper County, too.	8/31/2020 4:31 PM
86	I appreciate that there is a Green Print Plan and think it is urgently needed to have strong influence on Beaufort County's development plans moving forward.	8/31/2020 4:28 PM
87	Beaufort County Open Land Trust is a fantastic partner for helping execute and manage these resources we are trying to collectively manage.	8/31/2020 1:23 PM
88	Land preservation is critical to our environment	8/31/2020 9:59 AM
89	There are way too many people living here given the fragility of our unique environment.	8/30/2020 11:11 PM
90	People love the natural beauty and open vistas here. That's why everyone is buying. Most if not all are willing to support financially efforts to maintain the Lowcountry's natural beauty and use of outdoor wild areas here	8/30/2020 9:15 PM
91	Many new permanent residents are arriving daily - need to widen all roads, place permanent lighting on all bridges especially separating north and south Beaufort County, teardown all nasty buildings that need to go now - build a connecting bridge to Lady's Island out in the Grays area - they are coming for sure !!!! importantly everything out in the sunshine !!!	8/30/2020 6:36 PM
92	Thank you!	8/30/2020 5:53 PM
93	We have an opportunity to slow/stop development of the coastal area and preserve the natural beauty that that we love. Let's not look back in 10 years and say, 'How did that happen?'. Let's not make 170 and 278 another Rt 17 in Myrtle Beach.	8/30/2020 3:12 PM
94	There should be no more building adjacent to waterfront property.	8/30/2020 2:04 PM
95	Develop a 5,10,25 and lifetime/forever master plan(s)	8/30/2020 10:18 AM
96	I hope Beaufort county is able to maintain it's natural beauty, character and significance.	8/30/2020 9:07 AM
97	There has been a lot of trees taken down by developers with no fifty foot buffer to the road. It is ruining the way the county looks and feels. Developers are shaping how it will looks for years to come with little regard for esthetics or wildlife	8/30/2020 8:54 AM

98	Like to see Daufuskie Island protected from mining off the island	8/30/2020 8:33 AM
99	We need bike lanes added to heavily traveled roads, including heavily traveled rural roads. We need to better preserve Hunting Island. Future developments should always include easements to lakes, lagoon, walking trails.	8/30/2020 7:56 AM
100	Tourists are drawn by the green spaces and those places are being taken away by commercial development which is not needed or wanted by residents but only by politicians looking for tax monies.	8/29/2020 9:31 PM
101	incentives/encouragement of use of vacant commercial property before new developement	8/29/2020 8:58 PM
102	Limit residential and high traffic growth	8/29/2020 6:05 PM
103	You need to stop rezoning land for development and limit growth. We don't need for tourism, less would be better.	8/29/2020 5:56 PM
104	Beaufort County should certainly prioritize saving its waters, shrimping industry and critical habitat and green spaces and limit development "sprawl"	8/29/2020 5:28 PM
105	In addition to public land purchases, emphasis needs to be on conservation easements	8/29/2020 2:49 PM
106	There is a need for a moratorium to stop development in areas previously designated for growth until the environmental impacts have been thoroughly vetted.	8/29/2020 2:31 PM
107	I worry about building structures on marshes. At Fripp there have been several. Also people are gobbling up open spaces ruining natural habitats.	8/29/2020 2:01 PM
108	Less concrete and more pervious materials such as pavers, etc. use purchased land for public use.	8/29/2020 12:41 PM
109	The Beaufort Low Country is beautiful. I hate seeing it chopped up into pieces for developers who are out to make a quick buck.	8/29/2020 11:41 AM
110	Most if not all PUD' in Bluffton and in Beaufort County require rain sensors on irrigation systems and limit the use of ground water wells. Neither requirement is effectively enforced. Developers and Community Boards not do not install or maintain rain sensors. We are talking about 90% of the land area of Bluffton. Don't know how much of the county. Beaufort County Water and Sewer has been forced to require no irrigation on Mondays.	8/29/2020 11:22 AM
111	There has been enough developed areas in the last 6 years. Many building s are vacant and new housing is NOT AFFORDABLE for those who need it most. There us a new "normal" now and land and water conservation must be our Number 1 priority if we are to keep Beaufort County climate and nature forward in the existing climate.	8/29/2020 11:17 AM
112	I would like to see more about protection of the wildlife that is so critical to maintaining our environment as well,	8/29/2020 11:03 AM
113	Thanks to everyone for work on this!	8/29/2020 10:55 AM
114	Chamber of Commerce should stop promoting the Lowcountry. Word of mouth, only, will help to abate uncontrollable growth of the area.	8/29/2020 10:25 AM
115	On private land, owners should be strongly encouraged to use permeable materials	8/29/2020 10:07 AM
116	We need to preserve and conserve our environment as much as possible. Nature is a major benefit to our health.	8/29/2020 9:19 AM
	we need to preserve and conserve our environment as much as possible. Nature is a major benefit to our nearth.	0,20,2020 0.10 7 1111
117	It is critical that we address these issues and educate the public about the need to better manage our limited resources.	8/29/2020 7:45 AM

