

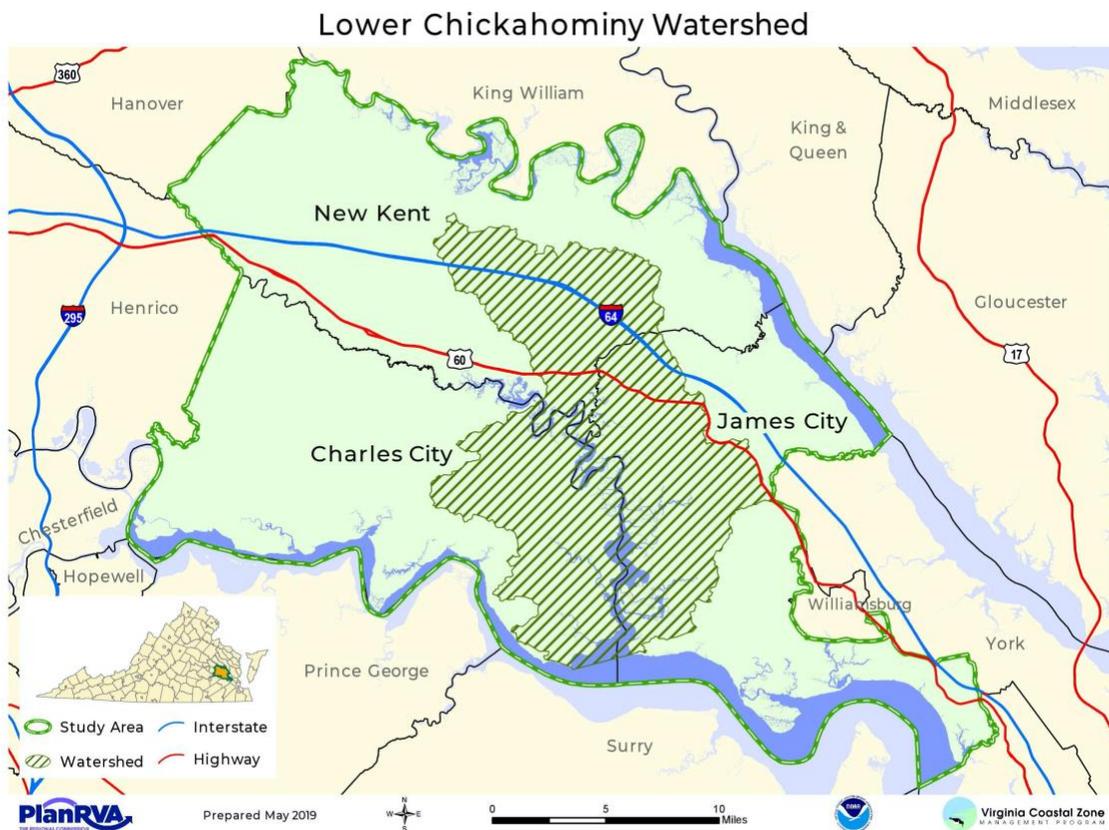


**INSTITUTE for
ENGAGEMENT & NEGOTIATION**
Shaping Our World Together



Virginia Coastal Zone
MANAGEMENT PROGRAM

Lower Chickahominy Watershed Project Year 3 Stakeholder Engagement Process



Final Report
May 15, 2020

Table of Contents

Final Report with Recommendations3

Appendices:

Project Steering and Outreach Committee Members16

Thought Leader Interviewees17

Thought Leader Interviews Results and Summary18

Focus Group Participants.....24

Focus Group Agenda26

Focus Group Sample Scoring Sheet27

Focus Group Results and Summary31

Electronic Survey Questions59

Electronic Survey Results and Summary.....62

Lower Chickahominy Watershed Project Final Report with Recommendations April 2020

The five-year strategy developed in 2016 by the Virginia Coastal Zone Management Program (VCZMP) initiated a collaborative planning process across three counties in the Lower Chickahominy watershed (LCW) to identify and establish an overarching vision for land use and land conservation priorities. The effort supports improved coordination between natural resource agencies, local governments, tribal governments, and regional organizations and interests in planning for coastal areas. This approach will build and strengthen relationships and partnerships among multiple stakeholders across the watershed.

Year three of the project involved developing and implementing an expanded stakeholder outreach and communication strategy to: (1) further defining stakeholder interests and issues, and (2) developing and refining potential coordinated watershed policies and strategies for maximizing both socio-economic and ecological benefits. The Institute for Engagement & Negotiation (IEN) at the University of Virginia was contracted to support the VCZMP and the Richmond area Regional Planning District Commission (PlanRVA) in conducting outreach to watershed stakeholders.

First, IEN conducted a series of 16 thought leader interviews in mid-May 2019, drawing from active stakeholders and leaders in the LCW. These interviews formed the basis for the main ideas and themes for the project. Second, to test these ideas and themes, and to develop more specific ideas for policies and strategies, IEN facilitated three Focus Groups in early August 2019, organized along affinity interests of natural and historic resources, economic development, and government. Last, working with the steering committee, IEN developed and conducted an electronic survey for broader outreach to the stakeholders of the watershed, to further refine and test the emerging proposals for policies and strategies.

Framework for Stakeholder Engagement

Year three of this project called for the continuation of the existing Steering Committee (SC) and the formation of an Outreach Committee (OC). [Appendix 1](#) shows the composition of both of these committees. The Steering Committee, also known as the core planning team, is charged with overall project direction. The newly formed OC will support year three activities through the three major deliverables (thought leader interviews, focus groups and survey). The OC is composed of professionals working and living within or work within the watershed boundary. The OC provided advice, assistance, and decision-making to the Steering Committee.

Thought Leader Interviews

IEN conducted 16 thought leader interviews during the period of May 14 through May 31, 2019. Twelve interviews were completed face to face, and four by phone. Eight (or half) of the interviewees were members of either of the Outreach and Steering Committees. The following questions were asked of each interviewee:

- What is your name, title, and role within the LCW?
- What part of the watershed's natural resources do you enjoy the most both personally and professionally?
- What is your Vision for the LCW?
- What ideas do you have for sustainable economic and ecological businesses/activities in the Lower Chickahominy watershed? (Be able to give examples like ecotourism, extending the Virginia Capital bicycle path, water recreation, more water access, etc.)
- Of the ideas you mentioned, are there one or two top priorities?
- What policies or programs might support or incentivize these types of economic and ecological business/ activities while also promoting natural resource and ecological protection?
- Of these ideas, are there one or two top priorities?
- What are 3 major challenges to advancing the ecological conservation and economic development priorities of the LCW?
- To your knowledge, are there any current major issues or land use conflicts in the LCW which would prevent advancements of the conservation or business opportunities that you have identified?
- Are there policies or programs that might help address or overcome these challenges or conflicts?
- What are 3 opportunities for advancing the ecological conservation and economic development priorities of the LCW?
- Are there policies or programs that might help support these opportunities?
- How does the rich history of the LCW play into decision-making for your organization?
- How might the rich history of the LCW be used to advance ecological conservation and economic development in the watershed?"
- Are there policies or programs that might help support or incentivize these ideas?
- What role do the Native-American communities play within your organization and in advancing land use programs, sustainable business opportunities and enforceable conservation policies?
- What relationship does your organization have with the Chickahominy, Eastern Chickahominy, (or Pamunkey) tribes, and how might you envision working with the tribes to advance ecological conservation and economic development through policies and programs?
- For tribal representatives: what relationship do you have with watershed organizations and localities, and how might you envision you working with them to advance the interests of your tribes in the areas of ecological conservation and economic development?

- For both: are there policies or programs that would be helpful to support collaboration and partnerships with the tribes?
- From your perspective, how does the public view sea level rise and/or climate change in the LCW?
- Do you think this might impact the feasibility of any or the policies or programs that we have discussed?
- Is there a lack of usable natural resources data in the LCW?
- Are there needs for additional data or information relating to ecological conservation or economic development in the LCW?
- Are there needs for information that would help the passage of specific programs or policies that you think should be considered?
- Of all the ideas we have talked about, what would be your organization's number 1 priority to advance land use conservation in the context of economic development in the LCW?
- Are there any other issues or concerns that you think should be considered as we move forward with this project?
- Who else (organizations, individuals) would be important to engage at some point in this community outreach effort?

Using the three foundational elements of better incorporating history, integrating tribes and tribal history, and maintaining ecological integrity resulting from the thought leader interview process, the following five specific ideas rose to the top during the thought leader interviews. Many thought leaders identified increasing public access to the river as their number one priority. Critical to this priority is the need for stewardship of the resource. As access to the river is increased, it is vital that the river resource is not degraded. Closely tied to this idea is the second priority of developing a river corridor plan.

A third priority that emerged from thought leaders is enhancing ecotourism, combined with local history and increased venue availability such as restaurants. Increased educational/ informational work related to the combined ecotourism/history/restaurant elements is necessary to advance project goals. Many of these ideas require additional river access. Thought leaders see experiential learning opportunities as a key component of this priority, with the goal of connecting people to the river. Leveraging the Capital Bike Trail is a foundation for further economic activity under this priority. Similarly, thought leaders suggested that development of trail spurs heading north from the existing trail is an important idea to pursue.

A fourth priority for many thought leaders is the conservation of existing habitat and forest cover. Engaging landowners, reaching out to educate them on forest conversion, conservation easement planning, legacy planning, and seeking additional incentives such as land use taxation for Charles City County – all could aid in conserving existing habitat and forest cover.

Thought leaders also suggested that a key method (priority #5) for advancing these priorities is the development of formal agreements, such as Memoranda of Agreements or Understanding (MOA) (MOU) between stakeholders. MOA's/MOU's would be an important early step in clarifying relationships and advancing work in the LCW, as formal agreements provide a pathway for

cooperative work to occur. While not the only method for working together, the negotiation of MOA's was a way to start a process that leads to additional collaborative efforts and increased synergy between stakeholders.

Focus Group Meetings

The above priorities and associated information derived from the thought leader interview process laid the groundwork for the three focus group meetings. The three focus groups were organized by specific sector or topic: (1) Natural and Historic Resources, (2) Government, and (3) Business Communities. Our target focus group size was between seven and fifteen individuals. Focus group participants were selected from local watershed names generated by our SC and OC. A week prior to each session, the participants were given a draft summary of the policy and program concepts discovered during the thought leader interviews.

From the listing of the top priorities resulting from the thought leader interviews, four main ideas were tested in the focus group sessions for the LCW. These ideas are not mutually exclusive but closely aligned conceptually and in implementation. For example, to increase river access, one could imagine developing a formal agreement such as an MOU to build consensus and action around river access. They are:

- Increasing public access to the river
- Enhancing ecotourism
- Conserving forest land and existing habitat
- Development of a river corridor plan

At each focus group session, a summary presentation showing the results of the thought leader interviews was offered. After reviewing each of the four main concepts together as a group, participants were asked to add comments or questions to the existing ideas presented. Lastly, time was available for any other idea to surface at each focus group session.

During these discussions, IEN facilitators recorded the participants' ideas and thoughts onto easel pad sheets separated under the categories of Strengths, Weaknesses, Opportunities, and Barriers. Each participant was asked to add any final notes under any of the categories. After the group discussion, scoresheets of six questions were distributed for each participant to individually score the main concept and its ideas. The following questions were asked of each participant:

- What is the likelihood of public acceptance of each idea?
- What is the likelihood that each idea will help the LCW achieve the goal of advancing sustainable economic development while protecting the watershed's ecological integrity?
- How important do you think it is to raise funds to implement and/or enforce each idea?
- How politically feasible do you think it is for the LCW counties to adopt and implement each idea?

- How economically feasible do you think it is for the LCW counties to adopt and implement each idea?
- How socially feasible do you think it is for the LCW counties to adopt and implement each idea?

Twenty-seven individuals participated across the three focus group sessions of natural and historic resources, government, and business. In the following four priority sections, responses have been consolidated due to their similarity and alignment. The following summarizes the focus group responses by the four priorities:

Increase Public Access to the River in the Watershed

Participants generally agreed that increasing public access to the LCW would be beneficial for attracting public awareness to protect, conserve, and utilize the river. There was some disagreement on where the use could be increased. Focus group members across the three groups expressed that the lower Chickahominy near the mouth to the James River is widely used due to the location of James City County park. Motorboats and their associated noise were considered distractions by focus group participants and increased safety concerns. As one goes up the river, use decreases and additional non-motorized activity could be acceptable.

On the Charles City County side (western), there are fewer access points. In addition, roads and trails leading to the river are less available and known locally. For example, the road leading through the Chickahominy Wildlife Area is not well marked and generally “uninviting” according to focus group members. Other state roads leading east in the county toward the river are also not well marked. Also, larger landowners with river access in Charles City County have historically been unwilling to grant river access or establish river access points. Focus group members agreed that signage offers an opportunity to open up these areas and provide education to the public.

The establishment of a system of known viewshed areas could be an attractant to river access. This system could lead people to the river and permit access as well as creating “learning spots” for both tribal and other history. Public easements could serve as an opportunity to acquire these viewshed areas or “learning spots.” Funding remains a critical element for these viewshed locations whether it is an easement or outright land purchase. Improving existing access points can serve the population as well but will take resources to implement. The designation of “low impact” access versus higher impact locations could serve the increasing paddling community.

In general, focus group members recognized that opening access would be attractive to the public, whether that is due to the public’s desire to experience the river or the increased economic development that will follow. The public support should be high within the LCW especially in James County City where citizens seem more ecologically aware of these ideas and needs.

Enhance Ecotourism in the Watershed

Focus group participants believe that ecotourism is strongly connected to several of the other listed project priorities. Enhancing ecotourism can be built through better education regarding local tribal and other history as well as developing formal agreements between state agencies and local governments. Regarding better incorporating tribal and other history in this effort, this quote offers insight to this issue:

“...people thirst and hunger to understand the indigenous culture, information that’s not covered in school...people like authentic, they like to be immersed and able to stay locally...”

The discussions also produced the prospect of using a website to designate ecotourism opportunities for the public and tourists. The idea of having a place online where people can connect to activities, hotels, restaurants, and other resources was thought to be valuable concept not currently available. Specifically, one of the common ideas from this discussion was to support a short-term rental program such as Airbnb where travelers could traverse from one activity to the next and not worry about lodging outside of the area. A package approach such as “peddle and paddle” ideas would advance ecotourism and appreciation for the history elements. This cross-marketing approach could yield significant benefits for the area but concerns over permit requirements and their cost remains an obstacle.

An additional concern is whether the tribes can support this additional tourism strain through developing programs that appeal to this history/tourism clientele. In addition, enhancing ecotourism would necessarily mean increasing bike use and travel and the safety issues associated with increased bike use. Enhancing existing bike trail/lanes and adding new ones would have to address the safety concerns.

Landowner awareness and education across the LCW is crucial to enhancing ecotourism. However, the participants mentioned the diversity of the counties posed as a barrier for accelerating this idea. Possibly through a MOA/MOU process, a local educational effort to build ecotourism efforts would need public support. Charles City County could also join the appropriate tourism council and begin working on and with their neighbors to increase ecotourism. Counties, particularly Charles City County, would need to better embrace this concept and work together to advance these ideas.

Conserve Wildlife Habitat, Forest Land, and Ecological Values in the Watershed

Focus group participants believe that the conservation of existing lands remains the critical element of this project and ties the other topical priorities to each other. The ideas from the discussion followed two basic tracks. One is the idea of consistent markets for agricultural and timber landowners and their products and associated educational efforts. These resource markets allow private, non-industrial landowners to maintain their land in this natural, un-fragmented condition versus bowing to pressure to sell for development. Again, educational programs directed to Legacy planning efforts such as *Generation Next* through the

Department of Forestry and Cooperative Extension teach landowners best practices for passing their lands to their children. Specific outreach to the African American community through the Black Family Land Trust was discussed as a path forward for adding conserved land through easements.

The second track mentioned in the discussion is the idea of policy efforts that protect ecological function such as educating developers and identifying wildlife corridors and viewing areas. The concept of a “blue-green” plan was discussed to recognize conservation efforts and bring county leaders up to speed on the current thinking around maintaining ecological values in the LCW. Many rural counties such as Charles City do not have land use taxation which sets tax rates lower for agricultural and forest land holders. Furthermore, there was considerable discussion on the idea of public-private partnerships to advance ideas such as an eco-business park that involves local businesses and citizens.

The idea for water monitoring services also draws concerns for the participants. Discussions of sea level rise impacting the monitoring systems, challenges in recruiting volunteers, and the financial cost local business owners would bear arose in the focus groups. However, if these barriers could be removed, focus group participants agree that water monitoring services will boost consumer confidence, especially if it expands to include reports for human use as well as fishing. A MOA/MOU between DEQ and the counties could potentially document that monitoring costs are not borne on local businessowners. Additionally, James City County already has a volunteer group for local water quality monitoring that could be expanded.

Lastly, the Chickahominy Wildlife Management Area (CWMA) was focal point of discussion. This valuable local resource serves as a large contiguous block of conserved forest land but is clearly underappreciated and underutilized by the public. Lack of funding to enhance programs was cited as one of the key reasons for this phenomenon. It was discussed in the focus group that access to the lower Chickahominy and clear directional signage is limited. Purposeful educational programs about the linkages to local tribal history, wildlife viewing could elevate the importance of the CWMA to residents and the ecotourism community.

Engage the Watershed through a River Corridor Planning Process

Participants generally supported a river corridor planning process but discussed the concern of it not being implemented due to lack of commitment and/or funding. Related planning efforts such as the Virginia Outdoors Plan (VOP) could serve as a conduit for increasing awareness about the importance of the LCW. Historically, there have been several planning processes conducted in this area but none exactly covering the LCW. The Captain John Smith Water Trail process and placement serves as a good start to better defining the positive attributes of the LCW in a more detailed way. Additionally, the James River Association, Chesapeake Conservancy and National Geographic Maps conducted a river corridor process called Envision the James in 2011. This planning effort aligns with this idea of a river corridor planning process and highlights similar concepts as expressed by focus group members. Specific implementation for the LCW was not included in these previous plans and would need to be addressed in this planning process.

Focus group members believe this planning process would encapsulate many of the goals listed by the thought leader interviews and focus groups. In essence, this plan could act as an “umbrella” and path forward for this LCWP. Participants cited the importance of synthesizing historical planning efforts and merging thinking across the three counties to maximize project effectiveness. Topics such as agricultural practices, including equine and other rural landowner needs that had been left out of past plans could be included to increase inclusivity.

Specific information about tribes and their increased local conservation and business participation since federal recognition should be included and highlighted in any river corridor planning process. In addition, one key information piece for the river corridor plan would be to assess the capacity and current use of the Lower Chickahominy River. In accelerating this plan, focus group members agreed that public outreach was necessary. Their involvement through the Internet and the possibility of a public commenting period were possibilities set forth to obtain public opinions and needs.

Some of the specific policies for developing the river corridor plan did not appeal to the focus group members. The use of proffers did not seem viable. Rather, using promoting existing ecological incentives or using proffers as a mitigation were offered as alternatives. In addition, decreased permit requirements was also an unpopular incentive for the participants. James City County members noted that their county already has an accelerated process, but the public perceives the process to be longer due to many “last minute requests” flooding the system. They propose that in place of decreased requirements, the option of an expedited process of permit acquisition should be offered instead.

Lastly, this river corridor planning process could lead directly into MOA/(MOU) between designated entities such as counties or state agencies and facilitate the implementation of the plan’s ideas. One MOU exists, signed in 2015, between the Virginia Department(s) of Transportation, Conservation and Recreation and Game and Inland Fisheries agrees to identifying and implementing additional public access sites along the rivers of the Commonwealth.

Stakeholder Survey and Results

For the final phase of the watershed stakeholder outreach, IEN worked closely with the project SC and OC to develop a survey for broad distribution. The goal of the survey was to further validate the emerging themes, as well as specific proposals for policies and strategies that had emerged from the focus groups and noted above. Through discussions about appropriate methods for distributing the survey, the OC decided that its members would distribute the survey to watershed stakeholders, colleagues, and other appropriate constituents. Rather than a broad approach seeking feedback from anyone in the watershed, the distribution targeted individuals with a basic knowledge and understanding of the watershed, who might use the LCW for recreation or other uses, and who either lived in or visited the LCW. The survey was open for four weeks and closed December 2, 2019.

IEN developed a multi-layered response format for the survey. The goal was to obtain respondent perspectives on the viability of each policy or strategy, using the following four basic questions:

- What is the likelihood of public acceptance of each idea?
- What is the likelihood that the idea will help the Lower Chickahominy watershed achieve the goal of advancing sustainable economic development while protecting the watershed's ecological integrity?
- How politically feasible do you think it is for the watershed counties to adopt and implement the idea?
- How economically feasible do you think it is for the watershed counties to adopt and implement the idea?

This electronic survey was sent to several hundred stakeholders in the LCW, following initial stakeholder engagement through sixteen thought leader interviews and three focus groups with 27 individuals. The survey was opened by 101 individuals, of whom 71 individuals completed the demographic portion of the survey, and 53 completed all or most of the remainder of the survey. The expressed purpose of the stakeholder survey was to further test and validate the proposals for policies and strategies that emerged from the interviews and focus groups, by asking respondents to assess for each proposal the likelihood of public acceptance, its likely contribution to economic development, political viability, and economic feasibility. A five-point Likert scale was used to allow respondents to express how much they agreed or disagreed with the specific viability metric.

Each proposal was scored according to the four-viability metrics listed above. Based on the scores, reported under Product #4 above, proposals for 26 specific policies and strategies were organized under the following six overarching goals.

Goal 1. Promoting policies and programs that promote and support natural resources and river protection;

Goal 2. Using written agreements to achieve our goals;

Goal 3. Advancing business and ecotourism efforts;

Goal 4. Increasing historical engagement and citizen education;

Goal 5. Expanding watershed knowledge; and Goal 6.

Enhancing public outreach.

Overall, all 26 ideas received generally favorable scoring from the respondents, with the proposal for policies to address river noise receiving the lowest viability score. This may reflect that significant refinement and prioritization of proposals occurred during the first two

stakeholder outreach components of thought leader interviews and focus groups. The broad stakeholder survey was an important third step to confirm that the thought leader and focus group process produced viable policy and strategy proposals that were widely accepted in the

watershed. With the few exceptions and specific areas of concerns noted in the above analysis, most of the 26 policy and strategy proposals are viable for further development. Please see the full report on the electronic survey LCW results offered on the PlanRVA and IEN websites. The website link(s) are as follows:

www.planrva.org.

www.arch.virginia.edu.

Project Results Summary and Synthesis

The information resulting from the thought leader Interviews, validated from the three focus groups, and later confirmed through the electronic survey show the following ideas and concepts as most feasible and viable. The percentage listed after each idea shows the overall agreement shown in the electronic survey responses. The Goals numbers reflect the Goals listed above. The ideas/concepts listing is as follows:

- Increase river access via public access and trail easement agreements, Goal 1 (87%);
- Develop policies or programs to obtain water quality monitoring data relating to human use (e-coli), habitat and fish populations and ensure that these monitoring costs are not borne by local businesses, through an MOU process with the Department of Environmental Quality, Goal 2 (84%);
- Increasing local river advocacy efforts through a "Friends of..." group, Goal 6 (84%);
- Increase the quality and frequency of signage for river access, Goal 6 (82%);
- River as economic driver - Develop watershed-wide policies and programs that support using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming, Goal 1 (81%);
- Natural resources data - Develop watershed-wide policies/ programs for improving data on contiguous forest blocks. Increase geospatial mapping, Goal 5 (78%);
- Comprehensive Plan - Engage stakeholders in how local and tribal history can be integrated into the three county Comprehensive Plans for both ecological significance and business opportunity, Goal 1 (77%);
- River access through bridge restoration - Strengthen or augment the existing Memoranda of Understanding (MOU) between VDOT and other state agencies to consider public access when planning bridge restoration work, Goal 2 (76%);
- Packaging Economic Opportunities with History - Combine different types of tourism experiences to create larger tourist packages, such as combining winery and estate tours with ecotourism, Goal 3 (73%);
- Economic Development, by developing watershed-wide programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources and to integrate into each county's comprehensive plan, Goal 4 (73%);
- Water safety - Develop programs to better educate recreationists about water safety and to enforce existing safety and boating regulations and establish a buoy system for safety, Goal 4 (72%)

- Expand the Capital Trail - Develop watershed-wide policies/ programs to expand on the Capital Trail by creating spur trails heading north from the existing trail, Goal 2 (72%);
- River Shoreline Erosion: Establish policies to better support “living shorelines” for river restoration projects where feasible, allowing seasonal access where appropriate, including policies that promote low-impact activities and “no wake” zones to mitigate the erosion on the living shoreline from foot traffic and larger waves, Goal 1 (72%);
- Natural Resources Data Access, by developing watershed-wide policies/ programs for improving data on contiguous forest blocks, Goal 6 (72%);
- Public Education for Family Legacy and Forest Conservation, Goal 6 (71%).
- Conduct a river carrying capacity assessment to better understand boat users and access points, Goal 5 (70%);
- Tribal History- Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries, Goal 4 (70%);
- App - Develop an app that provides all appropriate ecotourism opportunities and historic landmarks/other educational features, Goal 4 (70%).