	a tragedy to the island's environment and to the birds and other wildlife that are currently safe there. PLEASE do not allow development of this island. Please also stop the developers from encroaching on land that provides protection to wildlife, and also do not allow the development and destruction of the beautiful natural areas of Beaufort County that remain undeveloped at this time. Thank you.	
119	Please don't let myrtle beach happen here	8/28/2020 9:49 PM
120	I am very glad that so many properties have already been protected in Beaufort County	8/28/2020 9:10 PM
121	bike trails and walking paths and beautify the entrance into Ladys Island	8/28/2020 8:32 PM
122	The Green Print plan should influence zoning and development standards. I believe preservation of the rural character of Beaufort County is paramount if you seek to keep current residents happy and attract future ones. Urban sprawl is evident already in areas such as Hilton Head, Bluffton and Beaufort; we need no more of this. In addition, creating misplaced mixed use areas (i.e. businesses within residential golfing, retirement, island communities is what I see in so many areas; this is misguided and wrong. Moreover, it negatively impacts the natural beauty and property values of places many people call home. I am pro conservation and believe it needs to be a higher priority in this area. I also believe that planned communities and structured growth have a place here but undeveloped land is a rarity and deserves to be preserved for life long residents as well as new comers who appreciate rural character more so than nearby congested areas. I appreciate your efforts in this regard and hope they continue and increase in number.	8/28/2020 7:26 PM
123	Do not allow golf courses to be sold to developers without the communities being offered right of first refusal	8/28/2020 7:09 PM
124	Please start conservation efforts to save our fragile environment of the lowcountry. Possibly a County Metropark network, funded by the Public Taxpayers, would ensure we preserve land for conservation and keep it out of developers hands.	8/28/2020 6:27 PM
125	Overdevelopment in Hilton Head is creating so many problems - traffic congestion, threat/damage to natural habitats, huge volume of non-biodegradable trash/garbage, and absence of affordable housing for support workers.	8/28/2020 6:16 PM
126	Do what ever it takes to keep Beaufort County such a special place. Keep developers out of Beaufort County.	8/28/2020 5:23 PM
127	There is too much development in Beaufort County. Just because there is land available doesn't mean we have to build on it. Beaufort County is losing too much of what brought people here and, therefore, much of its character.	8/28/2020 5:10 PM
128	None at this time	8/28/2020 5:02 PM
129	Urban sprawl is detrimental to the environment, agriculture and habitat of species. We all understand and respect the need for affordable housing for employees is needed but the unabated building and expansion of the luxury housing must slow down or stop before there isn't any acceptable areas for those employees. The priorities of Beaufort county must change, how many new auto dealers, car washes, shopping areas under utilized and the pavement that leads to pollution.	8/28/2020 4:48 PM
130	My answers to your questions speak for them selves. We need to stop building large developments. The roads were not built to handle the traffic.	8/28/2020 4:38 PM
131	Growth sprawl limits need to be a priority	8/28/2020 4:34 PM
132	Stop Bull Point development	8/28/2020 4:22 PM
133	It appears this maybe too little too late as the development in Beaufort County is already out of control and has not been evaluated before going forward.	8/28/2020 4:22 PM
134	Limit use of prior political mandates that impacted quality of life by dense subdivision development.	8/28/2020 4:10 PM

135	There needs to be some merging of strategy and tactics by the county and the municipalities within ita unified approach so to speak.	8/28/2020 4:09 PM
136	Very important to maintain quality of life in area. 278 traffic resembles metropolitan area.	8/28/2020 3:29 PM
137	we moved here from the Philly area of PA where the loss of farmland and other large tracks of land was at a critical point. The township voters approved a small conservation tax that was accessed on earned income only. This money was used to purchase critical large farm areas or obtain easements to control the impact of development, protection of wetlands, etc. The fee was very low and safeguards were in place to ensure appropriate usage of the funds.	8/28/2020 3:23 PM
138	I do not feel we can sustain any further land developmentwe have had too much growth in a very short period of timeit is eroding the beauty & unique essence of this areajust too many people	8/28/2020 3:19 PM
139	Pleased to learn you are gathering input. Good survey. Hard questions though, good luck.	8/28/2020 3:19 PM
140	Development is necessary for growth of the tax base and to support aging infrastructure. Therefore, the "No Development Ever" mindset is unreasonable. However, development MUST BE controlled, directed and tightly regulated to preserve what we all cherish.	8/28/2020 3:00 PM
141	I think development in Bluffton needs to come to a halt. It's a shame what the county has let happen to what once a beautiful little town. Can you idiots stop cutting down the trees we have enough gas stations and grocery stores. I guess what developer has the most money can sway you people into doing anything they want. Stop the plan for the 5b let him file suit the lawsuit will be cheaper then putting a road in and ruining more of Bluffton	8/28/2020 2:53 PM
142	When buying land for conservation purposes, buy large tracks instead of many small tracts that will not create sustainable protection.	8/28/2020 2:51 PM
143	Development isn't inherently a bad thing, as long as it's "smart development," or "smart growth." I've lived in two popular areas of the country — Wisconsin's Door County, and the Colorado Rockies — and the full-steam-ahead development plan, where it was allowed, did permanent environmental damage and discouraged tourists from returning, because it ruined what was special about that place. Where smart growth was encouraged, and land trusts and conservancies protected land/views/habitat, tourism remained strong, property values soared, and the environment remained healthy and balanced. Beaufort and the Sea Islands are a precious place, one we chose for our permanent home because nature seems healthy here, and the region's traditional character seems to be valued. Please protect the wetlands and valuable habitats, preserve the character of this charming historic city, and don't allow unfettered development to ruin what makes this place so magical and irreplaceable. Thank you.	8/28/2020 2:45 PM
144	Please insure that south Carolina remains natural and beautiful.	8/28/2020 2:39 PM
145	Restrict new housing developments not including affordable housing	8/28/2020 2:33 PM
146	Open Views are welcome, as available to each and all.	8/28/2020 2:31 PM
147	Growth and development too rapid, especially in Bluffton area.	8/28/2020 2:16 PM
148	There's been enough building.	8/28/2020 2:09 PM
149	Rezoning of all forms of campsites to restrain sprawl and protection of habitat & ecosystems.	8/28/2020 1:37 PM
150	There should be incentives for in-fill development to make old shopping centers and gas stations revitalized - no new	8/28/2020 1:29 PM

151	There are way too many communities and not enough open space.	8/28/2020 1:12 PM
152	Beaufort County is a highly residential developed county. In my opinion, clean drinking water, rising water levels, scenic views, and recreation areas (Hunting Island State Park) are the core reasons people want to live in Beaufort county. Protecting your key reasons people want to live in Beaufort County ensures our future health, and planned, sustainable growth in our county. Thank you for the opportunity to respond to this survey.	8/28/2020 12:39 PM
153	Lets not lose what makes our area so attractive but we must protect against flood rise , over development	8/28/2020 12:30 PM
154	I am fearful of unplanned development affecting loss of natural ecosystems and water quality	8/28/2020 12:21 PM
155	Caution that the leverage of assets set aside, still incur carrying expenses & Maintenance to county tax payers, try to mitigate future cost associated with the acquisition.	8/28/2020 12:01 PM
156	Less government over site.	8/28/2020 11:50 AM
157	NO to BAY POINT development!!!!!	8/28/2020 11:49 AM
158	Public workshops should be numerous and well announced. ALL of the leading communities should have skin in the game. Town of Bluffton is a perfect example of how to fuck things up.	8/28/2020 11:34 AM
159	I believe it's necessary to do our best to preserve the environment but also to maintain the rights of property owners. One size fits all government approach can be devastating to property owners and business.	8/28/2020 11:34 AM
160	Please protect the beauty and accessibility of our natural environment from overdevelopment and do not perpetuate our shameful history of stealing heirs property for the profit of the privileged.	8/28/2020 11:10 AM
161	Coastal/shoreline management	8/28/2020 11:04 AM
162	Please plan alternate routes to help the over crowding of our highways. Suggestion: use of Hazel Farm Road as a conduit from SC Hwy 802 to US Hwy 21 on Lady's Island.	8/28/2020 10:57 AM
163	Have more aesthetic awareness of tree pruning along power lines which border roads. Much of this so called "pruning" is just hacked and ugly. I could be done in a much more aesthetic way with at least some proper pruning techniques and natural vision.	8/28/2020 10:52 AM
164	Housing density should dramatically reduced countywide. Developers MUST BE req'd to PAY for the ALL the costs of mitigating environmental impacts AND include AFFORDABLE housing as a portion of their proposals or NO GO!	8/28/2020 10:37 AM
165	Road construction should include safe animal/wildlife pass troughs. Animals and cars simply do not mix well.	8/28/2020 10:27 AM
166	Preserve the Historical District of Beaufort and do not let "modernization" or the "creation of more tax revenue" influence development decisions	8/28/2020 10:19 AM
167	The county is already over-developed. It has to stop. Maybe a county wide moratorium on development would be a start. Rebulding allowed, new building not.	8/28/2020 10:16 AM
168	We need landscape conservation for larger areas and targeted for smaller and nes	8/28/2020 10:07 AM
169	No to Bay Island development.	8/28/2020 9:27 AM
170	In today's world with growing coastal populations, land acquisitions may be the single most important tool to protect natural habitats and promote clean healthy living.	8/28/2020 9:16 AM