Of the ideas that received less favorable response, the general idea of regulatory approaches such as regulations to address “river noise”, for example, were not as popular. Also, developing a river assessment without formally engaging the public were regarded less favorably. The political ramifications of using state assistance funding drew a less favorable response. This could be due to drawing comparisons to other funding opportunities that would be missed if funding were directed to the LCW project.

Final Recommendations

Year three of the project involves developing and implementing an expanded stakeholder outreach and communication strategy to: (1) further define stakeholder interests and issues, and (2) develop and refine potential coordinated watershed policies and strategies for maximizing both socio-economic and ecological benefits. The Institute for Engagement & Negotiation (IEN) at the University of Virginia was contracted to support the VCZMP and the Richmond area Regional Planning District Commission (PlanRVA) in conducting outreach to watershed stakeholders.

First, IEN conducted a series of 16 thought leader interviews in mid-May 2019, drawing from active stakeholders and leaders in the LCW. These interviews formed the basis for the main ideas and themes for the project. Second, to test these ideas and themes, and to develop more specific ideas for policies and strategies, IEN facilitated three Focus Groups in early August 2019, organized along affinity interests of natural and historic resources, economic development, and government. Last, working with the steering committee, IEN developed and conducted an electronic survey for broader outreach to the stakeholders of the watershed, to further refine and test the emerging proposals for policies and strategies.

Following the results presented under Project Results Summary and Synthesis, showing the listing of the ideas and concepts in order of feasibility and viability, the following recommendations are made for Years 4 and 5 of the LCWP:

- Continue both the SC and OC leadership, meeting frequency and advisory efforts through the duration of the project
- Design, convene, and conduct a full-day invitational, watershed-wide summit. Stakeholders to be invited to the summit include but are not limited to Tribal representatives, local government staff, state agency staff, business representatives, and non-profit representatives from the following fields: land and natural resource conservation, environmental protection, agriculture, forestry, eco-tourism, economic development, land planning, transportation, and historic and cultural preservation. At the summit participants will be presented background information on the significance of the watershed established during years 1 – 3 of the project (Federal Fiscal Years 2017 – 2019). Discussion and decision-making at the summit will focus on policy and project ideas that can be considered for implementation as listed above under **Project Results Summary and Synthesis**. IEN will develop a synthesis report of the summit outcomes.

Also, during the Summit, organize and implement individual, separate county-level focus groups to discuss specific next steps following the summit. The focus groups will be held and potentially funded by later phases of this Project. The focus should be on policy or project next steps including the possibility of a MOA/MOU for stakeholders in the watershed.

- Design and conduct a communications and outreach process with the three tribes of the Lower Chickahominy Watershed. The three tribes are as follows: Pamunkey Tribe; Chickahominy Tribe; and Chickahominy Tribe, Eastern Division. Through this process, the results of a survey conducted during year three/Federal Fiscal year 2018 will be shared and emerging policy priorities will be discussed. In addition, IEN will explore preferences and/or limitations associated with interactions with local governments, meeting and process participation, organizational structure, etc. These tribal consultation meetings will lead into a Local Government Workshop (described below). This process will explore with the tribes will include, but are not limited to: “what are the tribes interests in the emerging watershed priorities?,” “are there other interests not represented in these emerging priorities?,” “what do the Tribes want local governments to know about them and how to best consult with them?,” “how would they like to participate in future trainings and meetings associated with this project?,” and “what do they want or need to know about local governments in Virginia in order to better influence local government decisions that impact them?”
- The goal of this process is to ensure that Tribal interests are respected and appropriately included in state environmental impact statements, policy proposals and any other emerging strategy elements that are developed during this scope of work. A second goal of this process is to develop a longer-term healthy relationship between state and local agencies and the Tribal nations.

- Design and conduct a training for local government administration and staff on working with tribes in the Lower Chickahominy Watershed. Participants from local governments should include but are not limited to county administrative officers, planning staff, and economic development staff. Topics for the workshop include but are not limited to: “history of the Tribes in the region, how can local governments today best work with and consult Tribes.” Depending on what is learned from the outreach to the Tribes, the workshop also may include Tribal members and include information from local governments on how the Tribes might best work with, and provide input, to local government decisions.
- Maintain the project’s online web platform on the PlanRVA website developed during year three. This platform will be an efficient means of communication with stakeholders and the public as policy is developed and presented for potential adoption in year five of the project. Guidance from the SC and OC will determine content to be added or updated on the platform. Additionally, meeting materials and other resources will be posted to the website.
- Work with the project steering committee and other interested stakeholders to develop a final policy proposal for consideration, likely to be an MOU or similar arrangement for the creation of a Watershed Working Group and/or “Friends of” group.
- Develop a River Corridor Action Plan including actions that can be taken by stakeholders in the watershed to advance consensus policy ideas as determined during years four and five of the project.
- PlanRVA staff will expand upon the Infrastructure Analysis performed during year four of this project to make recommendations regarding infrastructure improvements that will support and encourage growth of the ecotourism industry in the LCW counties. Recommendations will pertain to items such as signage, roadway improvements, parking, land and/or water trails including expansion of the Capital Bike Trail, boat ramps and boating access. This ecotourism infrastructure plan will compliment a River Corridor Action Plan (see above) to lay a pathway forward for localities and other stakeholders in the watershed as they harness the additional conservation of natural resources, expanding public access and other sustainable economic development efforts. As currently envisioned the Plan will be presented in full in the form of an ArcGIS StoryMap and will be supported by a short PDF Executive Summary including recommendations.
- Conduct Generation Next landowner education programs in the LCW. Increase inclusivity with this program to the underserved communities of color in the watershed. This combined Cooperative Extension and Department of Forestry program is well recognized as a quality, very credible landowner education program. Fully embrace as program partners the Black Family Land Trust representatives in the LCW.

Appendix 1: Project Steering and Outreach Committee Members

Lower Chickahominy Watershed Project Steering Committee

Plan RVA (Planning District Commission), *Sarah Stewart (Project Lead)*

Virginia Department of Environmental Quality, Virginia Coastal Zone Management Program, *Laura McKay and Jefferson Flood*

George Mason University, *Dr. Terry Clower*

University of Virginia Institute for Engagement and Negotiation, *Tanya Denckla Cobb, Director; J. Michael Foreman, Special Projects Manager; and Kelly Altizer, Project Manager*

Lower Chickahominy Watershed Project Outreach Committee

Chickahominy Tribe, *Stephen Adkins, Chief*

Eastern Chickahominy Tribe, *Jerry Stewart, Chief*

Charles City County, *Rachel Chieppa*

James City County, *Scott Whyte and Laura*

Messer New Kent County, *Justin Stauder*

Colonial Soil and Water Conservation District, *Richard "Dick" Phillips*

Capital Region Land Trust, *Parker Agelasto* Historic Virginia Land

Conservancy, *Patrice Sadler*

Hampton Roads Planning District Commission, *Ben McFarlane*

VA Department of Game and Inland Fisheries, *Becky Gwynn and Steven Living*

Virginia Department of Forestry, *Bryant Bays*

VA Department of Conservation and Recreation – Division of Natural Heritage, *Joseph Weber*

Virginia Tourism Corporation, *Staci Martin*

VCU, *Todd Janeski*

James River Association, *Jamie Brunkow*

The Nature Conservancy, *Andy Lacatell*

Appendix 2: Thought Leader Interviewees

Name	Organization/Entity	Category
Lori Erwin	Paddler	BTR
John Carnifax	Chickahominy Waterfront Park	EE
Cat Anthony	Capital Bike Trail	BTR
Matt Smolnik	ED/New Kent	G/ED
Scott Whyte	Planner, James City County	G/ED
Staci Martin	VA Tourism Corporation	G/ED
Parker Agelasto	Capital Region Land Conservancy	EE
Justin Stauder	New Kent County	G/ED
Jennifer Edwards	Planner/CCC	G/ED
Judy Ledbetter	Local History Center	O
Molly O'Liddy	DOF	SNRA
Carl Hershner	VIMS	A
Kirk Havens	VIMS	A
Pam Mason	VIMS	A
Steven Adkins	Chief, Chickahominy	T
Sue Williams	VT_Ext-4H	Y/E

Interview Category

Government/Planning and Economic Development (G/ED)

State Natural Resource Agencies (SNRA)

Environment/Ecological (EE)

Academia (A)

Business/Tourism/Recreation (BTR)

Tribes (T)

Youth/Education(Y/E)

Other (O-Local History Center)

Appendix 3: Thought Leader Interviews Results and Summary June 2019

Overview and Method

A five-year strategy led by the Virginia Coastal Zone Management Program (VCZMP) initiated in 2016 a collaborative planning process across three counties in the Lower Chickahominy watershed to identify and establish an overarching vision for land use and land conservation priorities. The effort supports improved coordination between natural resource agencies, local governments, Indian tribal governments, and regional organizations and interests in programs and enforceable policies for coastal areas. This approach also aims to build and strengthen relationships and partnerships among multiple stakeholders across the watershed.

As part of Phase 3 of the Lower Chickahominy Watershed Project (LCWP), the Institute for Engagement & Negotiation (IEN) at the University of Virginia was contracted to support the VCZMP and Richmond Regional Planning District Commission (RRPDC) in conducting outreach to watershed stakeholders. The goals of this outreach are to gain insight into stakeholder interests and issues and enable stakeholders to develop options for potential approaches for maximizing both socio-economic and ecological benefits through coordinated planning activities.

One of the first steps undertaken by IEN was to work with the VCZMP and RRPDC and Lower Chickahominy Steering Committee (LWSC) to convene an Outreach Committee comprised of agency and local watershed stakeholders. Next, potential “thought leaders” interviewees were identified by members of the Lower Chickahominy Watershed (LCW) Steering and Outreach Committees. Final selection was made by IEN in consultation with the Richmond Regional Planning District Commission (RRPDC) and Outreach Committee.

IEN conducted 16 thought leader interviews during the period of May 14 through May 31, 2019. Twelve interviews were completed face to face, and four by phone. Eight (or half) of the interviewees were members of either of the Outreach and Steering Committees. The following questions were asked of each interviewee:

- 1) What is your name, title and role within the LCW?
- 2) What part of the watershed’s natural resources do you enjoy the most both personally and professionally?
- 3) What is your Vision for the LCW?
- 4) What ideas do you have for sustainable economic and ecological businesses/activities in the Lower Chickahominy watershed? (Be able to give examples like ecotourism, extending the Virginia Capital bicycle path, water recreation, more water access, etc.)
 - a) Of the ideas you mentioned, are there one or two top priorities?
- 5) What policies or programs might support or incentivize these types of economic and ecological business/ activities while also promoting natural resource and ecological protection?
 - a) Of these ideas, are there one or two top priorities?

- 6) What are 3 major challenges to advancing the ecological conservation and economic development priorities of the LCW?
 - a) To your knowledge, are there any current major issues or land use conflicts in the LCW which would *prevent* advancements of the conservation or business opportunities that you've identified?
 - b) Are there policies or programs that might help address or overcome these challenges or conflicts?
- 7) What are 3 opportunities for advancing the ecological conservation and economic development priorities of the LCW?
 - a) Are there policies or programs that might help support these opportunities?
- 8) How does the rich history of the LCW play into decision-making for your organization?
- 9) How might the rich history of the LCW be used to advance ecological conservation and economic development in the watershed?"
 - a) Are there policies or programs that might help support or incentivize these ideas?
 - b) What role do the Native-American communities play within your organization and in advancing land use programs, sustainable business opportunities and enforceable conservation policies?
- 10) What relationship does your organization have with the Chickahominy, Eastern Chickahominy, (or Pamunkey) tribes, and how might you envision working with the tribes to advance ecological conservation and economic development through policies and programs?
 - a) *For tribal representatives:* what relationship do you have with watershed organizations and localities, and how might you envision you working with them to advance the interests of your tribes in the areas of ecological conservation and economic development?
 - b) *For both:* are there policies or programs that would be helpful to support collaboration and partnerships with the tribes?
- 11) From your perspective, how does the public view sea level rise and/or climate change in the LCW?
 - a) Do you think this might impact the feasibility of any or the policies or programs that we have discussed?
- 12) Is there a lack of usable natural resources data in the LCW?
- 13) Are there needs for additional data or information relating to ecological conservation or economic development in the LCW?
- 14) Are there needs for information that would help the passage of specific programs or policies that you think should be considered?
- 15) Of all the ideas we've talked about, what would be your organization's number 1 priority to advance land use conservation in the context of economic development in the LCW?
- 16) Are there any other issues or concerns that you think should be considered as we move forward with this project?
- 17) Who else (organizations, individuals) would be important to engage at some point in this community outreach effort?

Common Concerns and Themes

This summary highlights LCW thought leader responses to the above questions, including: 1) ideas for initiatives that could bring socio-economic and sustainable ecological benefits through coordinated planning activities; 2) their insights into possible implementation challenges; 3) possible enforceable policies and programs that could support implementation; and 4) the possible role of history and Federally recognized tribes in implementation.

Across all questions, thought leader responses were similar but often nuanced with different perspectives that added richness and context to the ideas. Following are highlights of Lower Chickahominy thought leader responses:

Your Vision for the Lower Chickahominy Watershed

Many thought leaders focused on the critical role of natural resources in the future of the LCW and noted that the conservation of natural resources is paramount. A common theme that emerged is the desire for additional river access as well as increased recreation opportunities. Maintaining the business of farm and forestry activities is also seen as an important part of the LCW vision. A common concern expressed is that progress in any economic activity must not impair the watershed's ecological value and natural resources.

Common Themes for Sustainable Economic Development While Maintaining Ecological Value

River Access: Many thought leader ideas revolved around the high ecological value of the LCW and the enhancement of recreation opportunities within the watershed. As noted above, thought leaders emphasized the need for increased river access to support heightened economic activity, and using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing and fish farming. Complementary to these ideas is the already established asset of the Captain John Smith Water Trail. This trail currently goes up the Lower Chickahominy River and could be an important driver and leverage for additional economic activity and increased access. All these ideas require additional river access.

Bike Trail: Another strong common theme was the possibility of leveraging the Capital Bike Trail as an economic driver. One thought leader noted that some businesses along the Bike Trail have seen economic activity rise over 200% since its installation. Because of this rise in economic activity, another common idea was the possible creation of spur bike trails going north from the existing Capital Trail.

Several thought leaders expressed concern safety on roads. While they liked the idea of spur bike trails, they felt the model of the Capital Bike Trail, with a separate pathway for the bikes, would address this need for safety. Respondents understood the additional cost that separate paths would bring, but nevertheless viewed it as a worthwhile investment.

Several thought leaders also suggested that a more intentional linking of ecotourism and history – including tribal history – could be a great economic "package" for the LCW. To date, there has been little collaborative efforts between businesses linking ecotourism with history. There is some evidence of combined tours and work along these lines, but no uniform or concerted effort.

Several thought leaders raised wildlife management as an important issue. In principle, wildlife management fits within the general framework of conserving the LCW's ecological integrity by preserving natural resources. Currently, the Chickahominy Wildlife Management Area is a cultural

feature in Charles City County, consisting mainly of woodlands and managed by the Virginia Department of Game and Inland Fisheries (DGIF) primarily for upland wildlife rather than wetland species. Regarding sustainable economic activity, the wildlife management area is considered difficult to get to with river access so limited. However, respondents suggested that converting a small part of the that state-owned land to a state park could allow more river access points and engage the public more directly with ecotourism activity and educational materials.

Supportive “Enforceable” Policies and Programs

Thought leaders emphasized the need for increased regional cooperation, both at the county level and at the state and federal levels as well. Memoranda of Agreement (MOA) between key entities would pave the way for collaborative efforts in achieving the LCW project goals. Incentives such as tax breaks, decreased permit requirements for certain businesses and cooperative project efforts, all could be realized with one or more MOA’s.

Additionally, the Virginia Department of Transportation (VDOT) plays a key role not only in the bike trail spur idea but also in terms of river access though bridge restoration work. Like the Capital Bike Trail, a MOA and possible public-private partnership with VDOT could advance project efforts.

Many thought leaders suggested the need for a LCW river corridor planning process. Such a process would allow education on the issues, engage stakeholders and the public in designing the river corridor, and grow buy-in and joint ownership for the work. A similar process was accomplished some years back for the James River with the “EnVision the James” effort. Additionally, a river corridor planning process could impact and influence the three localities’ Comprehensive Planning efforts. Both economic activity and ecological sustainability could be brought into the limelight through a stakeholder engagement process to create a river corridor plan.

Last, several thought leaders who currently use the river emphasized that safety and boating regulations are not enforced. They believe it is important to highlight this gap, and that increasing enforcement of existing laws could help in both stakeholder education and river protection.

Challenges to Advancing these Concepts

As with any regional project, there are significant challenges to creating and implementing a watershed-wide vision. Thought leaders noted that some of the LCW rural communities are resistant to additional economic activity and may prefer to “keep it as is,” though they also suggested that these sentiments may be less intense in western New Kent and James City Counties. They underlined a critical need for citizen exposure and education about how economic development can be undertaken in a way to support ecological integrity and natural resources. Additional challenges mentioned are strong sentiments regarding private landowner rights, distrust of government, and, in general, opposition to environmental rules and regulations.

One key point raised by thought leaders is the lack of identified financial resources. Creating a budget for this work will be an important factor to achieving better collaborative efforts between localities. One thought leader described this as a “political wall.” Also, as additional taxes are unpopular, some thought leaders indicated that other developmental projects could be encouraged to support these ecological development efforts through “proffers.”

In terms of increasing public access to the river, many thought leaders see property acquisition as a critical issue. They believe it can be overcome but will require widespread buy-in from local landowners, governments, and businesses.

Incorporating History into the Lower Chickahominy Watershed Project

Thought leaders frequently noted the need to present history in all forms of stakeholder and public engagement. They pointed to a vast amount of local history that can be utilized for both ecological significance and business opportunity. As one thought leader noted, the “history fits squarely with the river.” One cited idea for advancing history education is support of ecological tours, as well as combining winery and estate tours with ecological tours, which can be achieved in cooperation with local businesses. Additional elements of history, such as maritime and shipbuilding themes, were mentioned as histories that can be incorporated into tours, re-enactments, and other efforts. Incorporating accurate tribal history throughout all elements of this project will be key to advancing both the sustainable ecological and economic well-being of all three localities.

Integrating Tribes, into the Lower Chickahominy Watershed Project

Interviews affirmed that Virginia Tribes – particularly the Chickahominy Tribe and Eastern Branch of the Chickahominy Tribe, both now federally recognized – should be given high exposure as a key element of this work. Tribes have been active on many fronts, but thought leaders felt it would be important to clarify how this project will directly benefit Tribes and other stakeholders. Items such as tribal land location in the LCW, business opportunities, and a formal presence at meetings is critical to the Tribes’ long-term involvement and active engagement.

Data Gaps and Needs

Most thought leaders indicated that their data needs are already typically met with existing data. Data sets such as Coastal GEMS, Natural Heritage Explorer data, and other demographic data sets, are continually updated and provide most of the data typically needed.

However, distribution of the data is another matter. Thought leaders suggested that distribution or access to the data could be improved by this project through a concerted educational awareness campaign.

One key data gap identified is the need for water quality monitoring data in the LCW relating to habitat and certain fish populations. Another is the need for improvements in contiguous forest block data, which is a high priority for certain state agencies. Thought leaders generally agreed that the LCWP should keep abreast of new data needs and respond where possible with funding and efforts to support local government and agency data needs.

Top Priorities

As stated earlier, many thought leaders identified **increasing public access to the river** as their number one priority. Critical to this priority is the need for stewardship of the resource. As access to the river is increased, it is vital that the river resource not be degraded. Closely tied to this idea is the priority of **developing a river corridor plan**.

A second priority that emerged through thought leaders is **enhancing ecotourism**, combined with local history and increased venue availability such as restaurants. Increased educational/informational work related to the combined ecotourism/history/restaurant elements is necessary to advance project goals. Thought leaders see experiential learning opportunities as a key component of this priority, with the goal of connecting people to the river. Leveraging the Capital Bike Trail is a foundation for further economic activity under this priority. Similarly, the development of trail spurs heading north from the existing trail is an important idea to pursue.

A third priority for many thought leaders is the **conservation of existing habitat and forest cover**. Engaging landowners, reaching out to educate them on forest conversion and conservation easement planning and legacy planning, seeking additional incentives such as land use for Charles City County, all could aid in keeping existing habitat and forest cover.

A key method for advancing these priorities identified by thought leaders is **the development of formal agreements**, such as MOA's between stakeholders. MOA's would be an important early step in clarifying relationships and advancing work in the LCW, as formal agreements provide a pathway for cooperative work to occur. While not the only method for working together, the negotiation of MOA's can start a process that leads to additional collaborative efforts and synergy between stakeholders.

Appendix 4: Focus Group Participants

Natural Resources and Historic Community Participants:

Participant	Affiliation	Attended?
Mr. Jamison	Berkeley Plantation	N
Judy Ledbetter	Charles City County historian	N
Paul Howe	Virginia Forestry Association	N
Elizabeth Buhl	Virginia Forestry Association	N
John Magruder	Virginia Forestry Association	Y
Greg Garman, VCU	Rice Center	N
Craig Hofmeyer	Stantec Environmental	Y
Justin Stauder	New Kent County Environmental	Y
Josh Airaghi (OC)	New Kent County Environmental	N
Vernon Heath	Ag Mgt Agent VSU- Small Farm Outreach	N
Randy Chambers	W&M faculty	Y
Chris Egghart	DEQ-Hist/Arch & Preservation	Y
Alain Outlaw	Local Archaeologist	Y
Amy Angelopoulos	Tidewater Kayak Anglers Association	N
Parker Agelasto	Capital Trail Land Conservancy (OC)	Y
Dave Slack	DOF	Y
Stephen Adkins	Lower Chickahominy Tribe	Y
Lyle Browning	Archeologist	Y

Governmental Community Participants:

Participant	Affiliation	Attended?
Mike Woolson	Senior Watershed Planner James City County Wetlands Board	Y
Ben McFarland	HRPDC (OC)	Y
Toni Small	Stormwater Engineer, James City County	Y
Rodney Hathaway	County Administrator, New Kent County	N

Michelle Johnson	County Administrator, Charles City County	N
Scott Stevens	County Administrator, James City County	N
Steve Living	DGIF	Y
Kym Hall	Park Superintendent Bay Program	N
Cindy Chance	Park Superintendent Bay Program	N
Brett Glymph	Virginia Outdoors Foundation representative	N
Martha Little	Virginia Outdoors Foundation representative	N
Bryant Bays	DOF	Y
Christine Lucero	National Park Service	Y

Business Community Participants:

Participant	Affiliation	Attended?
Matthew Smolnik (OC)	New Kent ED	N
Katherine Gulick	Saude Creek Winery	N
Tony Farley	Thomas Nelson CC	Y
Mary Goad	Spokes and Art on the Capitol Trail	Y
Charles Evelyn	Charles City Forest Products	N
Bruce Lifka	Williamsburg Boat Club	N
Randy Caldwell	Rockahock Campground	Y
Fox Wire Farm Alpacas		N
Bonnie Whittaker	Restaurant on Bike Trail	N
Ron Monark	W&M Business School	N
Jeff Hula	Renwood Seed Company	N
Bob McKenna	Chamber of Commerce	N
Lori Erwin	Paddler	Y

**Appendix 5:
Focus Group Agenda
August 6-7, 2019**

- 9:00/1:00** **Welcome, Introductions and Goals (10)**
- 9:10/1:10** **Overview of Project (10)**
Sarah Stewart, Planning Manager, Environmental Program, PlanRVA
Laura McKay, Director, Virginia Coastal Zone Management Program, VDEQ
Jefferson Flood, Virginia Coastal Zone Management Program, VDEQ
- 9:20/1:20** **Thought Leader Interview Summary (15)**
Mike Foreman, Special Projects Manager, UVA Institute for Engagement & Negotiation
- Participant Review and Evaluation of Concepts for
Programs and Policies in Lower Chickahominy
Watershed***
- Review program and policy proposals regarding increasing public access to the river
 - Additional concepts for policies, programs, or MOU's, that should be considered?
 - What are strengths, weaknesses, opportunities, barriers for each?
 - Individual ranking – scoring sheets
- 9:35/1:35** **Programs and Policies to Increase Public Access to The River (30)**
- 10:05/2:05** **Programs and Policies to Enhance Ecotourism (30)**
- 10:35/2:35** **Snack Break (10)**
- 10:45/2:45** **Programs and Policies to Conserve Wildlife Habitat, Forest Land, Ecological Values (30)**
- 11:15/3:15** **Programs and Policies to Develop a River Corridor Plan (30)**
- 11:45/3:45** **Final Thoughts and Next Steps (15)**
- 12:00/4:00** **Adjourn**

Appendix 6: Focus Group Sample Scoring Sheet

1. Increase Public Access to the River in the Watershed

- A. Develop watershed-wide policies and programs that support using the river as a “soft” economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming
 - i. Support/ expand on the Captain John Smith Water Trail
- B. Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points
- C. Consider developing a Memoranda of Agreement (MOA) between the PDC, localities, and VDOT to advance river access through bridge restoration work
- D. Develop programs to better educate stakeholders about water safety and to enforce existing safety and boating regulations

Additional suggestions for policies/ programs

E.