171	Bay Point is a travesty and solely a tax revenue motivation. Shame on all who approved it!	8/28/2020 7:59 AM
172	Concerned about water drainage in the communities bordering the 170/278 and Bluffton Parkway corridor - density needs to be curtailed through acquisition of development rights. Long Island NY (Suffolk County is a model to look at)	8/27/2020 5:57 PM
173	Lowcountry will not be saved without a regional plan.	8/27/2020 5:17 PM
174	This is a difficult inquiry. Smart development is critical that balances habitat and the needs of our citizens.	8/27/2020 4:34 PM
175	The Green Print Plan is so important. The future of our beautiful region depends on it. Whether it is saving fragile coastal areas, purchasing land for conservation trusts, or partnering with public and private owners to ensure that everything possible is done to safeguard the land, we owe it to all future generations to preserve the health of the land.	8/26/2020 4:27 PM
176	Stop all the development !!!! It is too much !!!!!!!	8/26/2020 3:04 PM
177	Leave Barrier Island like Bay Point alone. Make zero sense to develop these. Reduce urban sprawl through better zoning. Packing houses together such as Oyster Bay on Lady's Island is not good for those who live theretoo pacted in. Growth does not have to be the only economic model to follow.	8/26/2020 2:22 PM
178	Don't overdo it with unreasonable "spring island trust " I'deas that negatively impede private home ownership (views from home to sea and marshes. Sometimes you go too far.	8/26/2020 7:09 AM
179	more conservation easemants	8/25/2020 4:08 PM
180	Traffic congestion	8/25/2020 3:49 PM
181	We have lived in Beaufort for 10 years. With clear cutting of building lots all over the county, the loss of habitat due to development is happening incredibly fast and is heartbreakingI am a retired developer and it does not need to be done this way. We have just sold our house and we are moving this fall to a more protective and responsible community.	8/24/2020 8:26 PM
182	Please increase public awareness of this activity including public meetings, important votes on the subject. Please consider adding a mailing list and web page specific to this subject.	8/24/2020 6:32 PM
183	I have lived on Lady's Island for 20 years. This area was one of the few places that one could call rural with a few places to purchase needs or drive to Savannah or Charleston for them. Now it seems that those moving here want to bring their big box stores, fast foods, etc. to this once rural island. There has got to be a plan put in place for those of us who enjoy a non-industrial region to be able to one. Those that want Lady's Island to look like where they use to live should just stay there and not move here. See Sally Murhphy's sign that is posted on Moutauk Beach.	8/24/2020 6:13 PM
184	Bay Point should not be developed as an example where government purchase or conservation easement may be necessary.	8/24/2020 5:26 PM
185	We seem to see area's that were supposed to be "conservation" area's coming under development or being encroached upon by development. This must stop for the sake of our wildlife and ecosystem locally. Plus - there is a financial incentive due to the people and visitors that are drawn to this sort of naturalized beauty and the businesses that they will utilize.	8/24/2020 5:13 PM
186	The county needs control of development through overarching reg.s to include cities	8/24/2020 4:07 PM
187	Green spaces are so necessary nor only for the health of our environment but for the health of Beaufort County residents. Getting outside is good for the brain, the skin and soul. Protecting beautiful places need to be a priority. We need to be	8/24/2020 4:06 PM

	saved from ourselves. Chasing economic growth will only lead to developing every square inch of potential land and change the landscape which has attracted so many people here to live and visit.	
188	There seems to be few areas on the map where Lady's Island properties are listed. We need more conservation efforts on Lady's Island as there is increased pressure for development on the Island and restricting infrastructure. Our maritime forest need protecting.	8/24/2020 2:06 PM
189	Land purchased by referendum dollars should be put under easement, some sort of protection. County reisdnets being misleadthinking that they are protecting this property when in actuality they are not. Will be very bad at next referendum if this comes to light, becomes an issue. Everyone I have talked to assumed there was some sort of protection to the lands being purchased by RCL, county.	8/24/2020 1:41 PM
190	You don't get a second chance to preserve our natural beauty and water cleanliness!	8/24/2020 11:44 AM
191	Please make all info open and honest. The more informed Beaufort County people are about conservation the more we learn.	8/24/2020 11:28 AM
192	Why is the United Way building purchased with TAXPAYER funds AS OPEN SPACE still being occupied by the county engineering department??? We can't afford to keep the solid waste transfer stations open but we need more office space?? See a trend here?? Looks like misappropriation of funds to me!!!	8/24/2020 11:01 AM
193	As the county develops new construction, when appropriate, it should also consider older obsolete structures which pose health, aesthetic, or other negative influence on the county. There are too many dilapidated trailers, businesses, gas stations etc which could be removed and returned to an "open space" or "Green Space"!	8/24/2020 10:45 AM
194	When will the old chamber building finally be torn down? County use was supposed to be temporary.	8/24/2020 8:35 AM
195	Stop development and subsidize the relocation of our citizens most impacted by global climate change.	8/24/2020 5:17 AM
196	Encourage builders and developers to plant native trees and shrubs that support wildlife. Encourage residential landowners to combat global warming by planting trees intend of grass. Grass is a useless waste of resources - provides no habitat for bees, birds and butterlies, pollutes air to mow. If we must inhabit every use able inch of land, develop it in a manner that sustains the environment.	8/24/2020 3:52 AM
197	I am concerned about overgrowth, insufficient infrastructure to support growth, pollution, preserving quality of life, ecosystem destruction	8/23/2020 10:50 PM
198	All future development must make traffic implications a major consideration.	8/23/2020 9:58 PM
199	Huge developments that were grandfathered years ago are a big issue. All new development should adhere to strict environmental standards and limit negative impacts that might not have been given priority when the permits were first issued	8/23/2020 9:38 PM
200	Stop giving developers so much leeway!	8/23/2020 9:23 PM
201	Stop allowing the COB to develop the Sea Islands. Block all development of Whitehall. We already bought half the property as much as it pains me to say this. Just buy the rest and put that fiasco to bed!	8/23/2020 8:58 PM
202	Prevent the Whitehall fiasco. Crazy density plan with no regard to anything deemed important in this survey.	8/23/2020 8:47 PM
203	Please continue to work with the Beaufort Open Land Trust	8/23/2020 8:45 PM

204	With the developments that are now scheduled to begin construction, we will be at a full capacity/saturation level of development. Infrastructure and basic sea level rise factors must be used to finally STOP development on Lady's Island. No more houses. We're full	8/23/2020 8:27 PM
205	Whitehall should not be developed	8/23/2020 7:57 PM
206	The litter that plagues our roads has a significant impact on open spaces and wildlife. It clogs sewers and assists in flooding issues. It's ugly and embarrassing. Its an issue that can easily be resolved with limited funding.	8/23/2020 7:16 PM
207	Build the Northern Bypass Bridge/tunnel!!	8/23/2020 7:10 PM
208	This is an excellent start	8/23/2020 5:52 PM
209	Low Country Residents know we have something very special. All of us need a sense of ownership to our environment and the management plan. We can develop, but develop smartly. A note on AICUZ: USMC routinely exceeds 110 dB in a 70dB designated areathe standing definition allows this as they measure dBs over time, so a jet could land on front lawn, run engines for half an hour, but still be under AICUZ designation over a 10 hour measured period. While USMC remains technically within AICUZ standard, resident expectations are for the established AICUZ dB number. This is a recipe for frustration. I suggest setting upper limit dBs for areas instead of 10 hour averagesie, jets should not generate more than 80dB over residential areas. AICUZ set my expectation for 75dB. Routine 110dB in a 75dB area is just too much120dB is intolerable.	8/22/2020 8:30 AM
210	Thank you for surveying the public.	8/21/2020 7:27 PM
211	I am concerned about the county overextending itself by buying land with money it may not have, and then missing the mark by being too lenient about Development requirements and zoning Issues.	8/20/2020 8:28 PM
212	How Can OLT or Beaufort County be trusted with our money after the Whitehall debacle?? Taxpayers paid ocean front Miami real estate prices and didn't even get a deeded access!!!! Curious how much money has been spent so far in litigation in attempt to get public access??? Can't find that number anywhere!! Time to defund OLT!!!!!! Too many sweetheart back door deals going all the way back to Butler Marine! But you needed those offices. Right?	8/20/2020 3:05 PM
213	To me, a key view to protect is the currently undeveloped land at the Beaufort side of the Broad River bridge. To all visitors and many residents, that view is one of the few Low Country views they experience. Put a multistory building ton that site and my perception of Beaufort will forever change.	8/20/2020 1:50 PM
214	Yes, I do.! As an artist, I am stunned why the Whitehall area hasn't been scooped up by public/private entities to preserve as the greatest scenic, historic, and environmental open space the County/City has. It can never, ever be reproduced and its development will turn Beaufort into just one more town that did not appreciate its crown jewel when they had it. Can you imagine how many pictures painted, photos taken, and marriage proposals offered, overlooking the town, the bridge, and the river? It's like something from 19th-century American landscapes. We have all seen what greed has done to our country.	8/20/2020 1:23 PM
215	Few areas on Lady's Island are specified in the plan. We support bird habitats for migrating birds especially on Cane and Cat Island. Neither area is included in the plan. Why is this area not considered a priority?	8/19/2020 8:18 PM
216	Very nice presentation.	8/19/2020 5:30 PM
217	I am sorry to say that prior to the Sea Island Coalition's email I never heard of the Green Print Plan. We have lived in Beaufort since early 2015 and support environmental causes.	8/19/2020 5:07 PM
218	My concern with this Plan and current actions by Beaufort County Planning and Zoning is that while the emphasis should be	8/19/2020 10:04 AM