F.

Q1: What is the likelihood of **public acceptance** of each idea?

	Very Unlikely	Somewhat Unlikely	Neutral/ Unsure	Somewhat Likely	Very Likely
A					
B					
C					
D					
E					
F					

Q2: What is the likelihood that each idea will help the Lower Chickahominy Watershed **achieve the goal** of advancing sustainable economic development while protecting the watershed’s ecological integrity?

	Very Unlikely	Somewhat Unlikely	Neutral/ Unsure	Somewhat Likely	Very Likely
A					
B					
C					
D					
E					
F					

Q3: How important do you think it is to **raise funds** to implement and/or enforce each idea?

	Very Unimportant	Somewhat Unimportant	Neutral/ Unsure	Somewhat Important	Very Important
A					
B					
C					
D					
E					
F					

Q4: How **politically feasible** do you think it is for the Watershed counties to adopt and implement each idea?

	Not at All Feasible	Probably Not Feasible	Neutral/ Unsure	Probably Feasible	Very Feasible
A					
B					
C					
D					
E					
F					

Q5: How **economically feasible** do you think it is for the Watershed counties to adopt and implement each idea?

	Not at All Feasible	Probably Not Feasible	Neutral/ Unsure	Probably Feasible	Very Feasible
A					
B					
C					
D					
E					
F					

Q6: How **socially feasible** do you think it is for the Watershed counties to adopt and implement each idea?

	Not at All Feasible	Probably Not Feasible	Neutral/ Unsure	Probably Feasible	Very Feasible
A					
B					
C					
D					
E					
F					

Your name (optional): _____

Appendix 7: Focus Group Results and Summary September 2019

The five-year strategy developed in 2016 by the Virginia Coastal Zone Management Program (VCZMP) initiated a collaborative planning process across three counties in the Lower Chickahominy watershed to identify and establish an overarching vision for land use and land conservation priorities. The effort supports improved coordination between natural resource agencies, local governments, tribal governments, and regional organizations and interests in planning for coastal areas. This approach will build and strengthen relationships and partnerships among multiple stakeholders across the watershed.

Year three of the project involves developing and implementing an expanded stakeholder outreach and communication strategy to: (1) further define stakeholder interests and issues and (2) to brainstorm potential approaches to maximizing both socio-economic and ecological benefits through coordinated planning activities. The Institute for Engagement & Negotiation (IEN) at the University of Virginia was contracted to support the VCZMP and the Richmond area Regional Planning District Commission (PlanRVA) in conducting outreach to watershed stakeholders.

There are three phases to the stakeholder outreach process. First are the thought leader interviews from active stakeholders and leaders in the Lower Chickahominy Watershed (LCW). Sixteen thought leader interviews were conducted in mid-May 2019 and formed the basis for the main ideas and themes for the project. (*See [Appendix 2](#) for people interviewed.*) Second are focus group sessions held to test the ideas and themes offered by the thought leader interviews. Lastly, an electronic survey will be sent out to further refine the ideas and provide additional input.

THOUGHT LEADER INTERVIEWS

The thought leader interviews yielded a robust set of foundational information and ideas to further the goals of the Lower Chickahominy Watershed Project (LCWP) which are to advance ideas around socio-economic advancement and sustainable ecological benefits. One notable comment is that the three counties are distinctly different in their urban-rural ratio, socio-cultural background, and political foundation. Hence, it was anticipated that the counties may have significantly different issues and priorities, which could make it difficult to find common interests across all three counties. The opposite, however, proved to be true.

Three major themes emerging from the thought leader interviews provide the foundation for advancing both sustainable economic and ecological development goals. They are as follows:

- Incorporating history into future LCWP work;
- Integrating Tribes and Tribal History;
- Maintaining Ecological Integrity.

Incorporating History into the Lower Chickahominy Watershed Project

Thought leaders frequently noted the need to present history in all forms of stakeholder and public engagement. They pointed to a vast amount of local history that can be utilized for both ecological

significance and business opportunity. As one thought leader noted, the “history fits squarely with the river.” One idea that emerged for advancing history education is the integration of history into all tours, as well as packaging winery and estate tours with ecological tours, both of which can be achieved in cooperation with local businesses. Additional elements of history, such as maritime and shipbuilding themes, were mentioned as histories that can be incorporated into tours, re-enactments, and other efforts.

Integrating Tribes and Tribal History

Interviews affirmed that Virginia Tribes – particularly the Chickahominy Tribe and Eastern Branch of the Chickahominy Tribe, both of which have deep history in the LCW and are now federally recognized – should be given high exposure as a key element of this work. Tribes have been active on many fronts, but thought leaders felt it would be important to clarify how this project will directly benefit Tribes and other stakeholders. Items such as tribal land location in the LCW, business opportunities, and a formal presence at meetings is critical to the Tribes’ long-term involvement and active engagement. Incorporating accurate tribal history throughout all elements of this project is seen as key to advancing awareness of tribal roles and history and advancing both the sustainable ecological and economic development goals for the watershed.

Maintaining Ecological Integrity

Thought leader ideas revolved around the high ecological value of the LCW and the need for the preservation of this ecosystem. Aligned with preserving the ecosystem are the sustainable business concepts of enhancing ecotourism and recreation opportunities within the watershed. Thought leaders emphasized the need for increased river access to support heightened economic activity and using the river as a “soft” economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming. Complementary to these ideas is the already established assets of the Captain John Smith Water Trail. This trail currently goes up the Lower Chickahominy River and could be an important driver and leverage for additional economic activity and increased access.

Top Priorities

Using the three foundational elements, the following five ideas rose to the top in the thought leader interviews. Many thought leaders identified **increasing public access to the river** as their number one priority. Critical to this priority is the need for stewardship of the resource. As access to the river is increased, it is vital that the river resource is not degraded. Closely tied to this idea is the priority of **developing a river corridor plan**.

A second priority that emerged thought leaders is **enhancing ecotourism**, combined with local history and increased venue availability such as restaurants. Increased educational/ informational work related to the combined ecotourism/history/restaurant elements is necessary to advance project goals. Many of these ideas require additional river access. Thought leaders see experiential learning opportunities as a key component of this priority, with the goal of connecting people to the river. Leveraging the Capital Bike Trail is a foundation for further economic activity under this priority. Similarly, thought leaders suggested that development of trail spurs heading north from the existing trail is an important idea to pursue.

A third priority for many thought leaders is the **conservation of existing habitat and forest cover**. Engaging landowners, reaching out to educate them on forest conversion, conservation easement planning, and legacy planning, and seeking additional incentives such as land use for Charles City County – all could aid in keeping existing habitat and forest cover.

Thought leaders also suggested that a key method for advancing these priorities is **the development of formal agreements**, such as Memoranda of Agreement (MOA) between stakeholders. MOA's would be an important early step in clarifying relationships and advancing work in the LCW, as formal agreements provide a pathway for cooperative work to occur. While not the only method for working together, the negotiation of MOA's was a way to start a process that leads to additional collaborative efforts and synergy between stakeholders.

FOCUS GROUP PROCESS METHODOLOGY

The above priorities and associated information derived from the thought leader interview process laid the groundwork for the three focus group meetings. The three focus groups were organized by specific sector or topic: (1) Natural and Historic Resources, (2) Government, and (3) Business Communities. Our target focus group size was between seven and fifteen individuals. The IEN worked with the LCWP Steering and Outreach Committees to develop a list of focus group invitees who could both represent these interests and expand the circle of outreach beyond the initially consulted thought leaders. A week prior to the focus groups, participants received a draft summary of the policy and program concepts that had emerged from the thought leader interviews. (*Appendix 4 shows the invited Focus Group Participants.*)

Four main categories of ideas were tested in the LCW focus group sessions. These ideas are not mutually exclusive but closely aligned conceptually and in implementation. For example, to increase river access, one could imagine developing a formal agreement such as an MOU to build consensus and action around river access. The four categories are:

- Increasing public access to the river;
- Enhancing ecotourism;
- Conserving forest land and existing habitat;
- Developing a river corridor plan

At each focus group session, the LWCP and findings from the thought leader interviews were initially summarized in a presentation. After reviewing each of the four main categories together as a group, participants engaged in a discussion about how to improve the ideas under each category, while also adding new ideas for consideration. (*See Appendix 5 for focus group meeting agenda.*)

During these discussions, IEN facilitators recorded participant concerns and suggestions, separating them into categories of Strengths, Weaknesses, Opportunities, and Barriers. Each participant was asked to add any final considerations under any of the categories. After the group discussion for each category of ideas, participants received scoresheets to individually score the ideas discussed, including the new ideas offered. Participants responded to 6 questions for each idea, as discussed farther below.

This discussion and scoring process was repeated for each of the four categories. (*See Appendix 6 for a sample scoring sheet.*)

FOCUS GROUP ANALYSIS

Twenty individuals participated across the three focus group sessions of natural and historic resources, government, and business. The following synthesizes all focus group responses to the ideas contained within each of the four categories.

Increase Public Access to the River in the Watershed

Participants generally agreed that increasing public access to the LCW would be beneficial for raising public awareness of the need to protect and conserve the river. There was some disagreement on where the use could be increased. Focus group members across the three groups expressed that the lower Chickahominy near the mouth to the James River is widely used due to the location of James City County park. Motorboats and their associated noise are distractions and increase safety concerns. As one goes up the river, use decreases and additional non-motorized activity could be acceptable.

On the Charles City County side (western), there are fewer access points. In addition, roads and trails leading to the river are less available and seem to be known only locally. For example, the road leading through the Chickahominy Wildlife Management Area (CWMA) is not well marked and generally uninviting according to focus group participants. Other state roads leading east in the county toward the river are also not well marked. Also, larger landowners with river access in Charles City County have historically been unwilling to grant river access or establish river access points. Focus group members agreed that signage offers an opportunity to open these areas and provide education to the public.

The establishment of a system of known viewshed areas could be an opportunity for river access. This system could lead people to the river and permit access as well as creating “learning spots” for both tribal and other history. Public easements could serve as an opportunity to acquire these viewshed areas. Funding remains a critical element for these viewshed locations, whether for an easement or outright land purchase. Improving existing access points is another avenue for increasing access but will take resources to implement. The designation of “low impact” access versus higher impact locations could serve the increasing number in the paddling community.

In general, focus group members recognized that opening access would be attractive to the public, serving the dual interests of the desire to experience the river and associated increased economic development. Focus group participants thought public support would be high within the LCW, particularly in James County City.

Enhance Ecotourism in the Watershed

Focus group participants believe that ecotourism is strongly connected to several other project priorities. For example, ecotourism can be enhanced through better education regarding local tribal and other history, as well as through formal agreements between state agencies and local governments that facilitate and create guidelines for sustainable ecotourism. Regarding better incorporation of tribal and other history into ecotourism, this focus group quote offers insight:

“...people thirst and hunger to understand the indigenous culture, [they want] information that’s not covered in school...people like authentic, they like to be immersed and able to stay locally...”

Participants also suggested the need for a centralized website where ecotourism opportunities can be easily found by the public and tourists. The idea of an online site where people can connect to activities, hotels, restaurants, and other resources was broadly supported. Specifically, one of the common ideas from this discussion was to support a short-term rental program such as Airbnb to enable travelers to traverse from one activity to the next while enjoying lodging near each activity. Development of package approaches, such as “peddle and paddle,” would advance both ecotourism and appreciation for local history. Participants generally agreed that this cross-marketing approach could yield significant benefits for the region. To facilitate this approach, obstacles such as permit requirements and their cost would need to be addressed.

One hope expressed by participants is that incorporation of history would create new job opportunities for tribal members. At the same time, some concern was raised about whether the tribes could support this additional tourism strain. In addition, enhancing ecotourism would necessarily mean increasing bike use and travel, thereby increasing safety issues that would need to be addressed. Enhancing existing bike trail/lanes and adding new ones would be one possible avenue for addressing increasing safety concerns.

Landowner awareness and education across the LCW is crucial to enhancing ecotourism. However, participants mentioned the diversity among the counties’ landowner demographics as a potential barrier for accelerating this idea. Participants discussed the possible use of MOA’s as a way of bridging anticipated landowner concerns about increased liability that might accompany greater river access and ecotourism. Participants first noted that Memoranda of Understanding (MOU) would be preferable and easier to develop than MOA’s. They also suggested that an MOU could be used to launch a watershed-wide educational effort to build public support for ecotourism efforts. In addition to a MOU, hope was expressed that Charles City County would join the regional Tourism Council, established in July 2018 by Virginia Senate Bill 942, which was founded to boost the region’s tourism industry through a year-round marketing campaign aimed at overnight tourists and supported by a sales tax surcharge. By joining this Council, the counties would be better able to work together to advance these ideas.

Conserve Wildlife Habitat, Forest Land, and Ecological Values in the Watershed

Focus group participants strongly advocated that conservation of existing lands in the watershed. This concept remains a critical element of this project and is synergistic with the other project priorities. Participant suggestions addressed a broad range of concerns. One is the need for consistent resource markets, and associated educational efforts, for the range of products offered by agricultural and timber landowners. These resource markets allow private, non-industrial landowners to maintain their land in the current more natural, un-fragmented condition versus bowing to pressure to sell for development. Additionally, educational programs for aging landowners to help them retain and pass on their land, such as *Generation Next*, a legacy planning program offered through the Department of Forestry and Virginia Cooperative Extension, teach landowners best practices for passing their lands to their children. Specific outreach to the African American community through the Black Family Land Trust, for example, was discussed as another path forward for adding conserved land through easements.

A second track discussed by participants is the need for policy efforts to protect ecosystem function and integrity as the region continues to develop. For example, participants identified the need for educating developers, and identifying wildlife corridors and wildlife viewing areas. Within this second track was the possibility of developing a “blue-green” plan to map important conservation efforts and raise county leader awareness and understanding of the important ecological

values that need to be protected in the LCW. For example, over 30 counties currently allow Agricultural and Forestal Districts, which provide landowners with reduced taxes corresponding to land use rather than fair market value and allow exceptions to laws that would restrict farming or forestry in the district. These districts, also known as “land use taxation,” are a tool used by counties to both preserve working landscapes and discourage residential developments, which burden counties with additional infrastructure costs not covered by the new resident property taxes. Despite its rural character, the adoption of an Ag/Forestal Districts “land use taxation” policy could be helpful for Charles City County to consider, especially as it begins to experience more residential development. Participants also expressed considerable support for public-private partnerships to advance ecological economic development, such as an eco-business park for local businesses and residents.

Concern about water quality was significant for many participants. When water quality suffers, so does the desire to recreate in the river and enjoy ecotourism opportunities. Water monitoring services will be crucial for retaining and building consumer confidence in healthy, safe water-oriented activities. Challenges that will need to be addressed include potential compromise of the monitoring systems due to sea level rise and rising tides, challenges in recruiting volunteers, and the financial costs for monitoring borne by local business owners. However, if these barriers could be addressed or even removed, focus group participants agreed that water monitoring services will boost consumer confidence, especially if it expands to include reports for human use as well as fishing. Participants suggested that an MOU between DEQ and the counties could provide the needed assurances that costs would not be borne on local businessowners. Additionally, James City County already has a volunteer group for local water quality monitoring that could be expanded.

Lastly, the Chickahominy Wildlife Management Area (CWMA) was focal point of discussion. This valuable local resource serves as a large contiguous block of conserved forest land but is clearly “underappreciated and underutilized” (focus group comment) by the public. Lack of funding to enhance programs was cited as one of the key reasons for this phenomenon. Participants in all focus groups strongly supported improved access to the lower Chickahominy river within the CWMA, as well as improved, clear directional signage to, and within the CWMA. Purposeful educational programs about the linkages to local tribal history and wildlife viewing were also suggested to elevate the importance of the CWMA to residents and the ecotourism community. However, the Department of Game and Inland Fisheries, which manages the CWMA, noted that without additional funding, it would be difficult to implement the suggested changes to the CWMA management framework.

Engage the Watershed through a River Corridor Planning Process

Participants in all focus groups felt a river corridor planning process made a lot of sense but expressed concern that the process would not be worth the effort if it were sidelined or shelved due to lack of commitment and/or funding. Related planning efforts such as the Virginia Outdoors Plan (VOP) could serve as a conduit for increasing awareness about the importance of the LCW. Historically, there have been several planning processes conducted in this area, but none specifically covering the LCW. The Captain John Smith Water Trail process and placement serves as a good start to better defining the positive attributes of the LCW in a more detailed way. Additionally, the James River Association, Chesapeake Conservancy and National Geographic Maps conducted a river corridor process called *Envision the James* in 2011. This significant planning effort aligns with this idea of a river corridor planning process and highlights similar concepts as expressed by focus group members. However, because specific consideration for the LCW was not included in these other plans, a river corridor planning process could develop goals and strategies specifically for the LCW.

Focus group members believe this planning process would encapsulate many of the goals listed by the thought leader interviews and focus groups. In essence, this plan could act as an “umbrella” and path forward for the LCWP. Participants cited the importance of synthesizing historical planning efforts and merging thinking across the three counties to maximize project effectiveness. Topics such as agricultural practices, including equine and other rural landowner needs that had been left out of past plans, could increase inclusivity. Specific information about tribes and their increased local conservation and business participation since federal recognition should be included and highlighted in any river corridor planning process. One key information piece for a river corridor plan would be to assess the carrying capacity and current use of the Lower Chickahominy River. Public engagement with the plan would be vital; in addition to in-person participation in plan development, engagement could include internet outreach as well as a more traditional public commenting period to elicit public opinions and needs.

Some specific policies that had emerged from the thought leader interviews did not appeal to focus group participants. For example, encouraging the use of proffers by developers was not viewed as a viable strategy. Rather, using ecological incentives or using proffers only as a mitigation tool were offered as alternative policy options. In addition, decreasing permit requirements for ecotourism efforts was also an unpopular incentive for some participants. James City County members noted that their county already has an accelerated process, but the public perceives the process to be longer due to many last-minute requests. They propose that in place of decreased requirements, the option of expedited process of permit acquisition would be a viable policy to consider.

Lastly, participants noted that a river corridor planning process could lead directly into Memoranda of Understanding (MOU) between designated entities, such as counties or state agencies, and facilitate the implementation of the plan’s ideas. In one MOU signed in 2015, the Virginia Departments of Transportation, Conservation and Recreation, and Game and Inland Fisheries, agreed to identify and implement additional public access sites along the rivers of the Commonwealth.

PARTICIPANT SCORING OF IDEAS

All three focus groups were presented the same four categories of ideas, same discussion process, and asked to rank the ideas based on six questions listed below. Each of these questions used a Likert scale of five points, as shown in the bar chart graphs below.

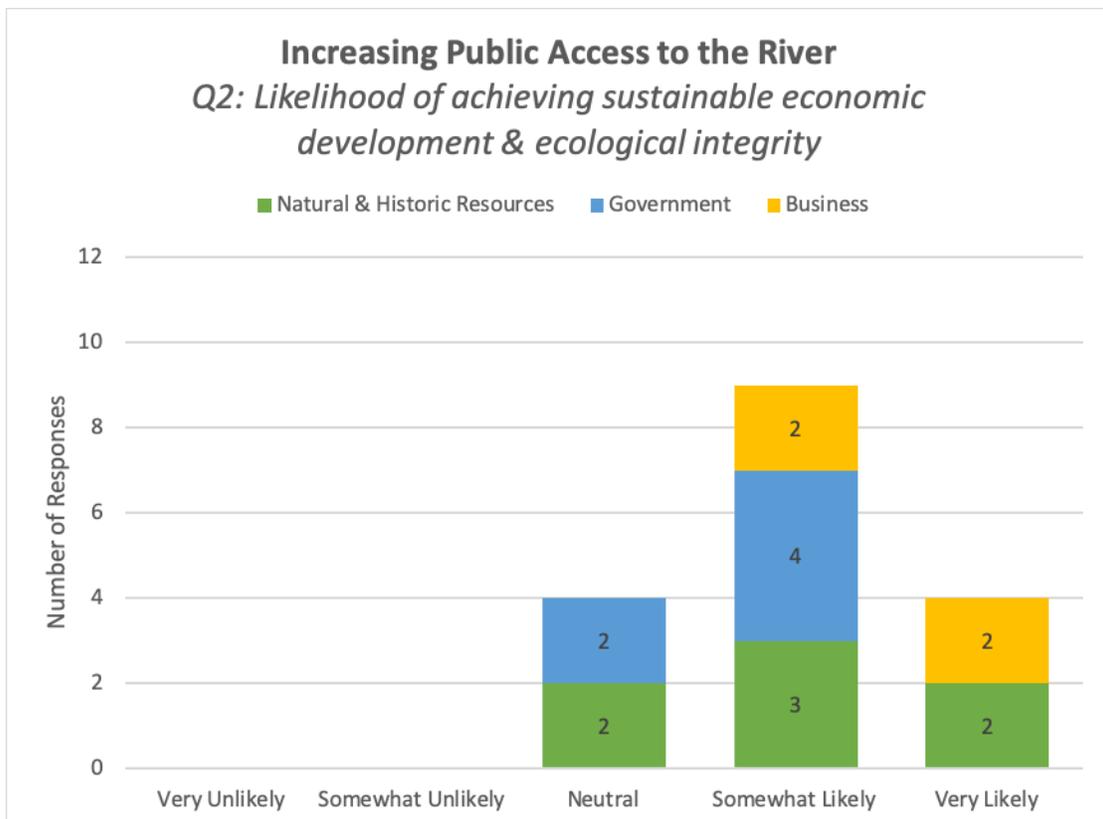
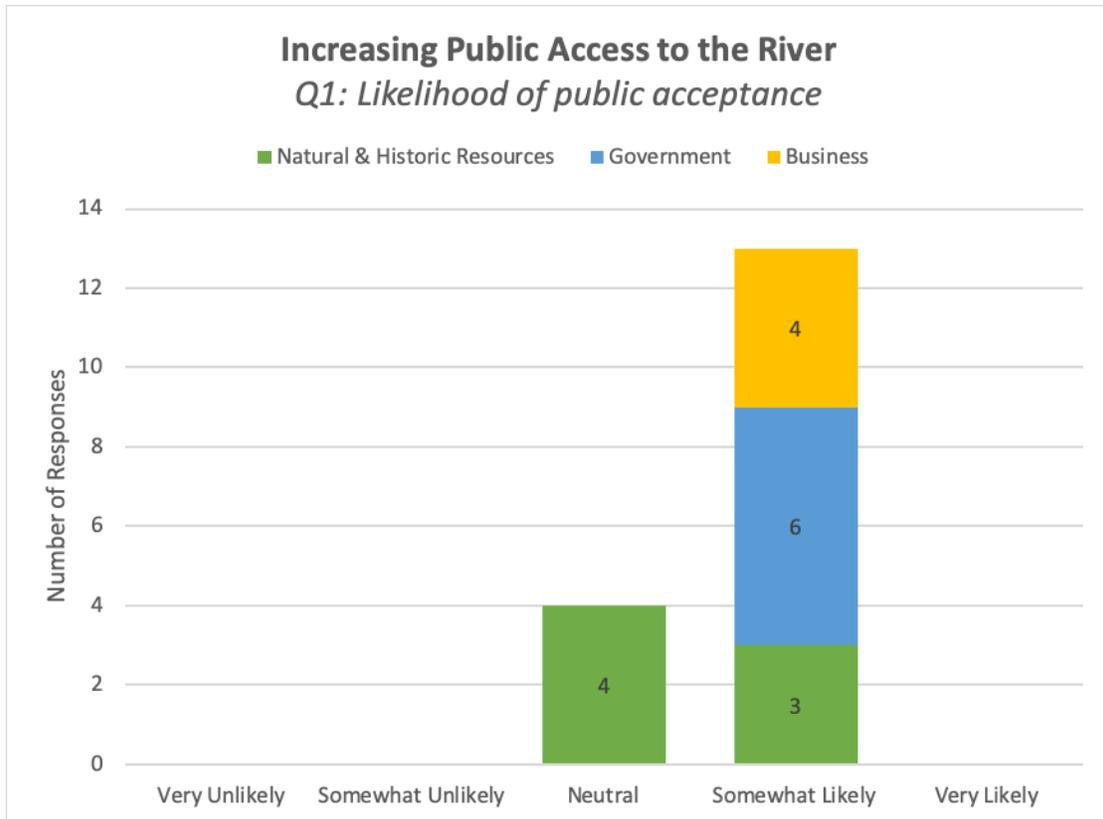
1. What is the likelihood of public acceptance?
2. What is the likelihood that the idea will help the Lower Chickahominy Watershed achieve the goal of advancing sustainable economic development while protecting the watershed’s ecological integrity?
3. How important do you think it is to raise funds to implement and/or enforce the idea?
4. How politically feasible do you think it is for the Watershed counties to adopt and implement the idea?
5. How economically feasible do you think it is for the Watershed counties to adopt and implement the idea?
6. How socially feasible do you think it is for the Watershed counties to adopt and implement the idea?