	on controlling commercial development, it restricts individual property owners from using their property as they see fit. The threat to Beaufort County is not from the individual resident. The threat is from developers and commercial developments (subdivisions, shopping centers, etc.). Yet restrictions are being placed on the individual land owner (5 acres and larger). Residential properties should be governed/controlled by the resident. Commercial properties should be governed/controlled by the county.	
219	We should be very careful in allowing new construction to interfere with what makes Beaufort so beautiful. We must also ensure the infrastructure supports growth.	8/18/2020 7:02 AM
220	Stop the unnecessary killing of oak trees on Hilton Head Island and put control of protecting our trees back at the State level. Beaufort County allows the plantations to police themselves on HHI. Unfortunately there are too many decision makers who have different agendas than saving these specimen trees. Rather, they kill our majestic oaks and replace them with palm trees. This is the low country, not Florida	8/17/2020 4:31 PM
221	170 at May river road. Between Suncity and May river is distorted with neighborhoods.	8/16/2020 8:45 AM
222	This place is beautiful and people come here because it's beautiful. There is a point where population begins to outweigh beauty. Restrictions on private housing need to be more stringent. There are too many clear cut neighborhoods and they keep coming. Low income housing for teachers, police and other first responders needs to be built and that should be it. This is true especially SOB.	8/14/2020 9:58 PM
223	Protect all Marshlands!	8/14/2020 3:33 PM
224	It is difficult to answer these multiple choice questions without having more information about the specifics, i,e, property size, location, ecological community, proposed development, economic impact (cost/benefit). It's important to get community informed fully and early in the process to weigh the pros and cons of the management options.	8/14/2020 2:03 PM
225	Thank you!	8/14/2020 1:29 PM
226	Please look at the Coastal Commission in California which has slowed or prevented development along the beautiful coastal Highway 1 and kept it pristine.	8/14/2020 12:56 PM
227	Private ownership with strict conservation easements offer the highest level of habitat protection achievable. More so than public ownership.	8/14/2020 12:09 PM
228	Seeing this occurring is so encouraging. In the coming months and years, expanding projects and funding sources to support conservation will be critical so that what everyone loves about Beaufort County can be enjoyed for decades to come.	8/14/2020 11:50 AM
229	We need to use every mechanism we can to protect our natural environment in the County. Also we need to do a better job educating people about how protecting our natural environment also helps our economy & quality of life.	8/14/2020 11:36 AM
230	My heart breaks a little more each time I see a timber truck go by, loaded with our beautiful pines. I've lived here just 18 months, and there are 4 new housing developments going up within ONE mile of me! (New Riverside). And in this short time living here, I have seen how the increased population has affected traffic (so much more aggressive and dangerous), the litter along the roads, especially New Riverside, is getting more pronounced, and the access to stores and shopping much more crowded. Really makes me sad to see how the county has turned over so much land for development. And, they're just getting started	8/13/2020 7:28 AM
231	Dr Holland told us 20 years ago about impervious surface cover - 10% is the limit. South of Broad is all sprawl - that's the opposite of good. Orlando, Sulka and company have destroyed SOB. The only question left is if NOB will do same thing.	8/12/2020 3:14 PM

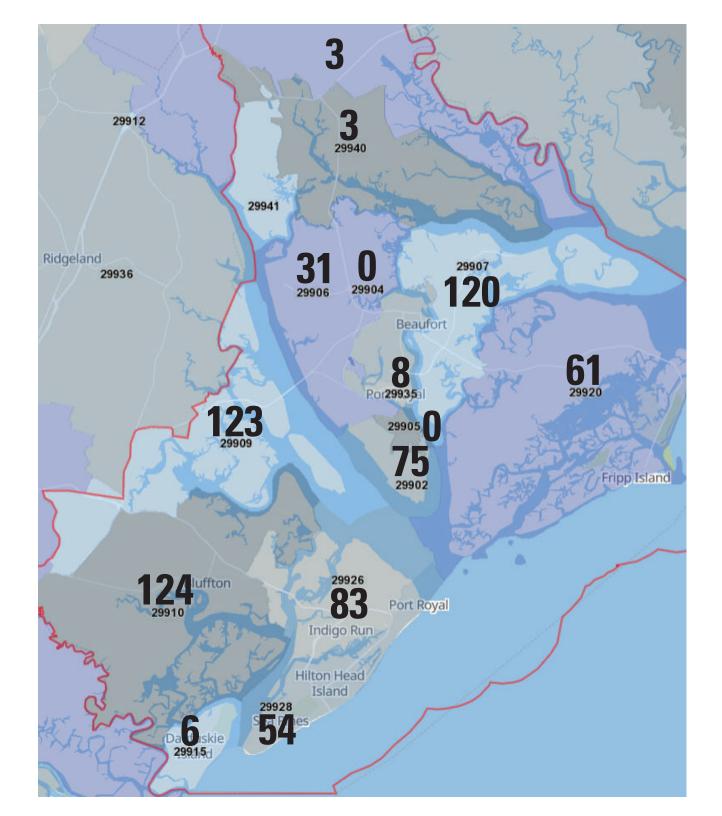
232	County development should be limited. Preferably no more than 1 house per 2 acres. This portion of Green print applies across County except in municipalities.	7/28/2020 2:30 PM
-----	--	-------------------

Q16 What is your ZIP code?

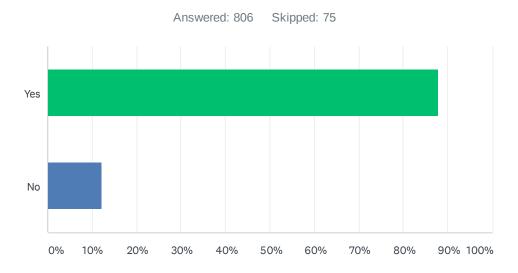
Answered: 716 Skipped: 165

Illustration:

Number of Respondents by ZIP Code



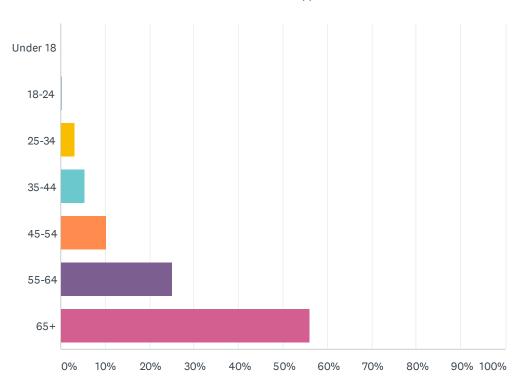
Q17 Do you live in Beaufort County year-round?



ANSWER CHOICES	RESPONSES
Yes	87.97% 709
No	12.03% 97
TOTAL	806

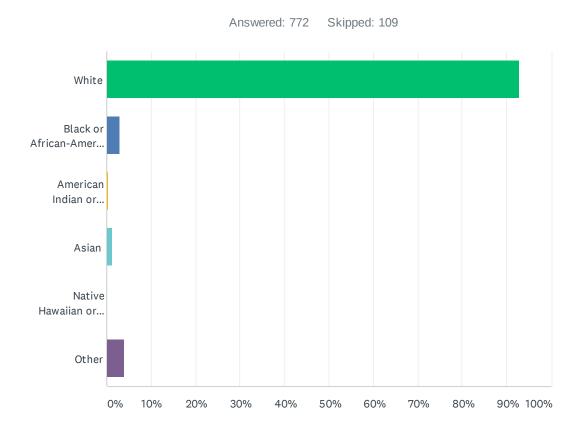
Q18 What is your age?





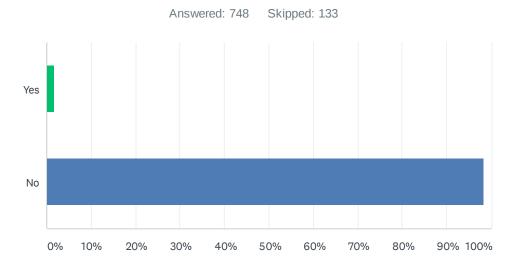
ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18-24	0.12%	1
25-34	3.11%	25
35-44	5.35%	43
45-54	10.20%	82
55-64	25.12%	202
65+	56.09%	451
TOTAL		804

Q19 Please choose one or more races that you consider yourself to be:



ANSWER CHOICES	RESPONSES	
White	92.88%	717
Black or African-American	2.85%	22
American Indian or Alaska Native	0.39%	3
Asian	1.17%	9
Native Hawaiian or Other Pacific Islander	0.00%	0
Other	3.89%	30
Total Respondents: 772		

Q20 Are you Spanish, Hispanic, or Latino?



ANSWER CHOICES	RESPONSES	
Yes	1.74%	13
No	98.26%	735
TOTAL		748

APPENDIX D

PASSIVE RECREATION PRIORITY MAP

Passive recreation is an important element of publicly owned open space. The following pages discuss the opportunities for public access and recreation on conservation lands, and a priority map shows areas of the County that are most in need of access to recreation based on countywide walking and driving times to existing recreation opportunities.

PASSIVE RECREATION

In a 2016 Beaufort County survey conducted by Clemson University, 86% of respondents said conservation lands should be more publicly accessible, and 93% said that continued protection of those lands was important if they were made accessible.

Passive recreational activities such as hiking, fishing, birdwatching, swimming and kayaking require minimal site disturbance – they offer a way for the public to access and enjoy the open space lands they've supported through bond referenda while ensuring those lands continue to perform ecosystem services such as the protection of water quality and sensitive habitat. Plus, passive recreation has been shown to benefit the local

economy and overall community health and wellbeing.

Of the RCLPP properties, more than 11,000 acres are owned by Beaufort County. Of that acreage, the 2018 Passive Park Public Use Work Plan identified properties totaling more than 8,000 acres where some passive recreation elements would be appropriate, and the report defined the management and infrastructure improvements that would be needed at each site to allow public accessibility. As of the 2018 report, fewer than 200 of those acres were open to the public.