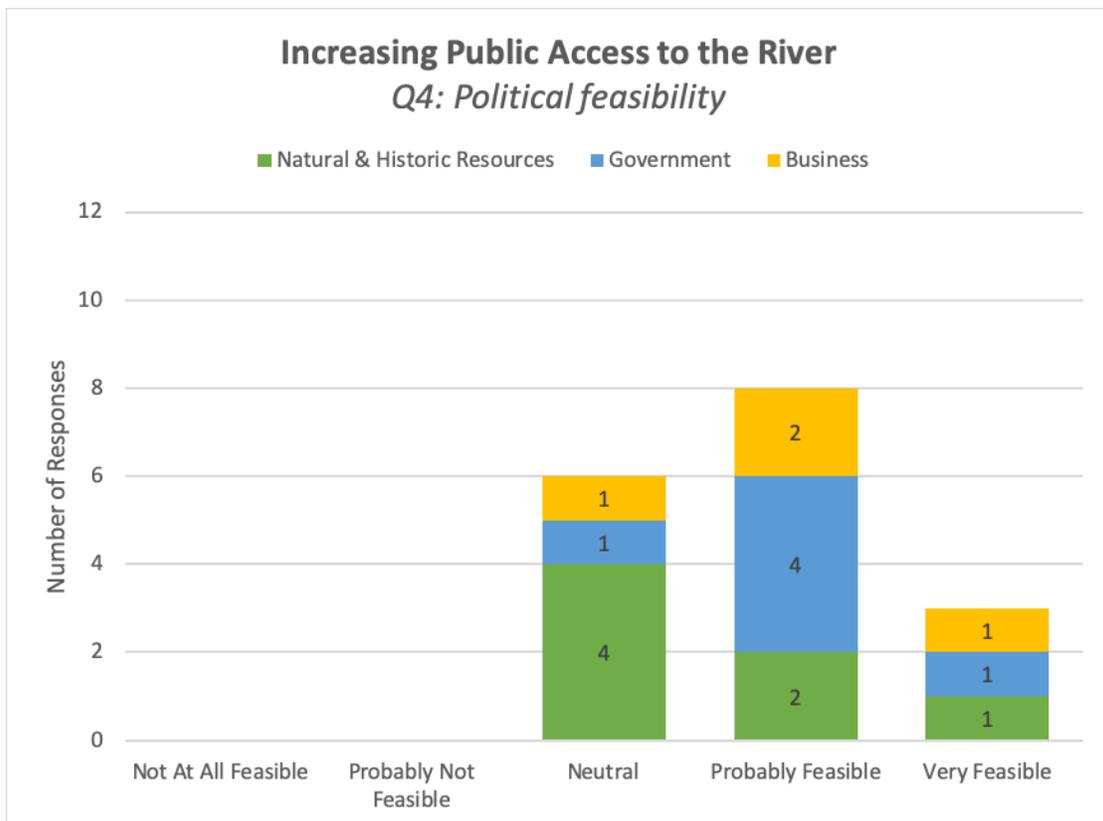
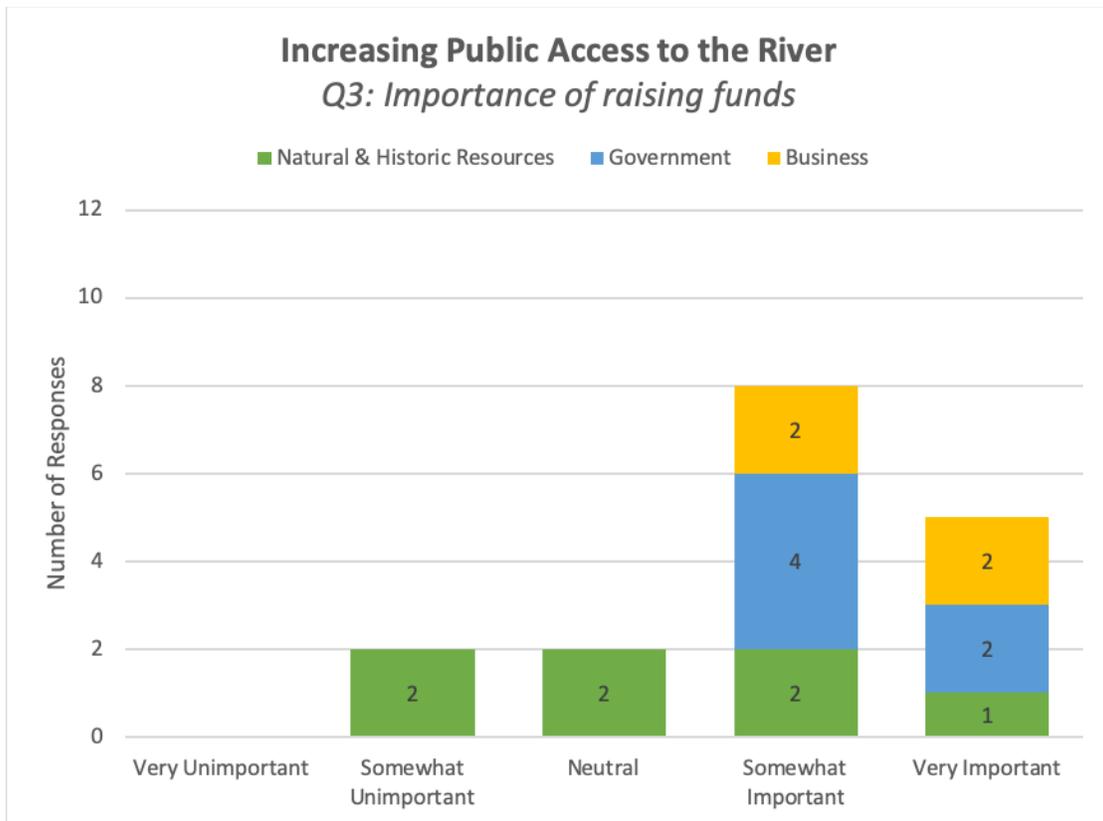
Because of the uneven and incomplete scoring by some participants, responses from all focus groups were combined to provide a comprehensive scoring overview. Also, please note that the number of respondents shown for each question reflects the variation in individual scoring, meaning that some respondents may have scored only one question, or scored all questions for only one of the category's ideas. Thus, the scores shown reflect the actual number of respondents for that question.

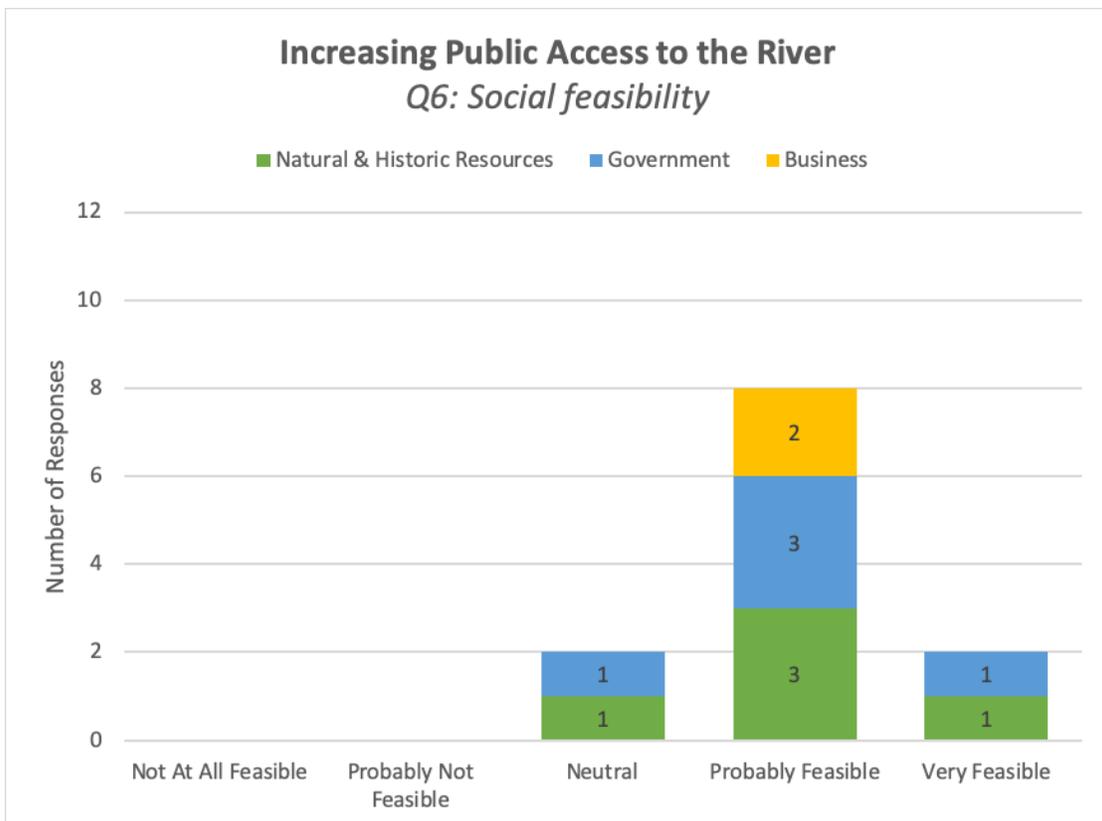
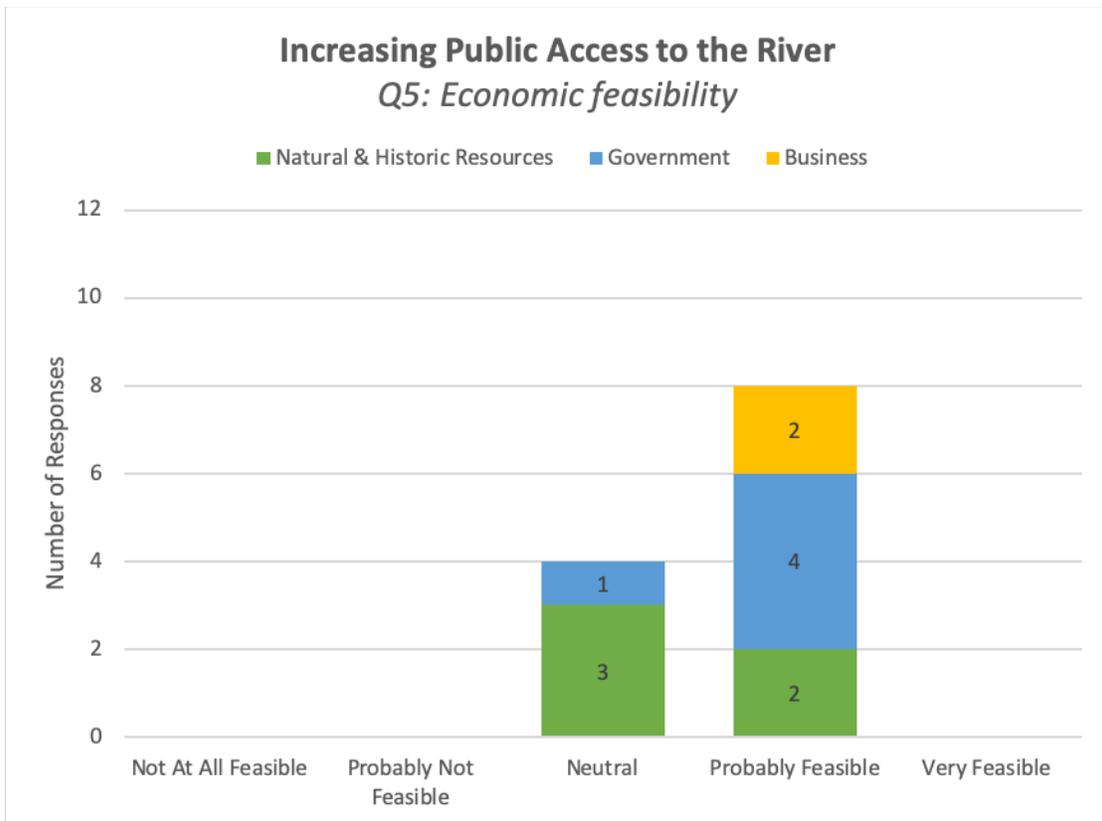
The following bar charts depict participant responses for each category of ideas. The graph also shows each focus group name depicted in different colors. The results are also briefly summarized following presentation of the bar chart data.

Category 1: Increase Public Access to the River

- G. Develop watershed-wide policies and programs that support using the river as a “soft” economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming.
 - i. Support/ expand on the Captain John Smith Water Trail.
- H. Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points.
- I. Consider developing a Memorandum of Agreement (MOA) between the PDC, localities, and VDOT to advance river access through bridge restoration work.
- J. Develop programs to better educate stakeholders about water safety and to enforce existing safety and boating regulations.



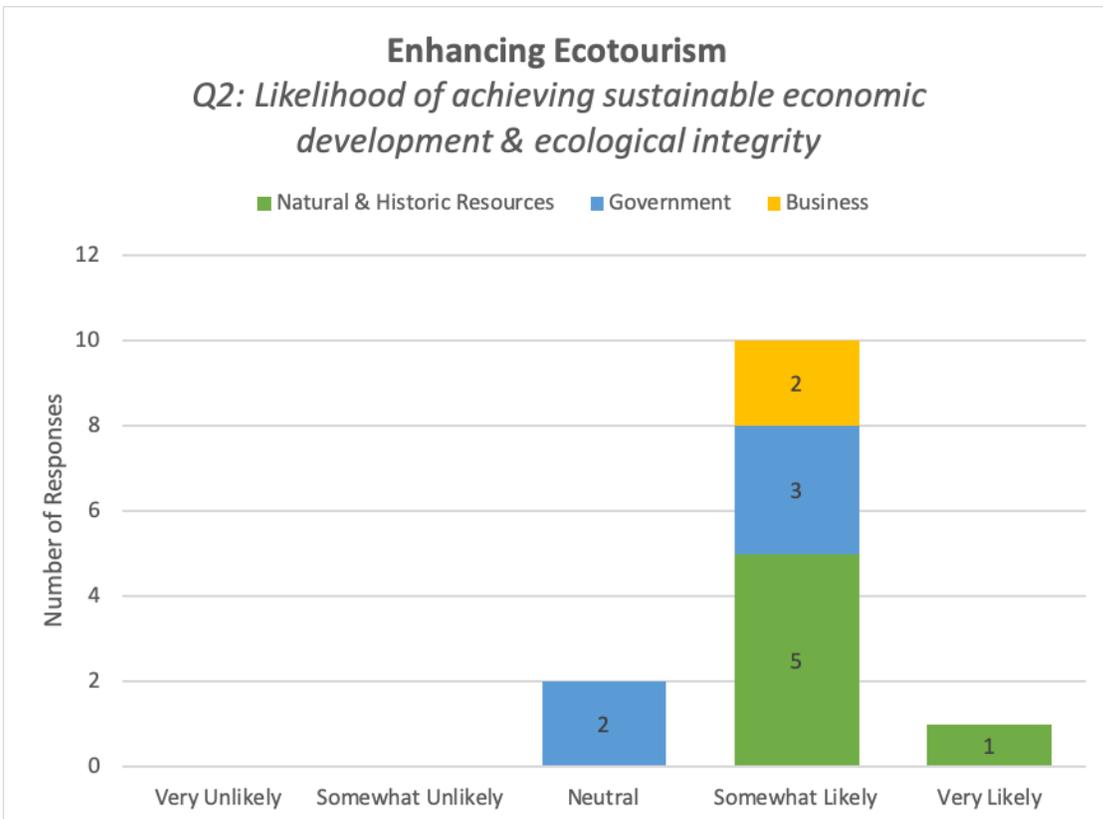
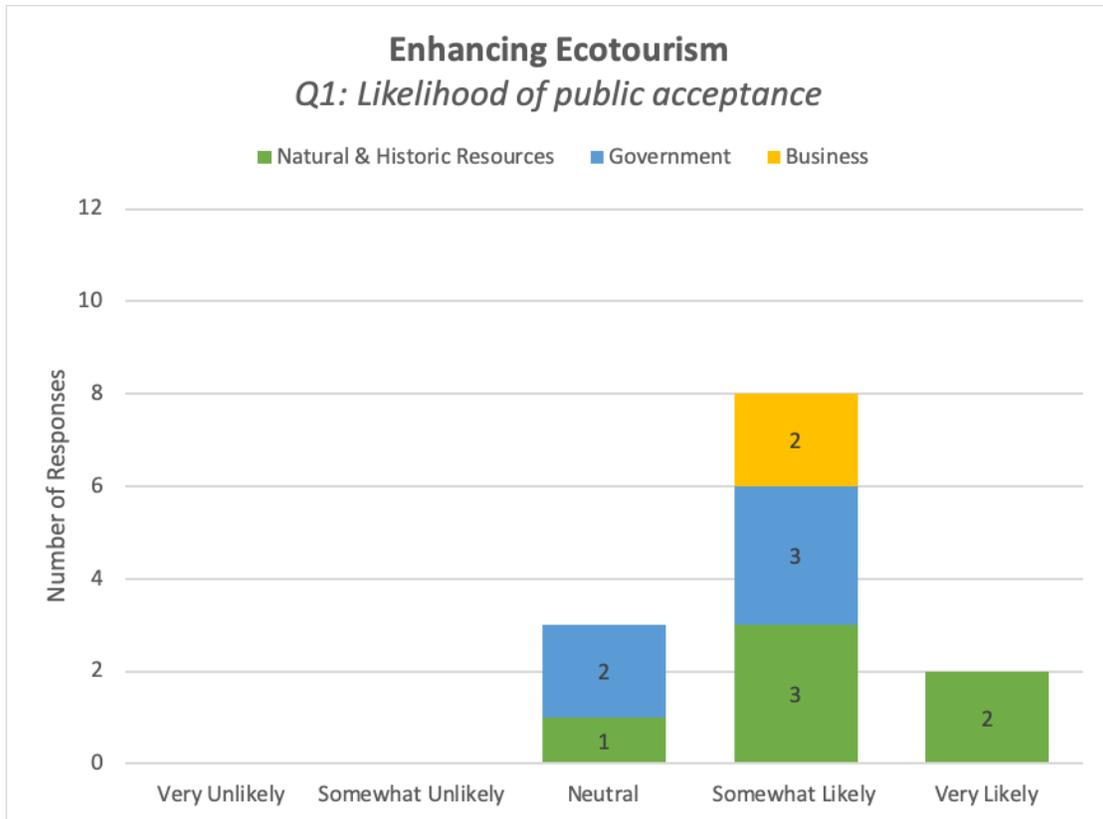


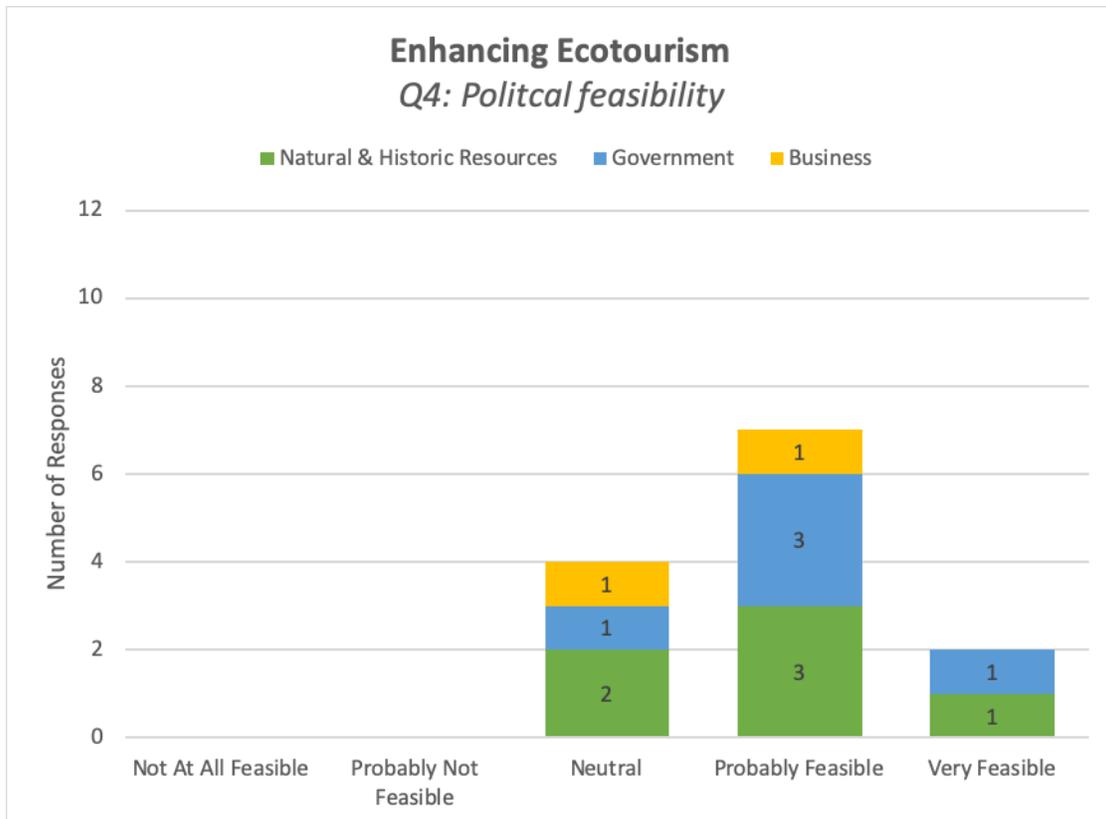
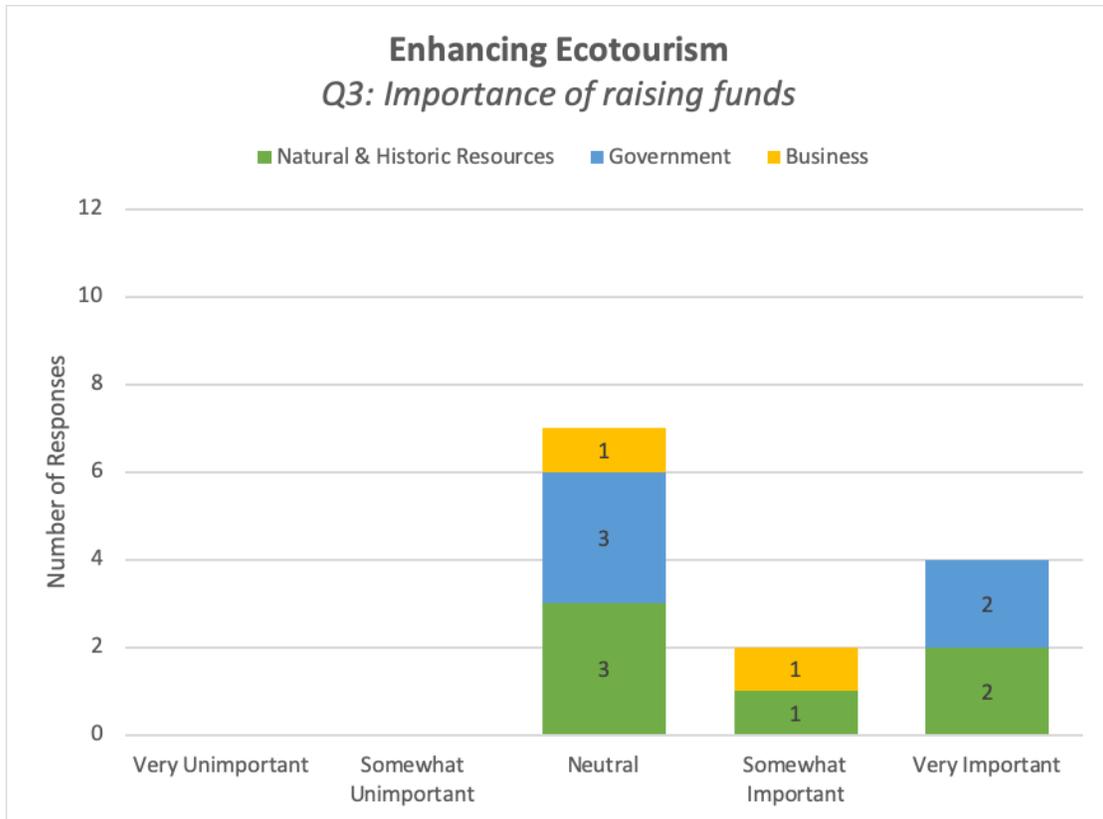


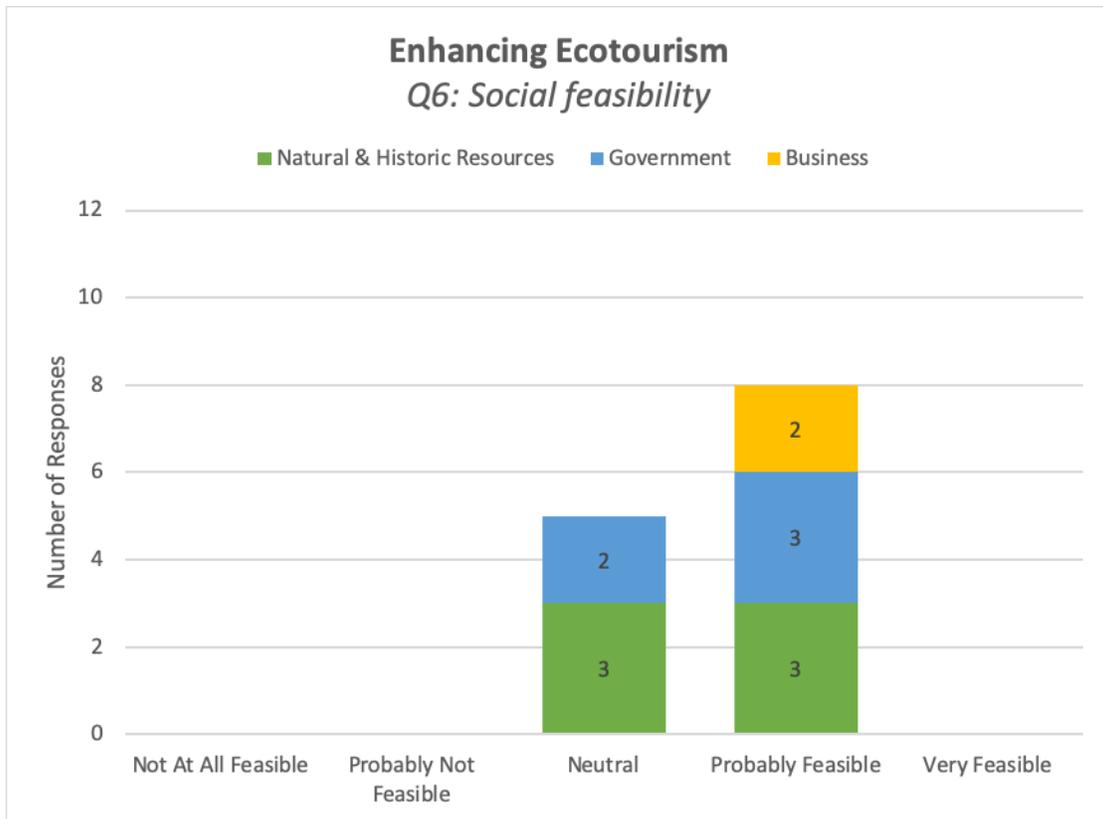
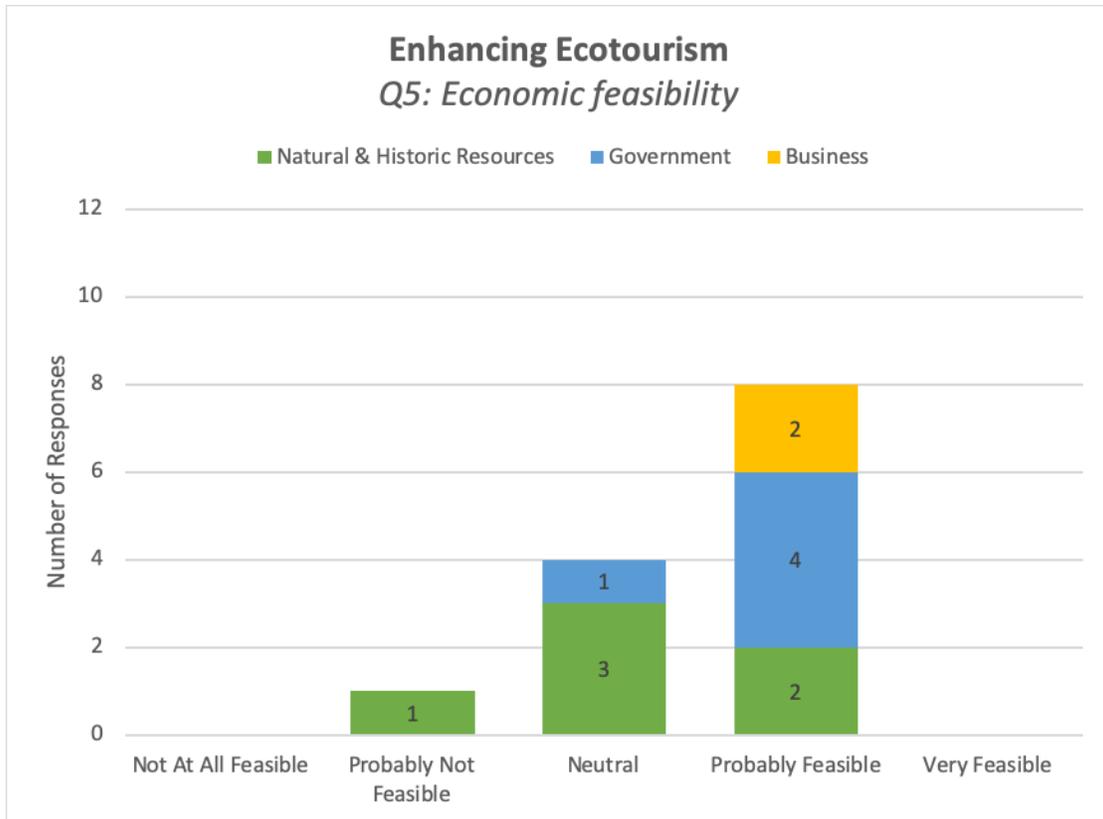
All three focus groups believed that increasing public access to the river was either a neutral or feasible and important idea based on our six-question approach methodology. Rankings across the five of the six questions were consistently positive, with at least one-quarter of the respondents expressing uncertainty (neutral responses) for each of the questions. Respondents indicated they were least certain about public acceptance and political feasibility for this category of ideas, with all responses either *neutral* or *somewhat positive*. Question three regarding the need for raising funds for implementation elicited the least consensus across the focus groups, with votes from the Natural Resources participants varying from “somewhat unimportant” to “very important,” while all Business and Government participants agreed that raising funds would be somewhat or very important.

Category 2: Enhance Ecotourism in the Watershed

- A. Develop watershed-wide policies/ programs to support/ expand on the Capital Bike Trail.
 - i. Create spur bike trails heading north from the existing trail, with separate pathways for bikes to address safety concerns.
 - ii. Consider developing a Memoranda of Agreement (MOA) between the PDC, localities, and VDOT to advance the bike trail concepts.
- B. Develop watershed-wide policies and programs to systematically integrate tribal and other history into ecotourism through collaboration among businesses, nonprofits, and tribes.
Examples include:
 - i. Combining winery and estate tours with ecological tours;
 - ii. Including maritime and shipbuilding themes into tours, re-enactments, and other efforts;
 - iii. Ensuring that tribal history is integrated throughout all aspects of ecotourism, and that the tribal history is accurate.
- C. Develop watershed-wide policies and programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources.
- D. Develop programs to provide broader awareness of and access to data (e.g. Coastal GEMS, Natural Heritage Explorer, and other demographic data).



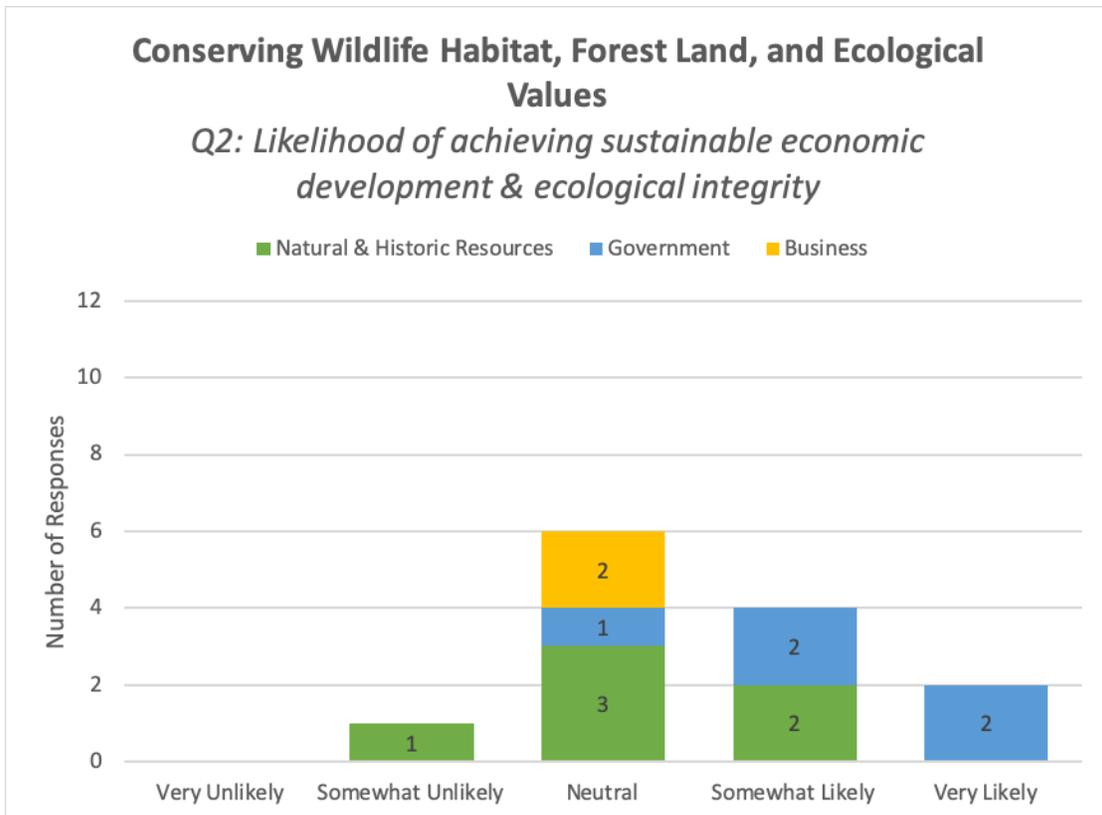
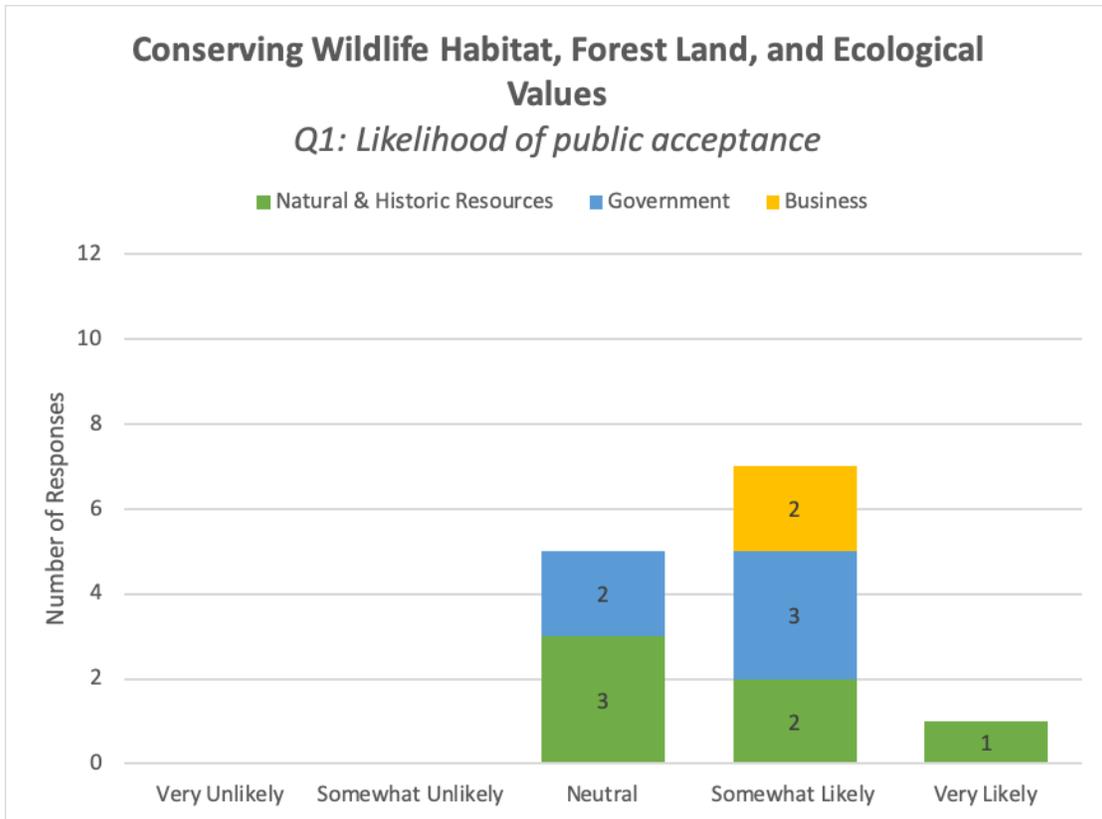


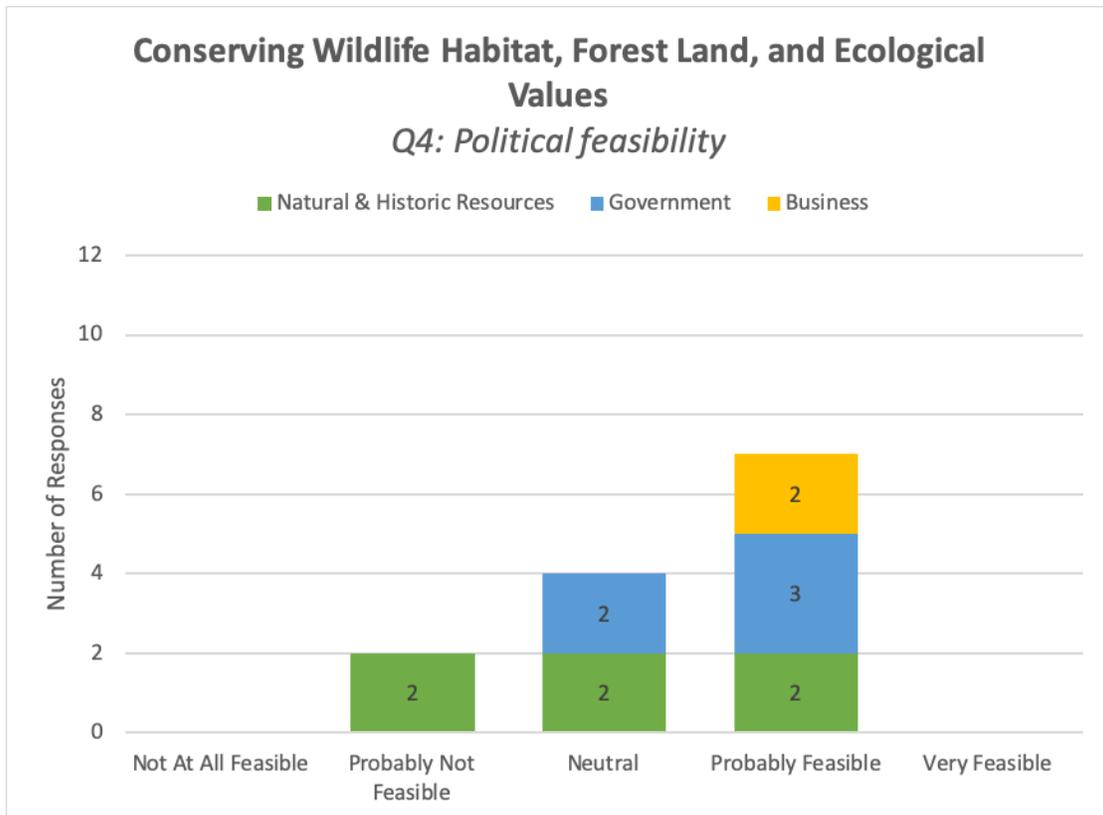
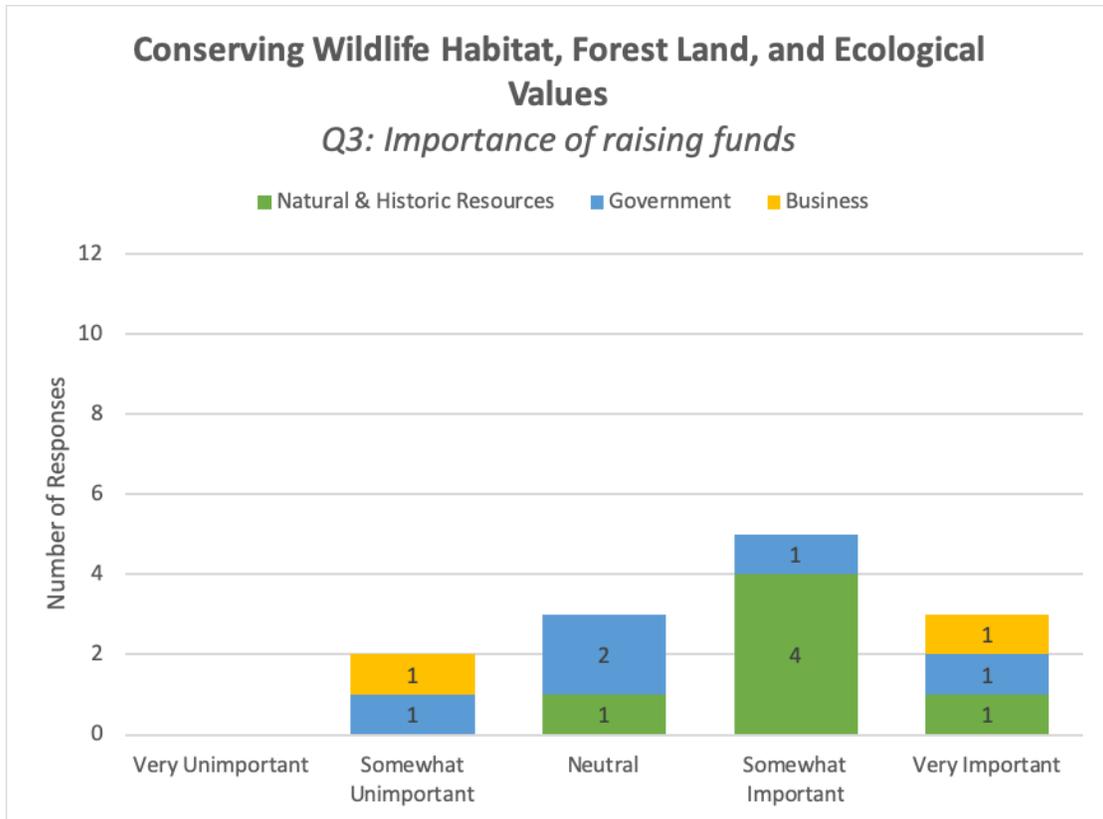


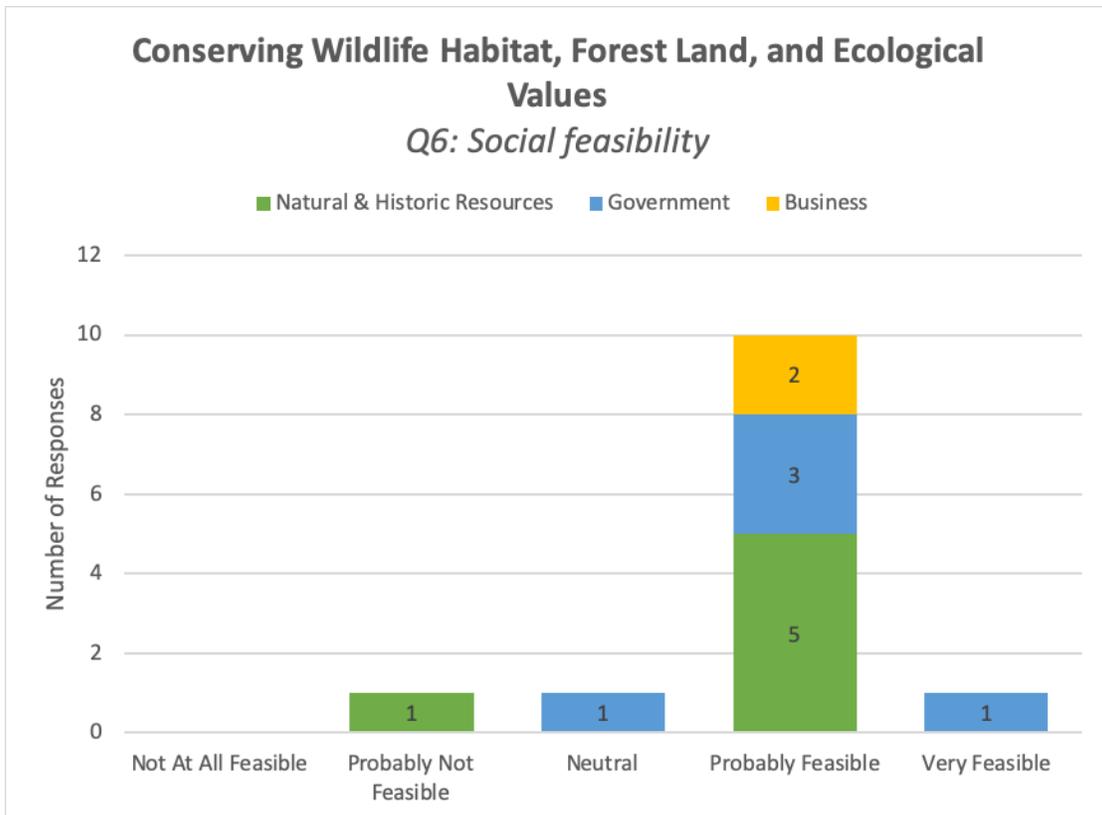
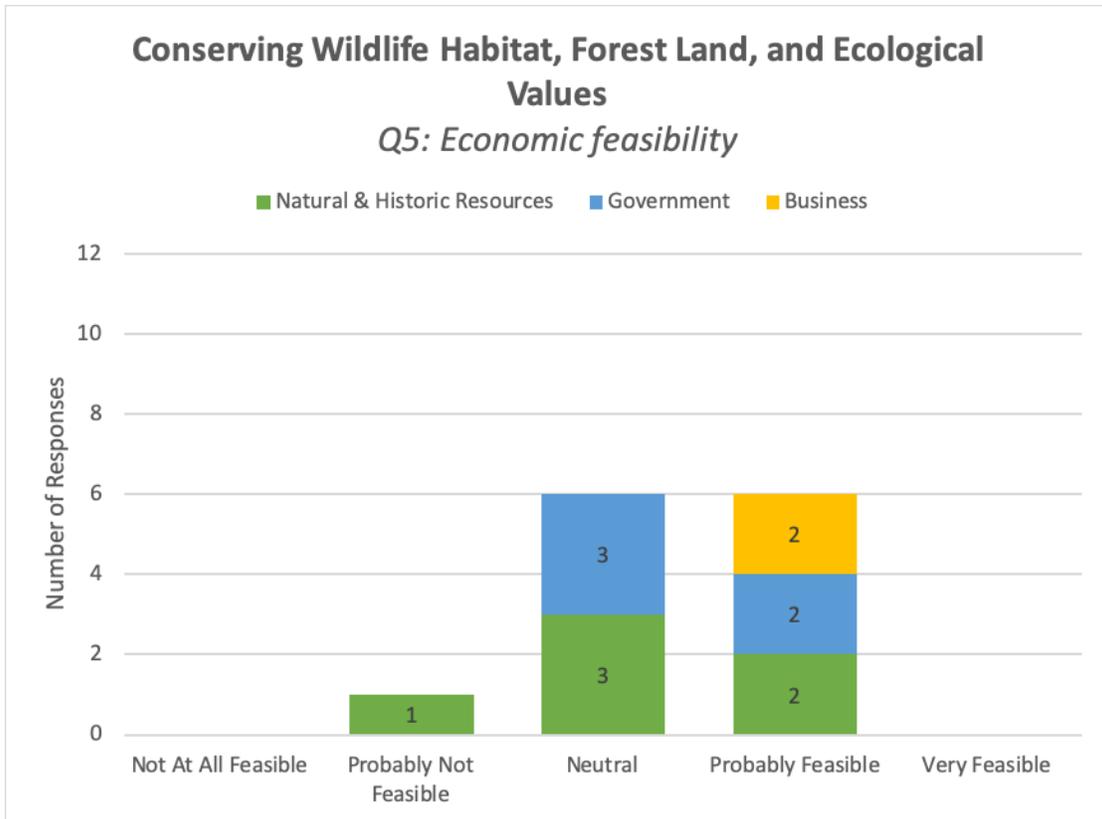
For this category of ideas, respondents were consistently and cautiously positive about their feasibility and impact, while also showing a range of responses. Only the economic feasibility of enhancing ecotourism elicited a single response that it was “probably not feasible.” With regard to the need to raise funds to implement this category of ideas, four respondents felt it was very important as many as seven were uncertain or “neutral.” While eight respondents felt this category of ideas would be “probably or very” politically feasible, four were uncertain or “neutral.” The greatest consensus, though cautious, emerged around the likelihood that this category of ideas would be publicly accepted (“somewhat (7) or very (2)” likely), and would also be likely to achieve the goal of sustainable economic development and ecological integrity (“somewhat (8) or very (2)” likely).