The department continues to fine-tune its recreation, stewardship and funding strategies in order to meet its mission of protecting the conservation values of publicly owned open space while allowing county residents and visitors to use – and build connections to – those spaces and the natural environments and cultural landscapes they hold. The Greenprint prioritization model considers how publicly held passive recreation lands – both current and future – can best support the existing facilities shown in Figure 4.3.3 and fill access gaps.

OBJECTIVES



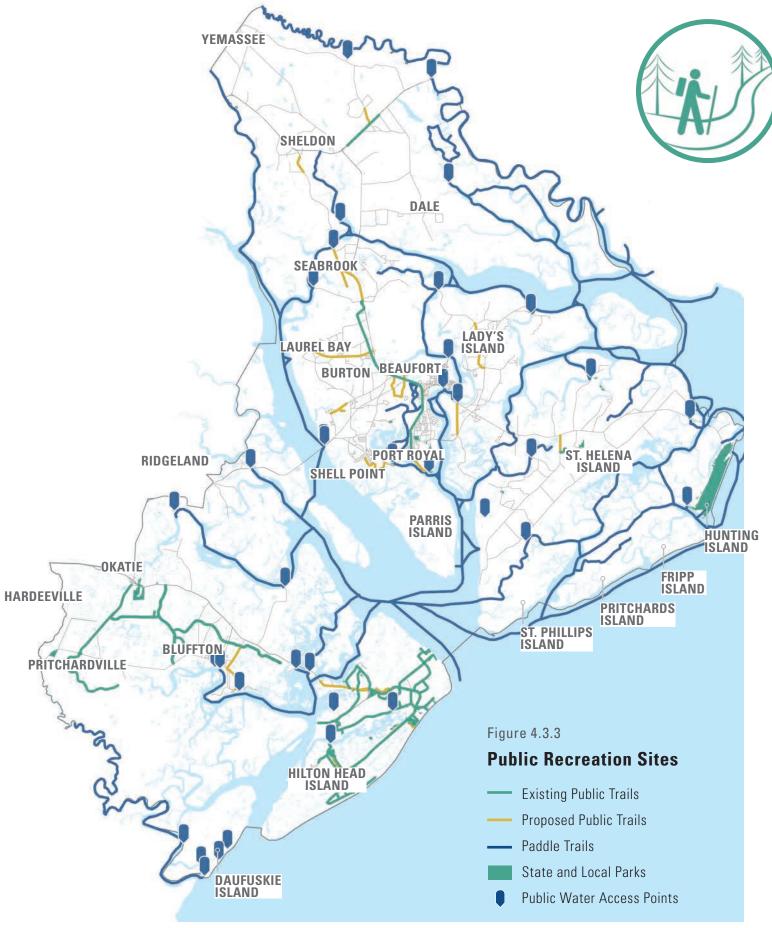
Making protected open space accessible to the public where appropriate.



Ensuring equitable access to public open space.



Identification of funding and strategies for the long-term stewardship of publicly accessible open space.



Source: Beaufort County

Summary of Approach

 Areas that do not currently have access to county passive parks or areas that do not have planned passive parks within a 5- and 10-minute drive were prioritized.

Summary of Limitations

- This does not account for other passive parks, such as state or federal parks.
- Driving distances were assessed based on the existing street network, which is ever evolving.
- This analysis did not consider other modes of transportation such as bicycles or public transportation.

PASSIVE RECREATION

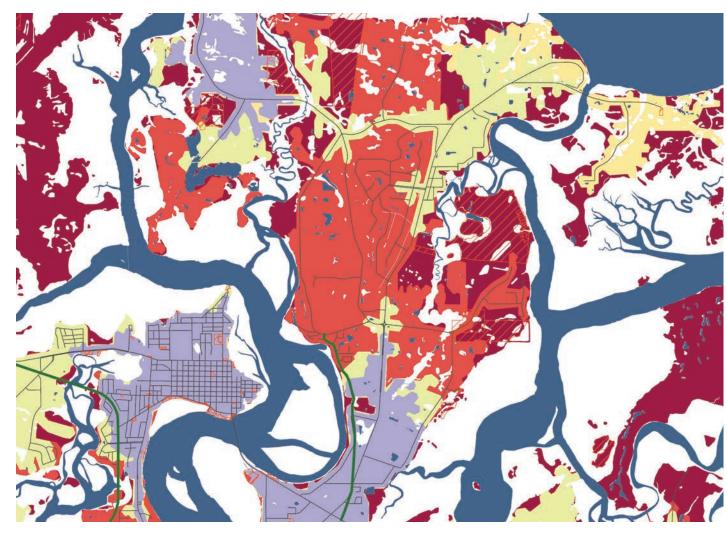
PRIORITY MAPPING INPUTS

Public Water Access within 5-Minute Drive Public Water Access

within 10-Minute Drive

Rural and Critical Fee Land within 5-Minute

Rural and Critical Fee Land within 10-Minute Drive



Sample enlargement map of Passive Recreation Priority Land in the vicinity of Lady's Island.