Category 3: Conserve Wildlife Habitat, Forest Land, and Ecological Values in the Watershed

- A. Develop policies/ programs to support and expand the Chickahominy Wildlife Management Area (CWMA) in Charles City County as a place where natural resources are preserved and actively managed for ecological integrity
 - i. Policies/programs may need to identify financial resources for this work. A first step would be to create a budget for specific goals, such as property acquisition, management, education, etc.
 - ii. Policies/ programs regarding property would also need to obtain widespread buy-in from local landowners, governments, and businesses
 - iii. Consider ways to expand river access through this CWMA, such as converting part of the CWMA to a state park with public river access, to enable education and ecotourism
- B. Develop watershed-wide policies/ programs to obtain water quality monitoring data relating to habitat and fish populations
- C. Develop watershed-wide policies/ programs for improving data on contiguous forest blocks, a high priority for certain state agencies
- D. Develop watershed-wide policies/ programs to engage and educate landowners about forest conversion and conservation easement planning and legacy planning. Example could include:
 - i. Provide the “land use” tax incentive (ag/ forestall districts) in Charles City County to support preservation of habitat and forest cover



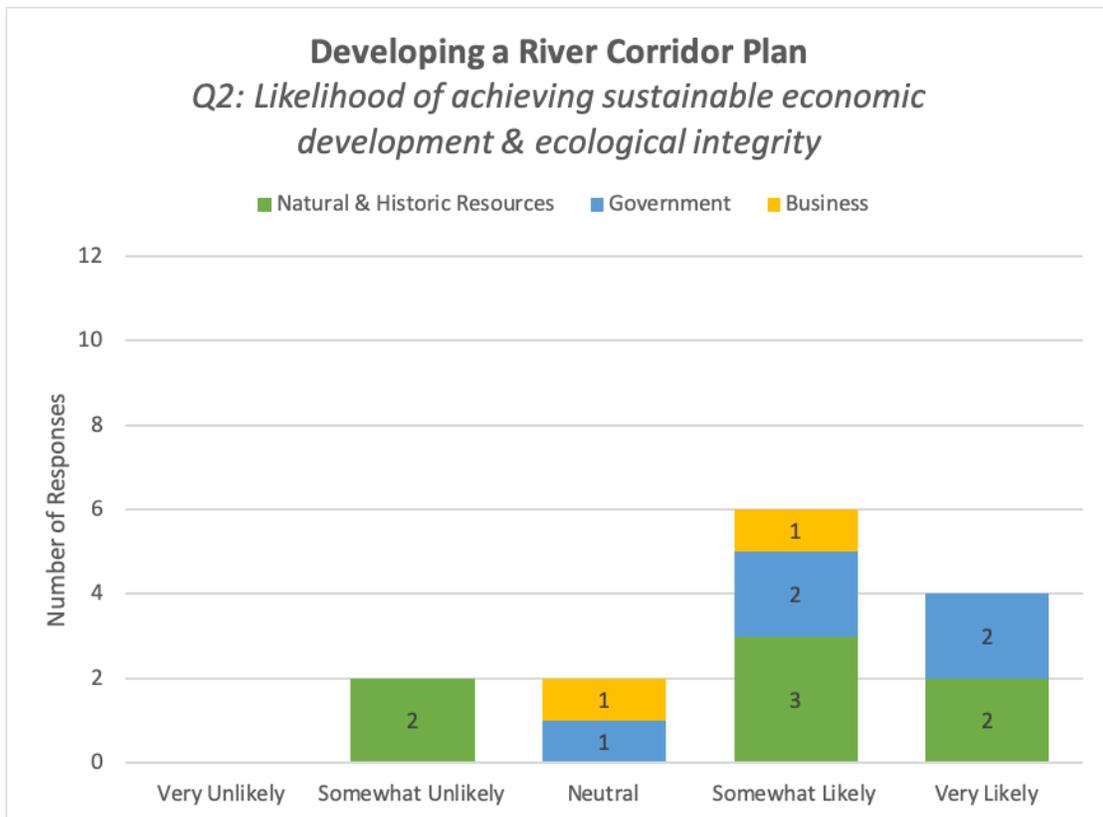
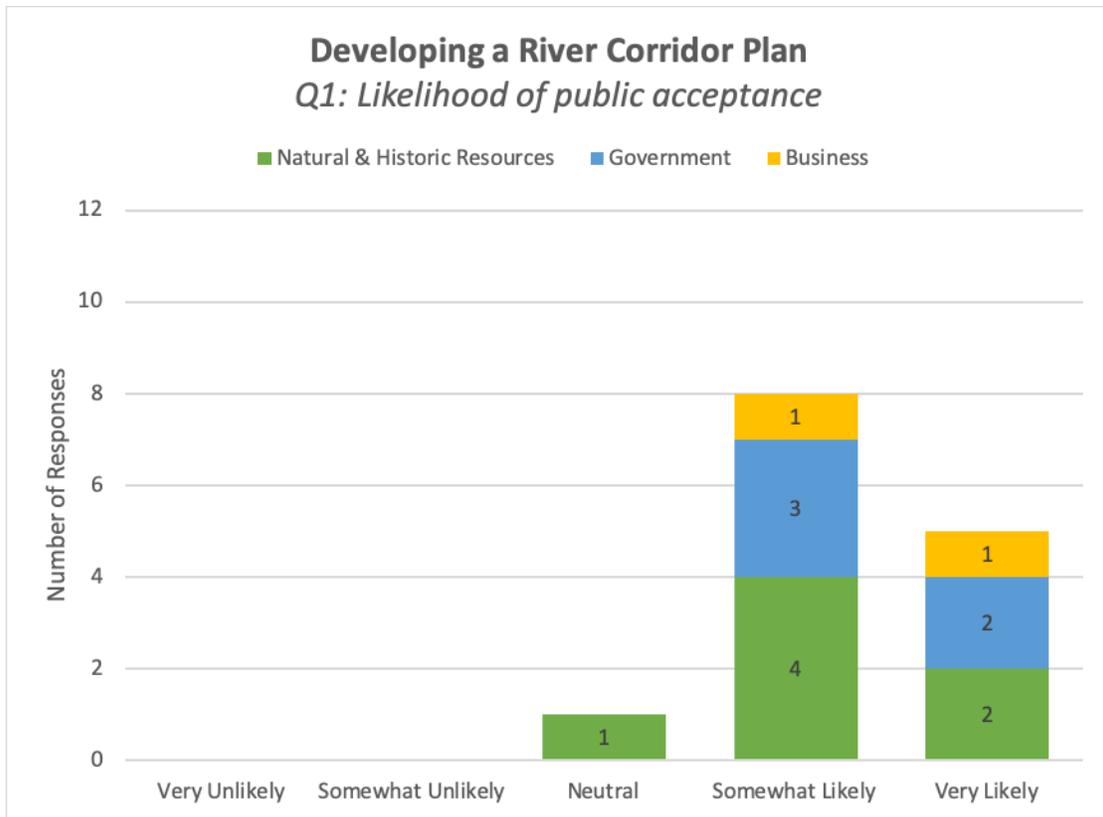


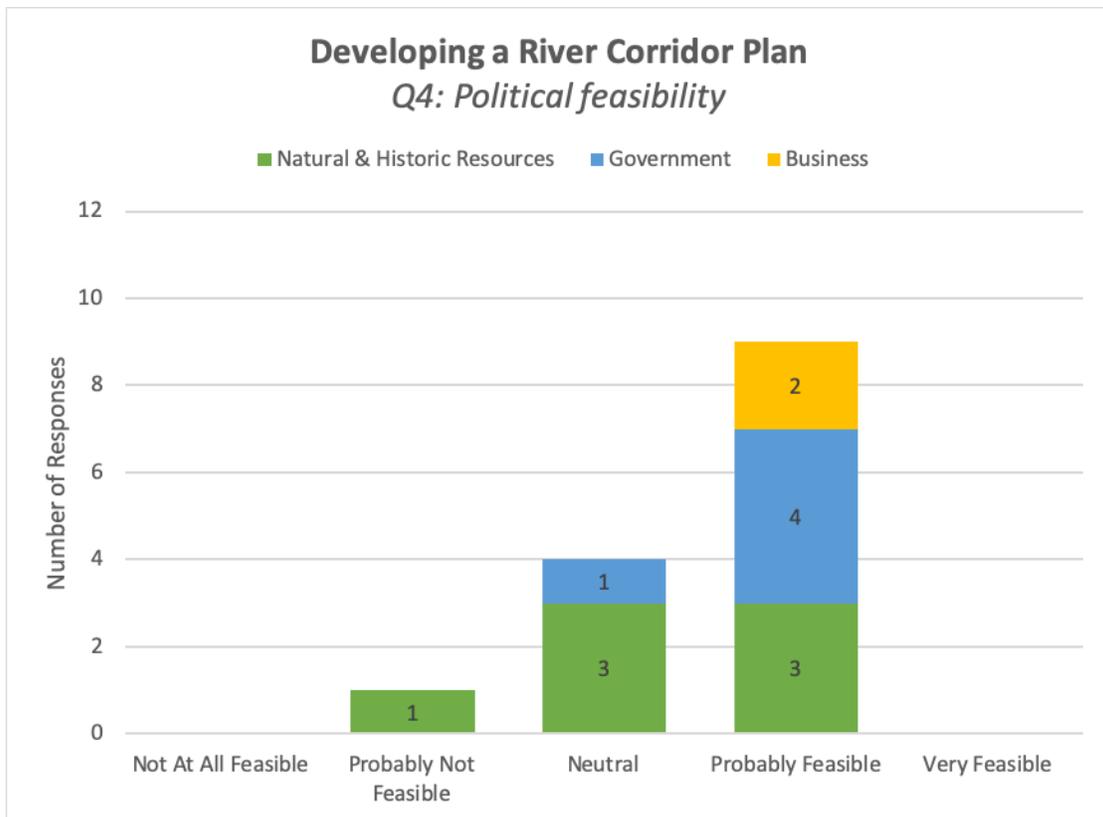
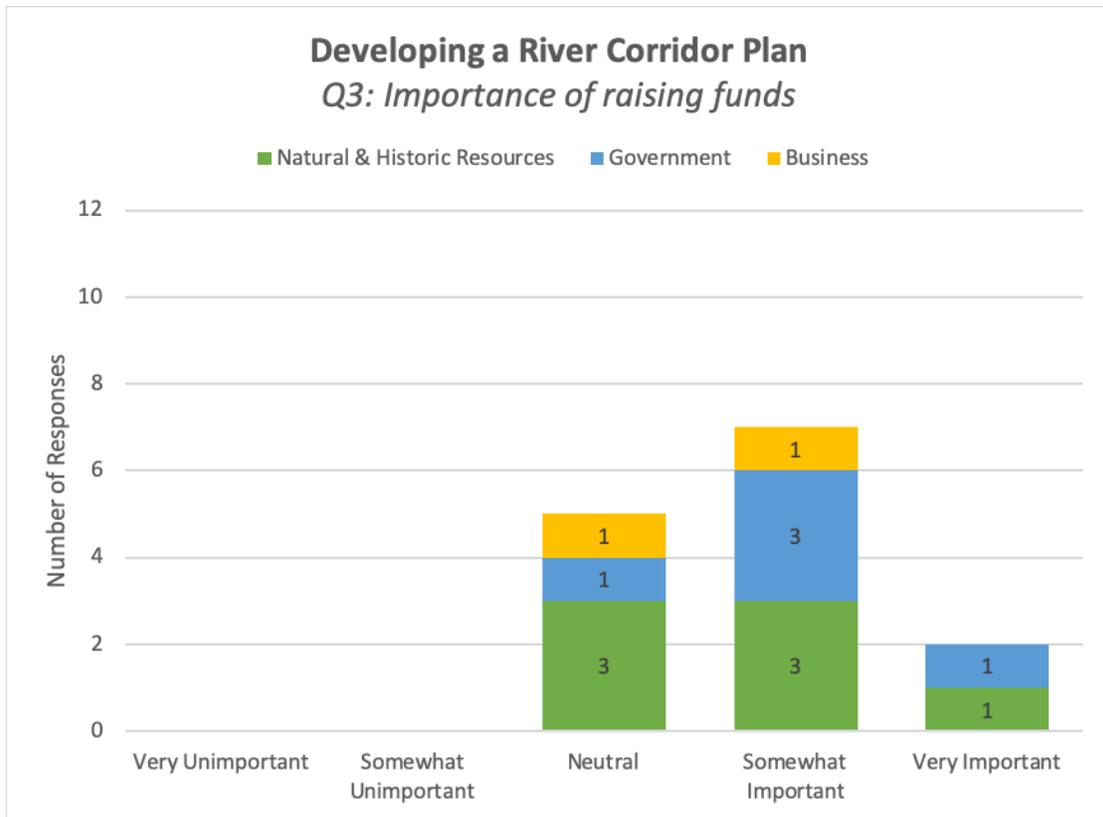


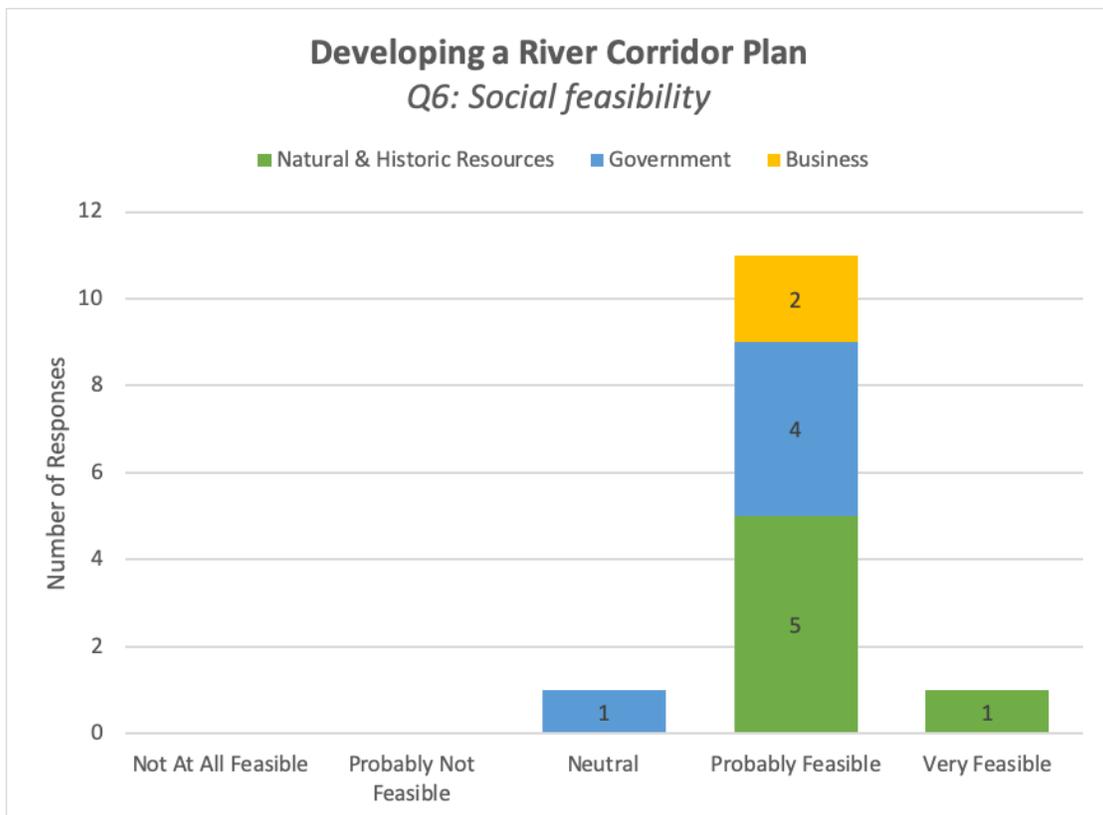
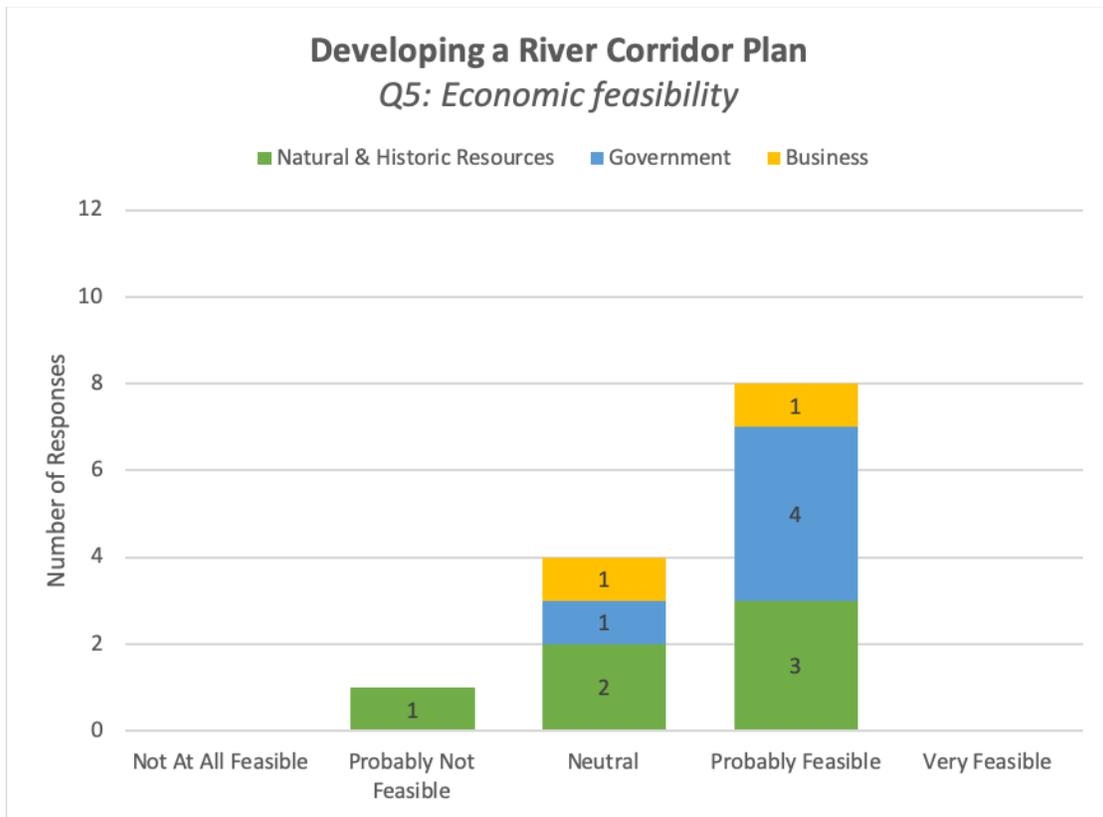
Focus group responses for the category of conserving wildlife habitat, forest land and ecological values were more varied than for previous topics. Although still generally ranked as “feasible” or “probably feasible,” there were more votes in the neutral or probably not feasible categories across the six questions. This category of ideas elicited the least positive responses regarding economic feasibility (6 neutral, 1 probably not feasible), followed by political feasibility (4 neutral, 2 probably not feasible), likelihood of achieving sustainable economic development and ecologic integrity (5 neutral, 1 probably not feasible), and then importance of raising funds (3 neutral, 2 probably not feasible). These responses reflect concerns expressed during the discussion when participants noted how funding is needed to purchase land or conservation easements, and that landowner education programs are difficult and require state and local government effort to achieve the goal.

Category 4: Engage the Watershed through a River Corridor Planning Process

- A. Design a Lower Chickahominy Watershed river corridor planning process that will:
 - i. Engage stakeholders, Tribes, and broader public in designing the river corridor.
 - ii. Educate stakeholders and build understanding and joint ownership in the river corridor.
 - iii. Highlight county Comprehensive Planning efforts, along with economic activity and ecological sustainability efforts.
 - iv. Engage stakeholders in designing where and how local history and accurate tribal history can be integrated for both ecological significance and business opportunity.
- B. Through this process, develop watershed-wide policies and programs for supporting and developing the river corridor plan. Examples could be:
 - i. Memoranda of Agreement (MOA) between key entities to pave the way for collaborative efforts in achieving the LCW project goals;
 - ii. Incentives such as tax breaks, decreased permit requirements for certain businesses and cooperative project efforts, etc.
 - iii. Encourage development projects that support ecological development efforts through “proffers;”
 - iv. Explicit recognition and inclusion of Tribes in business opportunities, formal presence at meetings, and consideration of their lands.







As with the previous three main topics, focus group respondents generally believe that engaging in a river corridor planning process would be publicly accepted and socially feasible. However, this category elicited more uncertainty overall. It is striking that no respondents felt this process was politically and economically “very feasible.” Some Natural and Historic Resources (NHR) respondents expressed the least certainty (*neutral or somewhat not feasible*) with regard to its likelihood of success in achieving the goals (*two responses that it is somewhat not feasible*), and half of the NHR respondents indicated that it is somewhat not politically and economically feasibility. Still, most respondents felt that a river corridor plan would be somewhat or very likely to help achieve sustainable economic development and ecological integrity. Also, most respondents agreed that it would be somewhat or very important to raise funds for implementing a river corridor plan.

THE PRESENTATION OF THE RANKED IDEAS AND GENERATION OF NEW IDEAS BASED ON FOCUS GROUP DISCUSSION

Under each of the four categories of ideas, each of the bar chart rankings were prioritized by the average score acquired during the focus group sessions score card. Many of the average scores reflect minor differences in participant’s perspective regarding advancing both sustainable ecological benefits and socio-economic but does provide a lens from which to advance the most agreed to ideas. In addition, at the end of the three focus group sessions, the final agenda topic was to see if there were any additional program and/or policy ideas stemming from our group effort and synergy. Numerous ideas came forward. A planned scorecard approach for these new ideas using our six questions was utilized and resulted in scoring of many of the new ideas but not all of them were scored by the focus group participants. For those new ideas not scored, they are included below as “new ideas.” However, the new program and policy ideas do represent a continued effort to widen the scope of implementation options for the LCWP and will be included in the public outreach process as the project moves forward. These ideas are presented below under each of the original topics, in the Focus Group where they were originally suggested.

1. Increase Low Impact Access to the River

- a. Develop watershed-wide policies and programs that support using the river as a “soft” economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming. Support/expand the Captain John Smith Water Trail through more and better signage.
 - o *3.94 public acceptance; 4.18 achieve goal; 4 raise funds; 3.88 politically feasible; 3.83 economically feasible; 3.75 socially feasible*
 - **Average score: 3.93**
- b. Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries.
 - iii. *3.82 public acceptance; 3.82 achieve goal; 3.88 raise funds important; 3.82 politically feasible; 3.75 economically feasible; 4 socially feasible*
 - i. **Average score: 3.85**
- c. Consider developing a Memoranda of Understanding (MOU) between the PDC, localities, and VDOT to advance river access through bridge restoration work
 - o *3.94 public acceptance; 3.94 achieve goal; 3.63 raise funds important; 3.77 politically feasible; 3.55 economically feasible; 4 socially feasible*
 - **Average score: 3.81**
- d. Develop programs to better educate stakeholders about water safety and to enforce existing safety and boating regulations; Establish a buoy system for safety

- a. *3.94 public acceptance; 3.75 achieve goals; 3.75 raise funds important; 3.83 politically feasible; 3.45 economically feasible; 3.91 socially feasible*
 - **Average score: 3.77**

New Ideas

- e. Establish public access and trail easement agreements
- f. Expand on the 2015 MOU between DCR, DGIF and VDOT to increase public access points statewide with emphasis on the LC
- g. Identify all existing access points including private sites
- h. Examine how to improve existing river access
- i. Support the Planning District Commissions to lead this regional effort
- j. Identify viewsheds for preservation
- k. Consider a Pamunkey Tribe and James City County MOU for shoreline design and restoration
- l. Establish matching grants programs to purchase waterfront property for public access
- m. Consider expanding the permitting process or leasing agreement for the Lower Chickahominy Wildlife Management Area to include passive use
- n. Consider development or improvement of noise emissions regulations from boats, motorcycles, and public
- o. Promote low-impact activities and “no wake” zones to mitigate the erosion on the living shoreline from foot traffic and larger waves
- p. Utilize “living shorelines” for river restoration projects where feasible with seasonal access available
- q. Execute a carrying capacity assessment to better understand boat users and access points
- r. State should consider funding private-public partnerships that promote business development such as additional river access and other “cooperative ventures” such as an Economic Development Authority (EDA)
- s. Obtain opinions of residents near the river to find out what their needs and wants are

2. Enhance Ecotourism in the Watershed

- E. Allow small lots along trails for economic development (e. g. small biking businesses, coffee shops)
 - a. *5 public acceptance; 5 achieve goal; 3 raise funds important; 5 politically feasible; 4 economically feasible; 4 socially feasible*
 - i. **Average score: 4.35**
- F. Create an app to show historic landmarks and other educational features
 - a. *4.5 public acceptance; 4.33 achieve goal; 4.17 raise funds important; 4.17 politically feasible; 3.33 economically feasible; 3.67 socially feasible*
 - i. **Average score: 4.03**
- G. Develop watershed-wide policies and programs to systematically integrate tribal and other history into ecotourism through collaboration among businesses, nonprofits, and tribes. Examples include combining winery and estate tours with ecological tours, including maritime and shipbuilding themes into tours (tying into the Deltaville Museum), re-enactments and other efforts and ensuring that tribal history is integrated throughout all aspects of ecotourism and is accurate; Map all appropriate ecotourism opportunities
 - a. *4.08 public acceptance; 3.84 achieve goals; 4.23 raise funds important; 3.69 politically feasible; 3.23 economically feasible; 3.77 socially feasible*
 - i. **Average score: 3.81**

- H. Develop watershed-wide policies and programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources and to integrate into the county comprehensive plan; Also use the county libraries as a resource
 - a. *3.75 public acceptance; 4 achieve goal; 3.83 raise funds important; 3.85 politically feasible; 3.46 economically feasible; 3.46 socially acceptable*
 - i. **Average score: 3.73**
- I. Adopt a short-term rental program
 - a. *3.67 public acceptance; 4.17 achieve goal; 3.33 raise funds important; 3.83 politically feasible; 3.4 economically feasible; 3.67 socially feasible*
 - i. **Average score: 3.68**
- J. Pursue marketing and promotional network (e.g. CCC to join the Richmond region tourism)
 - a. *3.83 public acceptance; 4.4 achieve goal; 4 raise funds important; 3.4 politically feasible; 2.8 economically feasible; 3.6 socially feasible*
 - i. **Average score: 3.67**
- K. Develop programs to provide broader awareness of and access to data (e.g. Coastal GEMS, Natural Heritage Explorer web site, and other demographic data)
 - a. *3.77 public acceptance; 3.54 achieve goal; 3.54 raise funds important; 3.85 politically feasible; 3.38 economically feasible; 3.54 socially feasible*
 - i. **Average score: 3.60**
- L. Create immersive experiences for the public including native foods restoration, establishing climax hardwood forests and tribal tours using tribe members depicting how they looked and viewed the landscape
 - a. *3.6 public acceptance; 4 achieve goal; 3.6 raise funds important; 3.6 politically feasible; 3.2 economically feasible; 3.6 socially feasible*
 - i. **Average score: 3.60**
- M. Develop watershed-wide policies/ programs to support/ expand on the Capital Bike Trail by creating spur bike trails heading north from the existing trail with separate pathways for bike trails to address safety concerns and developing a MOA between PDC's, localities and VDOT
 - a. *3.08 public acceptance; 3.08 achieve goal; 4.23 raise funds important; 3.69 politically feasible; 3.23 economically feasible; 3.77 socially feasible*
 - i. **Average score: 3.51**

3. Conserve Wildlife Habitat, Forest Land, and Ecological Values in the Watershed

- a. Develop programs and policies for wildlife corridors
 - o *4 public acceptance; 3.8 achieve goal; 3.8 raise funds important; 3.8 politically feasible; 3.2 economically feasible; 4.4 socially feasible*
 - **Average score: 3.83**
- b. Develop watershed-wide policies/ programs to obtain water quality monitoring data relating to human use (e-coli), habitat and fish populations; Specific water quality data for the Yarmouth and Gordon Creeks would be helpful
 - o *3.92 public acceptance; 3.46 achieve goal; 4.08 raise funds important; 3.62 politically feasible; 3.54 economically feasible; 4 socially feasible*
 - **Average score: 3.77**
- c. Create demo forests to illustrate pre-settlement forest structure of Native Americans
 - o *3.83 public acceptance; 3.67 achieve goal; 4 raise funds important; 4 politically feasible; 3 economically feasible; 3.5 socially feasible*

- **Average score: 3.67**
- d. Develop watershed-wide policies/ programs to engage and educate landowners about forest conversion and conservation easement planning and legacy planning; Consider connecting families with the Black Family Forest Land Trust or other organization
 - o 3.38 public acceptance; 3.92 achieve goal; 4 raise funds important; 3.46 politically feasible; 3.46 economically feasible; 3.69 socially feasible
- **Average score: 3.65**
- e. Develop watershed-wide policies/ programs for improving data on contiguous forest blocks which is a high priority for certain state agencies; Increase geospatial mapping efforts for conservation and wildlife corridors for potential prioritization
 - o 3.77 public acceptance; 3.38 achieve goal; 3.46 raise funds important; 3.62 politically feasible; 3.69 economically feasible; 3.85 socially feasible
- **Average score: 3.63**
- f. Promote ordinances for development that protects natural resources
 - o 3.4 public acceptance; 3.8 achieve goal; 3.2 raise funds important; 3.4 politically feasible; 3.4 economically feasible; 3.6 socially feasible
- **Average score: 3.47**
- g. Develop policies/ programs to support and expand the Chickahominy Wildlife Management Area (CWMA) in Charles City County as a place where natural resources are preserved and actively managed for ecological integrity; Utilize boating access study to identify strategies and policies; Public-private partnership for sustainable business development of parcels contiguous to the lower Chickahominy Wildlife Management Area particularly for river access
 - o 3.46 public acceptance; 3.46 achieve goal; 3.77 raise funds important; 2.32 politically feasible; 3.08 economically feasible; 3.38 socially feasible
- **Average score: 3.25**
- h. Map duck blinds and all other access points
 - ii. 3 public acceptance; 3 achieve goal; 2 raise funds important; 3 politically feasible; 4 economically feasible; 4 socially feasible
- **Average score: 3.17**

New Ideas

- i. Promote and support ordinances and policies that promote river protection for natural resources
- j. Develop policies and program to discourage forest fragmentation and help keep family tracts intact and economically viable
- k. Increase the quality and frequency of signage for the Lower Chickahominy Wildlife Management Area
- l. Ensure additional water quality monitoring costs are not borne by local businesses through an MOU process with the Department of Environmental Quality

4. Through a River Corridor Planning Process, Develop a LCWP Management Plan

- C. Design a Lower Chickahominy Watershed river corridor planning process; Educate all stakeholders in the process; Highlight county comprehensive planning efforts and engage stakeholders in how local and tribal history can be integrated for both ecological significance and business opportunity
 - o 4.35 public acceptance; 3.79 achieve goal; 3.79 raise funds important; 3.57 politically feasible; 3.62 economically feasible; 3.92 socially feasible
- **Average score: 3.84**

- D. Establish an umbrella organization or coalition, “Friends of the Lower Chickahominy”
 - *3.83 public acceptance; 3.67 achieve goal; 3.83 raise funds important; 3.83 politically feasible; 3.67 economically feasible; 4 socially feasible*
 - **Average score: 3.81**

- E. Through this process, develop watershed-wide policies and programs for supporting and implementing the river corridor plan; MOA between key entities; Consider incentives for sustainable business; Encourage development projects that support ecological development efforts through proffers; Ensure recognition and inclusion of Tribes in business opportunities, formal presence at meetings and consideration of their lands
 - *4.14 public acceptance; 3.64 achieve goal; 3.86 raise funds important; 3.36 politically feasible; 3.31 economically feasible; 3.85 socially feasible*
 - **Average score: 3.69**

- F. Develop and integrate non-traditional BMPs of existing water quality and stormwater mitigation resources to promote river corridor integrity
 - *3.33 public acceptance; 3 achieve goal; 2.67 raise funds important; 2.67 politically feasible; 2.83 economically feasible; 3.17 socially feasible*
 - **Average score: 2.95**

New Ideas

- G. Develop the plan
- H. Meet with local leaders to identify existing plans that should be rolled into the Master LCWP Plan
- I. Before unrolling the process, meet with local leaders to add strength and value to the grassroots advocacy
- J. Model impacts of development on the entire watershed in the Plan

Appendix 8: Electronic Survey Questions

Each strategy under the six goals were asked the following four questions which participants were asked to rank:

1. What is the likelihood of public acceptance of each idea?
2. What is the likelihood that the idea will help the Lower Chickahominy Watershed achieve the goal of advancing sustainable economic development while protecting the watershed's ecological integrity?
3. How politically feasible do you think it is for the Watershed counties to adopt and implement the idea?
4. How economically feasible do you think it is for the Watershed counties to adopt and implement the idea?

GOAL 1: Promoting policies and programs that promote and support natural resources and river protection.

- A. **River as an Economic Driver:** Develop watershed-wide policies and programs that support using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming.
- B. **River Noise:** Development or improvement of noise emissions regulations from boats, motorcycles, and public.
- C. **River Shoreline Erosion:** Establish policies to better support "living shorelines" for river restoration projects where feasible, allowing seasonal access where appropriate, including policies that promote low-impact activities and "no wake" zones to mitigate the erosion on the living shoreline from foot traffic and larger waves.
- D. **River Access:** Establish public access and trail easement agreements.
- E. **Comprehensive Plans:** Engage stakeholders in how local and tribal history can be integrated into the three county Comprehensive Plans for both ecological significance and business opportunity.
- F. **Tribal History:** Develop watershed-wide policies and programs to systematically integrate tribal history into ecotourism through collaboration among businesses, nonprofits, and tribes, to ensure recognition and inclusion of tribes in business opportunities and ensure their formal presence at meetings and consideration of their lands

GOAL 2: Using written agreements to achieve our goals

- A. **Water Quality Monitoring Data:** Develop watershed-wide policies/programs to obtain water quality monitoring data relating to human use (e-coli), habitat and fish populations and ensure that these monitoring costs are not borne by local businesses through an MOU process with the Department of Environmental Quality (Specific water quality data for the Yarmouth and Gordon Creeks would be helpful).

- B. **River Access through Bridge Restoration:** Strengthen or augment the existing Memoranda of Understanding (MOU) between VDOT and other state agencies to consider public access when planning bridge restoration work. Additional emphasis could be paid to the Lower Chickahominy River watershed and altering language focused on public access implementation.
- C. **Expand the Virginia Capital Trail:** Develop watershed-wide policies/ programs to expand on the Capital Trail by creating spur trails heading north from the existing trail. Separate multi-use pathways from state roads to address safety concerns.

GOAL 3: Advancing business and ecotourism efforts

- A. **State Assistance Development Funding:** The State should consider funding private-public partnerships that promote business development, such as additional river access and other “cooperative ventures” like an Economic Development Authority (EDA).
- B. **State or Local Incentives:** Consider incentives for sustainable business and encourage development projects that support ecological development efforts through proffers or other incentives.
- C. **Matching Grants:** Establish a matching grants programs to purchase waterfront property for public access.
- D. **Marketing:** Pursue a marketing and promotional Lower Chickahominy Watershed network
- E. **Business Opportunities:** Allow small lots along trails, particularly the Virginia Capital Trail, for small business economic development (e. g. small biking businesses, coffee shops and short-term rental program).
- F. **Business Resources:** Develop and integrate non-traditional water quality best management practices and stormwater mitigation resources to promote river corridor integrity.
- G. **Packaging Economic Opportunities with History (Paddle & Pedal):** Combine different types of tourism experiences to create larger tourist packages, such as combining winery and estate tours with ecotourism. Other examples include a) incorporating maritime and shipbuilding themes into tours (e.g. tying into the Deltaville Museum), b) creating immersive experiences for the public including native foods restoration, c) establishing climax hardwood forests and tribal tours using tribe members depicting how they looked and viewed the landscape, and d) reenactments and other efforts and ensuring that accurate tribal history is integrated throughout all aspects of ecotourism.

GOAL 4: Increasing historical engagement and citizen education

- A. **Tribal History:** Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries.
- B. **Water Safety:** Develop programs to better educate citizens about water safety and to enforce existing safety and boating regulations and establish a buoy system for safety.
- C. **Phone Application (APP):** Develop an app that provides all appropriate ecotourism opportunities and historic landmarks/other educational features.

- D. **Economic Development:** Develop watershed-wide programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources and to integrate into each county's comprehensive plan.

GOAL 5: Expanding watershed knowledge

- A. **Assessment:** Execute a river carrying capacity assessment to better understand boat users and access points. Obtain resident's opinions near the river to find out what their needs and wants are. Includes mapping of all river access points including duck blinds, and important viewsheds needing preservation (including private sites) and examine methods for improving them.
- B. **Natural Resources Data:** Develop watershed-wide policies/ programs for improving data on contiguous forest blocks. Increase geospatial mapping efforts for conservation and wildlife corridors for potential prioritization.

GOAL 6: Enhancing public outreach

- A. **Signage:** Increase the quality and frequency of signage for river access in the Lower Chickahominy Watershed, as well as for the Captain John Smith Water Trail.
- B. **Advocacy:** Establish an umbrella organization or coalition, "Friends of the Lower Chickahominy."
- C. **Natural Resources Data Access:** Develop programs to provide greater awareness of and access to data (e.g. Coastal GEMS, Natural Heritage Explorer web site, and other demographic data)
- D. **Public Education for Family Legacy and Forest Conservation:** Develop watershed-wide programs to engage and educate landowners about forest conversion and conservation easement and legacy planning to discourage forest fragmentation and help keep family tracts intact and economically viable by connecting families with local family land trusts.

Appendix 9: Electronic Survey Results and Summary February 2020

The five-year strategy developed in 2016 by the Virginia Coastal Zone Management Program (VCZMP) initiated a collaborative planning process across three counties in the Lower Chickahominy watershed (LCW) to identify and establish an overarching vision for land use and land conservation priorities. The effort supports improved coordination between natural resource agencies, local governments, tribal governments, and regional organizations and interests in planning for coastal areas. This approach will build and strengthen relationships and partnerships among multiple stakeholders across the watershed.

Year three of the project involves developing and implementing an expanded stakeholder outreach and communication strategy to: (1) further define stakeholder interests and issues, and (2) develop and refine potential coordinated watershed policies and strategies for maximizing both socio-economic and ecological benefits. The Institute for Engagement & Negotiation (IEN) at the University of Virginia was contracted to support the VCZMP and the Richmond area Regional Planning District Commission (PlanRVA) in conducting outreach to watershed stakeholders.

First, IEN conducted a series of 16 thought leader interviews in mid-May 2019, drawing from active stakeholders and leaders in the LCW. These interviews formed the basis for the main ideas and themes for the project. Second, to test these ideas and themes, and to develop more specific ideas for policies and strategies, IEN facilitated three Focus Groups in early August 2019, organized along affinity interests of natural and historic resources, economic development, and government. Last, working with the steering committee, IEN developed and conducted an electronic survey for broader outreach to the stakeholders of the watershed, to further refine and test the emerging proposals for policies and strategies.

THOUGHT LEADER INTERVIEWS

Using the three foundational elements of better incorporating history, integrating tribes and tribal history and maintaining ecological integrity resulting from the thought leader interview process, the following five specific ideas rose to the top during the thought leader interviews. Many thought leaders identified **increasing public access to the river** as their number one priority. Critical to this priority is the need for stewardship of the resource. As access to the river is increased, it is vital that the river resource is not degraded. Closely tied to this idea is the priority of **developing a river corridor plan**.

A second priority that emerged from thought leaders is **enhancing ecotourism**, combined with local history and increased venue availability such as restaurants. Increased educational/ informational work related to the combined ecotourism/history/restaurant elements is necessary to advance project goals. Many of these ideas require additional river access. Thought leaders see experiential learning opportunities as a key component of this priority, with the goal of connecting people to the river. Leveraging the Capital Bike Trail is a foundation for further economic activity under this priority. Similarly, thought leaders suggested that development of trail spurs heading north from the existing trail is an important idea to pursue.

A third priority for many thought leaders is the **conservation of existing habitat and forest cover**. Engaging landowners, reaching out to educate them on forest conversion, conservation easement

planning, and legacy planning, and seeking additional incentives such as land use taxation for Charles City County – all could aid in conserving existing habitat and forest cover.

Thought leaders also suggested that a key method for advancing these priorities is **the development of formal agreements**, such as Memoranda of Agreements (MOA) between stakeholders. MOA's would be an important early step in clarifying relationships and advancing work in the LCW, as formal agreements provide a pathway for cooperative work to occur. While not the only method for working together, the negotiation of MOA's was a way to start a process that leads to additional collaborative efforts and increased synergy between stakeholders.

FOCUS GROUP MEETINGS

The above priorities and associated information derived from the thought leader interviews laid the groundwork for the three focus group meetings. The three focus groups were organized by specific sector or topic: (1) Natural and Historic Resources, (2) Government, and (3) Business Communities. For each sector, the target focus group size was between seven and fifteen stakeholders representing interests in that sector. A total of 27 stakeholders participated in the three focus groups. Focus group participants were identified in collaboration with the project Steering and Outreach Committees.

From the top priorities identified through the thought leader interviews, four main ideas were tested with the focus groups. These ideas are not mutually exclusive but closely aligned conceptually and in implementation:

- Increasing public access to the river;
- Enhancing ecotourism;
- Conserving forest land and existing habitat;
- Development of a river corridor plan.

Robust conversations in the focus groups led to numerous substantive proposals for policies and strategies that would advance these four watershed priorities. The specific policies and strategies developed during the focus groups are provided in the [Focus Group Summary section](#).

THE STAKEHOLDER SURVEY PROCESS AND RESULTS

For the final phase of the watershed stakeholder outreach, IEN worked closely with the project Steering and Outreach Committees (OC) to develop a survey for broad distribution. The goal of the survey was to further validate the emerging themes, as well as specific proposals for policies and strategies that had emerged from the focus groups. Through discussions about appropriate methods for distributing the survey, the OC decided that its members would distribute the survey to watershed stakeholders, colleagues, and other appropriate constituents. Rather than a broad approach seeking feedback from anyone in the watershed, the distribution targeted individuals with a basic knowledge and understanding of the watershed, who might use the LCW for recreation or other uses, and who either lived in or visited the LCW. The survey questions are provided in [Appendix 8](#). The survey was open for four weeks and closed December 2, 2019.

IEN developed a multi-layered response format for the survey. The goal was to obtain respondent perspectives on the viability of each policy or strategy, using the following four basic questions:

1. What is the likelihood of **public acceptance** of each idea?
2. What is the likelihood that the idea will help the Lower Chickahominy watershed **achieve the goal** of advancing sustainable economic development while protecting the watershed’s ecological integrity?
3. How **politically feasible** do you think it is for the watershed counties to adopt and implement the idea?
4. How **economically feasible** do you think it is for the watershed counties to adopt and implement the idea?

Out of 101 individuals who opened the survey, 71 individuals completed the demographic questions, and 53 completed all or most of survey. The demographic results are presented below.

Chart #1: Survey respondent’s Age

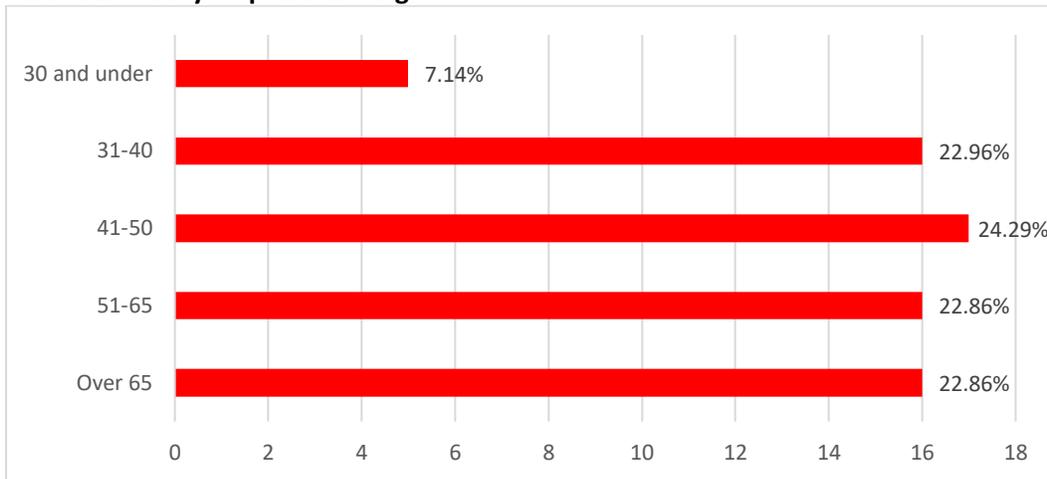


Chart #2: Survey Question: Do you live in the Lower Chickahominy Watershed?

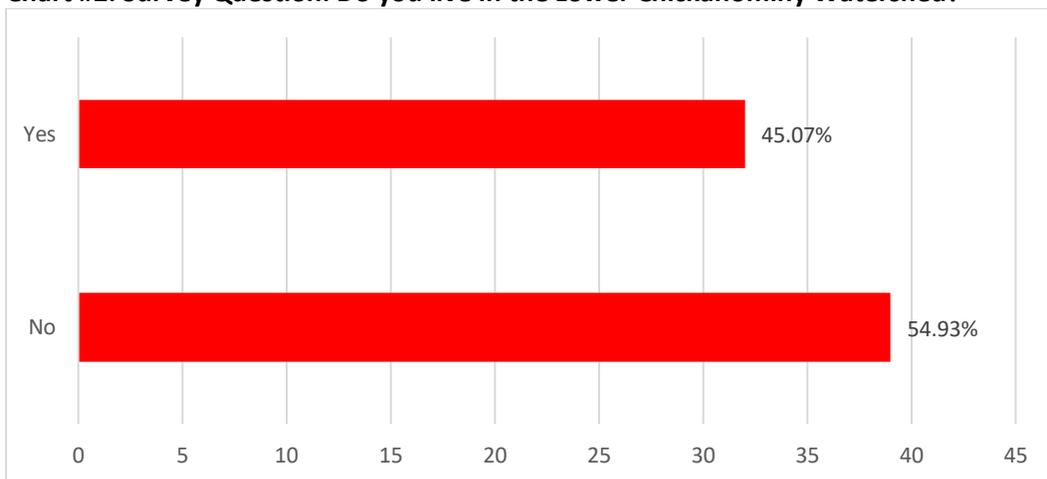


Chart #3: Survey Question: Which county do you live in?

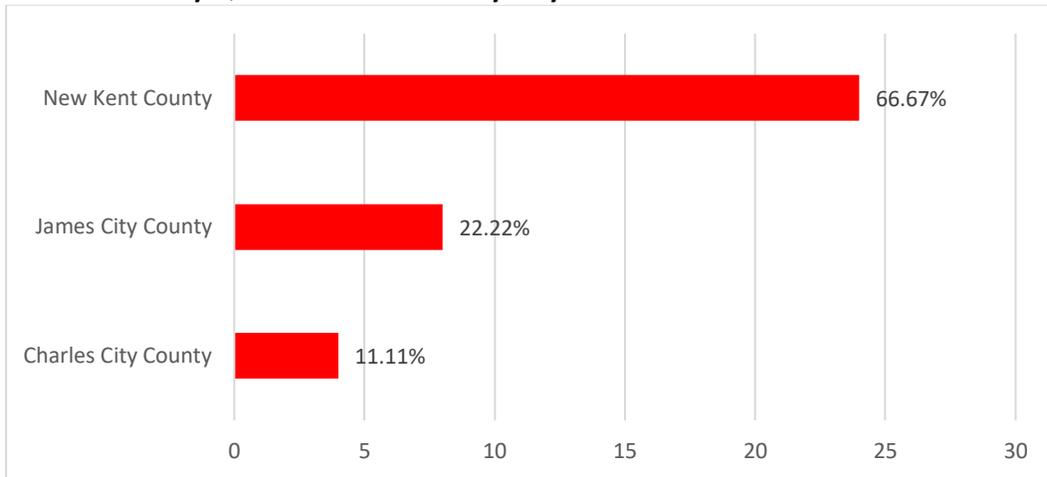
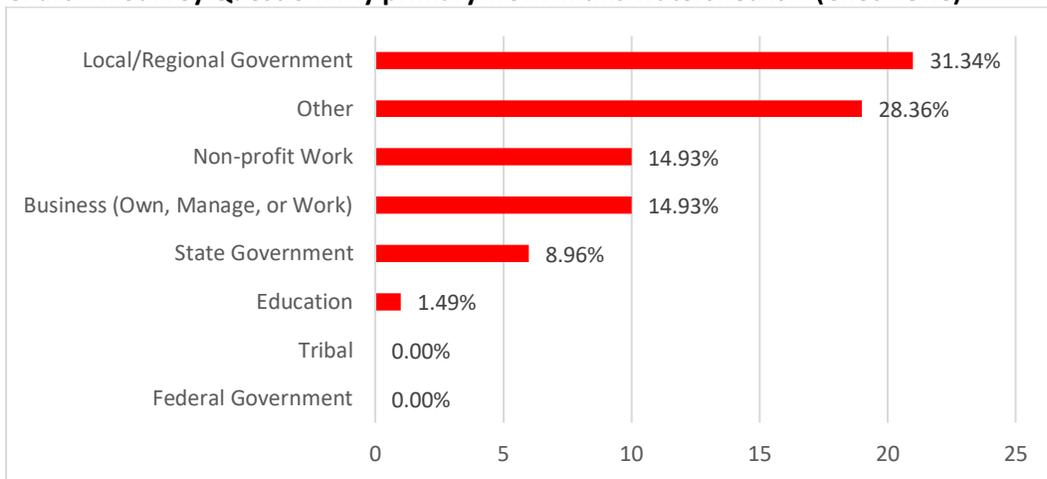


Chart #4: Survey Question: My primary work in this watershed is... (Check One)

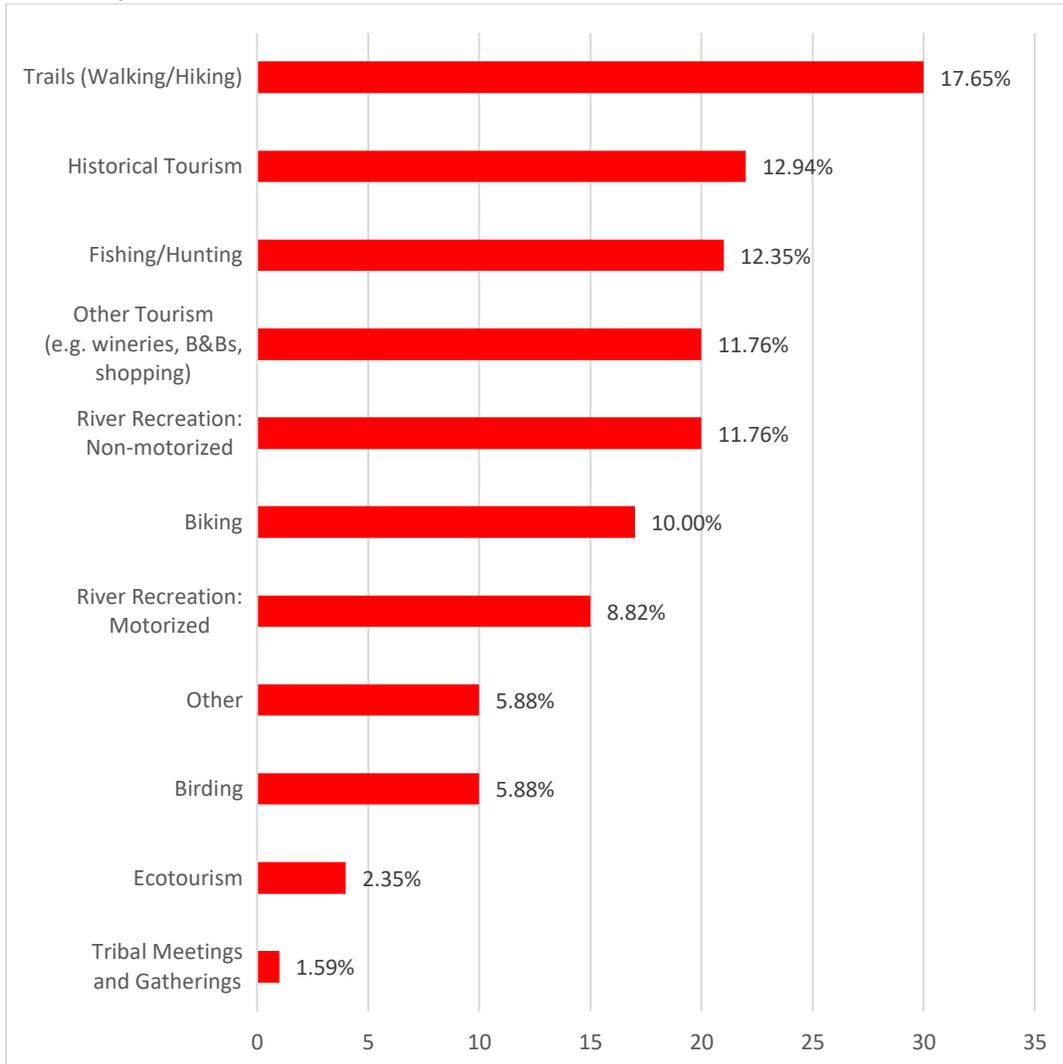


Based on the above demographic analysis, survey respondents represent a balanced distribution across all age brackets, with the exception of those under 30 years. Only five individuals under the age of 30 responded to the survey. Additionally, in terms of where respondents live, there was also good balance between those living in and those living outside the watershed. Out of 71 respondents to this question, 39 live in the watershed and 32 live outside watershed.

For the 39 respondents who live in the watershed, there was less overall balance of representation between the three counties. With 32 responding to this more specific demographic question, the large majority of 24 (67%) from New Kent County. This may reflect the growing nature of New Kent County, as it represents the urban-rural interface between the more rural Charles City County and more highly urbanized James City County.

Regarding where survey respondents work, there is good representation across all sectors, with the exception of zero respondents with both federal government and tribes. Out of 67 respondents, the top two groups are 21 (30%) who work for local and/or regional government, and 19 (28%) who work in “other.” This response indicates considerable variation in workplace, suggesting that the survey represents a range of stakeholder perspectives on the issues surrounding the LCW.

Chart #5: Survey Question: My primary activities in the watershed are... (Choose Your Top Three Activities)

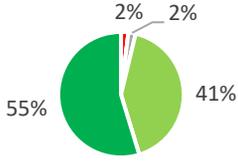
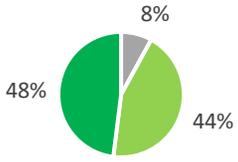
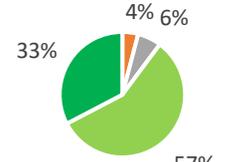
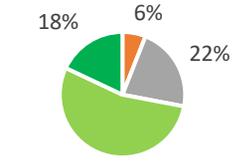
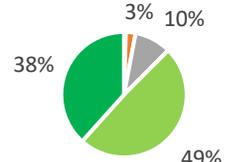
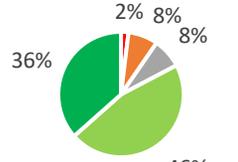
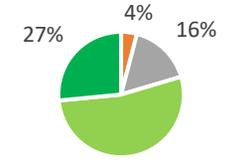
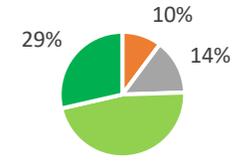
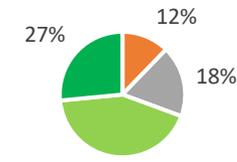
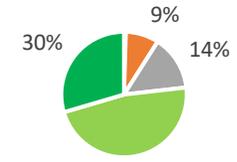
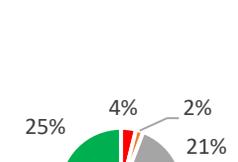
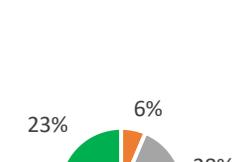
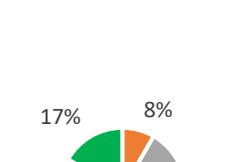
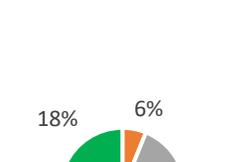
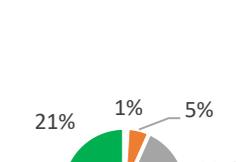


Respondents' three primary activities in the watershed demonstrate that the most popular activity in the watershed is walking/hiking on trails, accounting for 30 of 71 respondents. Furthermore, walking/hiking on trails was popular among all age groups. The second most popular activity is historical tourism with 22 respondents, which adds considerable weight to the emerging watershed priority of enhancing historical and tribal history tourism activities. In contrast, the topic of "ecotourism" by itself was identified as a primary activity by only four respondents. This low number might be explained by the other categories listed, which are more specific forms of ecotourism activities. For example, fishing/hunting (21), other tourism such as wineries and Bed & Breakfast locations (20), and non-motorized river recreation (20), formed a strong second tier of primary activities and was also popular among all age groups. Taken together, these responses confirm the information gathered through the focus groups that the river is an important destination and opportunity for enhancing ecological condition and promoting sustainable economic development.

GOAL SURVEY RESPONSES

Goal 1: Promoting policies and programs that promote and support natural resources and river protection						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
River as an Economic Driver	Develop watershed-wide policies and programs that support using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming.	<p>N=53</p>	<p>N = 50</p>	<p>N= 50</p>	<p>N=51</p>	
River Noise	Development or improvement of noise emissions regulations from boats, motorcycles, and public.	<p>N=53</p>	<p>N=49</p>	<p>N=49</p>	<p>N=50</p>	
River Shoreline Erosion	Establish policies to better support "living shorelines" for river restoration projects where feasible, allowing seasonal access where appropriate, including policies that promote low-impact activities and "no wake" zones to mitigate the erosion on the living shoreline from foot traffic and larger waves.	<p>N=53</p>	<p>N=49</p>	<p>N=49</p>	<p>N=50</p>	

Lower Chickahominy Watershed Project: Year 3 Stakeholder Engagement Process

River Access	Establish public access and trail easement agreements.	 <p>N=53</p>	 <p>N=50</p>	 <p>N=49</p>	 <p>N=50</p>	
Comprehensive Plan	Engage stakeholders in how local and tribal history can be integrated into the three county Comprehensive Plans for both ecological significance and business opportunity.	 <p>N=52</p>	 <p>N=49</p>	 <p>N=49</p>	 <p>N=49</p>	
Tribal History	Develop watershed-wide policies and programs to systematically integrate tribal history into ecotourism through collaboration among businesses, nonprofits, and tribes, to ensure recognition and inclusion of tribes in business opportunities and ensure their formal presence at meetings and consideration of their lands in ecotourism opportunities.	 <p>N=52</p>	 <p>N=47</p>	 <p>N=48</p>	 <p>N=49</p>	

As shown above, of the six elements of Goal One, only one, the development or improvement of noise emissions regulations from boats, motorcycles, and public,” was viewed by less than 50% of respondents as “probably viable” or “very viable.” The remaining policy and strategy proposals were all viewed by more than 50% of respondents as probably or very viable. Of these, river access was scored by the most respondents (38%) as “very viable,” and also received the highest combined score of probably and very viable (87%). In addition, integrating local and tribal history into comprehensive planning scored high as probably or very viable (90%) in advancing economic development while protecting the watershed’s ecological integrity. The importance of integrating local and tribal history into ecotourism also scored well and supports the idea of working closely with tribes to advance river policies and programs in the LCW. In terms of combined “overall viability,” river access (87%) was followed by using the river as an economic driver (81%), engaging stakeholders to integrate local and tribal history into the comprehensive plan (77%), supporting river shoreline erosion (72%), and developing policies and programs to integrate tribal history into ecotourism (65%).

Goal 2: Using written agreements to achieve our goals						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
Water Quality Monitoring Data	Develop watershed-wide policies/programs to obtain water quality monitoring data relating to human use (e-coli), habitat and fish populations and ensure that these monitoring costs are not borne by local businesses through an MOU process with the Department of Environmental Quality.	<p>N=49</p>	<p>N=48</p>	<p>N=48</p>	<p>N=48</p>	<p>N=48</p>
River Access through Bridge Restoration	Strengthen or augment the existing Memoranda of Understanding (MOU) between VDOT and other state agencies to consider public access when planning bridge restoration work.	<p>N=49</p>	<p>N=47</p>	<p>N=47</p>	<p>N=48</p>	<p>N=48</p>
Expand the Virginia Capital Trail	Develop watershed-wide policies/ programs to expand on the Capital Trail by creating spur trails heading north from the existing trail. Separate multi-use pathways from state roads to address safety concerns.	<p>N=48</p>	<p>N=47</p>	<p>N=47</p>	<p>N=48</p>	<p>N=48</p>

For Goal Two, using written agreements to achieve project goals, the three proposed policies and strategies were all seen as highly viable by respondents. The use of water quality monitoring data as a way to ensure that monitoring costs are not borne by local businesses received the highest overall viability of 84%.

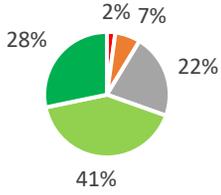
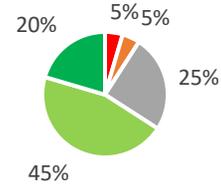
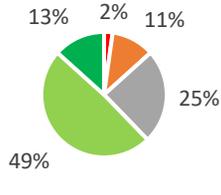
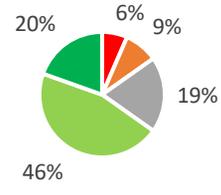
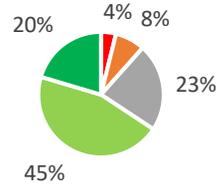
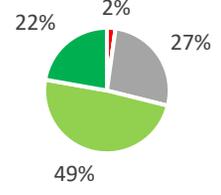
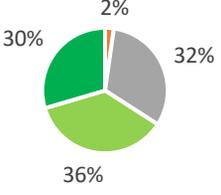
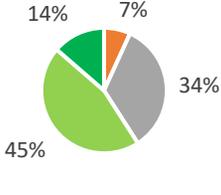
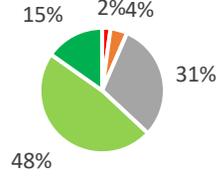
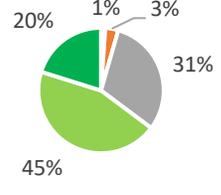
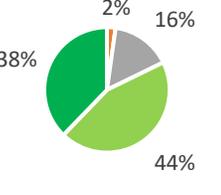
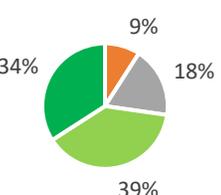
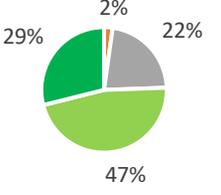
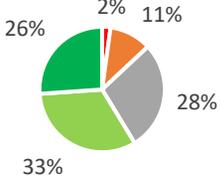
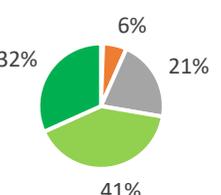
An ongoing effort for the Commonwealth of Virginia is the working concept of creating river access statewide when bridge restoration work occurs. This has been a successful, collaborative effort between the Virginia Department of Transportation and natural resource agencies over the last decade or more. Respondents viewed the use of local written agreements or Memoranda of Understanding to achieve increased river access as a strategy that would have high viability, with 76% indicating it would be probably or very viable.

Furthermore, the idea of expanding the Capital Bike Trail was seen as very viable, with 72% indicating it would be probably or very viable. Based on conversations in the Focus groups, efforts could begin soon to plan for developing connecting bike rails or adding to the current Capital Bike Trail system through federal or state grants and funding.

It is striking that all three proposals received the highest scores of viability in their likelihood of acceptance by the public, with water quality monitoring viewed by 98% of respondents as probably or very viable, followed by expansion of the bike trail (90%), and river access through bridge restoration MOU's (88%).

Goal 3: Advancing business and ecotourism efforts						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
State Assistance Development Funding	The State should consider funding private-public partnerships that promote business development, such as additional river access and other “cooperative ventures” like an Economic Development Authority (EDA).	<p>N=46</p>	<p>N=46</p>	<p>N=46</p>	<p>N=46</p>	<p>N=46</p>
State or Local Incentives	Consider incentives for sustainable business and encourage development projects that support ecological development efforts through proffers or other incentives.	<p>N=47</p>	<p>N=45</p>	<p>N=45</p>	<p>N=46</p>	<p>N=46</p>
Matching Grants	Establish a matching grants programs to purchase waterfront property for public access.	<p>N=46</p>	<p>N=43</p>	<p>N=45</p>	<p>N=46</p>	<p>N=46</p>
Marketing	Pursue a marketing and promotional Lower Chickahominy Watershed network.	<p>N=46</p>	<p>N=44</p>	<p>N=45</p>	<p>N=46</p>	<p>N=46</p>

Lower Chickahominy Watershed Project: Year 3 Stakeholder Engagement Process

<p>Business Opportunities</p>	<p>Allow small lots along trails, particularly the Virginia Capital Trail, for small business economic development (e.g. small biking businesses, coffee shops and short-term rental program).</p>	 <p>N=46</p>	 <p>N=44</p>	 <p>N=45</p>	 <p>N=46</p>	
<p>Business Resources</p>	<p>Develop and integrate non-traditional water quality best management practices and stormwater mitigation resources to promote river corridor integrity.</p>	 <p>N=45</p>	 <p>N=44</p>	 <p>N=44</p>	 <p>N=46</p>	
<p>Packaging Economic Opportunities with History</p>	<p>Combine different types of tourism experiences to create larger tourist packages, such as combining winery and estate tours with ecotourism. Other examples include a) incorporating maritime and shipbuilding themes into tours (e.g. tying into the Deltaville Museum), b) creating immersive experiences for the public including native foods restoration, and c) reenactments and other efforts and ensuring that accurate tribal history is integrated throughout all aspects of ecotourism.</p>	 <p>N=45</p>	 <p>N=44</p>	 <p>N=45</p>	 <p>N=46</p>	

Within Goal three, “advancing business and ecotourism efforts,” all policy and strategy proposals were seen by more than 50% of respondents as probably or very viable. The concept of packaging economic opportunities with history received the highest overall viability, with 73% of respondents indicating it would be probably or very viable. All other proposals were given very close overall viability scores, from 62% at the low end for state assistance for public-private partnerships to 68% at the high end for the proposal to develop a marketing and promotional Lower Chickahominy Watershed network.

It is also interesting to note that the number of respondents who were unsure or “neutral” about the viability of these ideas was higher in this goal than for any other goal in the survey. This category of policy and strategy proposals also did not garner as high overall viability scores as those proposed for other three goals, as none of them achieved 80% or greater overall viability.

Some policy and strategy proposals garnered strong viability scores of over 75% in one or two specific categories, such as public acceptance, while faring less well with weaker viability scores of under 50% on other categories. For example, for public acceptance, the idea of using state or local incentives to encourage development projects that support ecological development efforts through proffers or other incentives was given a probably or very viable score of 83%, but only 49% political viable and 48% economic viable. Similarly, establishing a matching grants programs to purchase waterfront property for public access was seen by 78% of respondents as probably or very likely to receive public acceptance, and by 81% as probably or very likely to support economic development, while only 49% politically viable and 47% economically viable.

Taken together, these scores may reflect greater caution about specific types of viability or may reflect less of an understanding of the potential business opportunities available such as state development incentive funding, small business loans, or knowledge of packaged business approaches. Still, the overall viability remains positive for all Goal Three ideas.

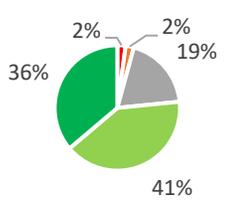
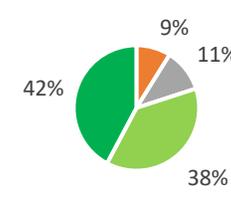
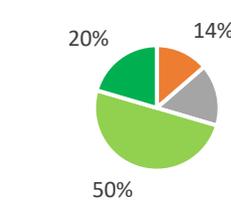
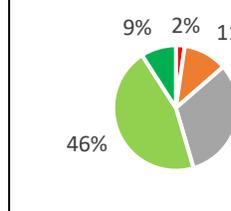
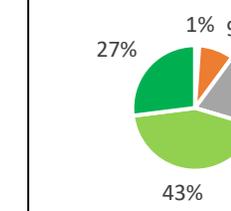
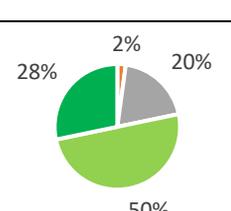
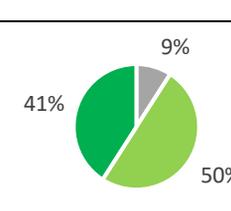
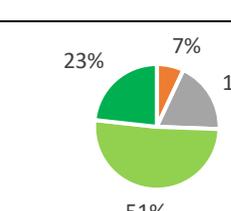
Goal 4: Increasing historical engagement and citizen education						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
Tribal History	Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries.	<p>N=47</p>	<p>N=47</p>	<p>N=46</p>	<p>N=45</p>	
Water Safety	Develop programs to better educate recreationists about water safety and to enforce existing safety and boating regulations and establish a buoy system for safety.	<p>N=47</p>	<p>N=46</p>	<p>N=45</p>	<p>N=46</p>	
Phone Application (APP)	Develop an app that provides all appropriate ecotourism opportunities and historic landmarks/other educational features.	<p>N=47</p>	<p>N=46</p>	<p>N=45</p>	<p>N=46</p>	
Economic Development	Develop watershed-wide programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources and to integrate into each county's comprehensive plan.	<p>N=47</p>	<p>N=46</p>	<p>N=45</p>	<p>N=46</p>	

The goal of “increasing historical engagement and citizen education” was a very popular idea during the thought leader interviews and focus group discussions as a way to enhance both the use and understanding of the Lower Chickahominy watershed and river system. All four proposals for policies and strategies to advance this goal received strong overall viability scores of between 70% to 73%.

It is interesting to note that the proposal for developing watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries, was seen by 76% of respondents as probably or very politically viable, while a significant 17% of respondents viewed it as probably not politically viable. While the remaining responses for this idea were generally positive, this score does reflect a concern about political viability to further explore before moving forward with this concept.

Respondents scored the proposal to educate recreationists about water safety idea quite high, with an overall viability of 72%, reflecting a 77% likelihood of public acceptance and 75% overall political viability, with lower scores for its ability to advance economic development (68%) and overall economic viability (67%). This may reflect that respondents believe water safety will receive strong public and political support but will also come at a cost.

Similarly, the development and use of a phone application to provide ecotourism opportunities, historic landmarks, and other educational features, also received a strong 70% overall viability score, with 83% of respondents indicating it would probably or very likely garner public acceptance, 72% viability for advancing economic development, and 67% political viability. The lowest score of 56% economic viability may reflect lack of knowledge about how much it would cost to develop the app and market it to potential users.

Goal 5: Expanding watershed knowledge						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
Assessment	Execute a river carrying capacity assessment to better understand boat users and access points. Obtain resident's opinions near the river to find out what their needs and wants are. Includes mapping of all river access points including duck blinds, and important viewsheds needing preservation (including private sites) and examine methods for improving them.	 <p>N=47</p>	 <p>N=45</p>	 <p>N=44</p>	 <p>N=44</p>	
		Natural Resources Data	Develop watershed-wide policies/ programs for improving data on contiguous forest blocks. Increase geospatial mapping	 <p>N=46</p>	 <p>N=44</p>	 <p>N=43</p>

Goal Five, “expanding watershed knowledge” was simpler with only two proposals presented, one for conducting a river carrying capacity assessment and another for developing a policy to improve data on contiguous forest blocks, to facilitate wildlife corridors and habitat. Both ideas received generally high overall viability scores of 77% and 78%, respectively. High scores in the likelihood of public acceptance (77% and 78%), viability in supporting economic development (80% and 91%), and overall political viability (70% and 74%), were balanced by greater uncertainty about their economic viability as reflected by high “neutral” responses of 32% and 21%, respectively. Similar to some of the proposals for Goal 4, respondents viewed these two proposals as very likely to garner public and political support but were less sure about whether they could be funded or how they would be.

Goal 6: Enhancing public outreach						
Key: ■ Not At All Viable ■ Probably Not Viable ■ Neutral ■ Probably Viable ■ Very Viable						
Idea	Description	Public Acceptance	Achieve Economic Development	Political Feasibility	Economic Feasibility	Overall Viability
Signage	Increase the quality and frequency of signage for river access in the Lower Chickahominy Watershed, as well as for the Captain John Smith Water Trail.	<p>N=45</p>	<p>N=44</p>	<p>N=44</p>	<p>N=44</p>	
Advocacy	Establish an umbrella organization or coalition, "Friends of the Lower Chickahominy."	<p>N=45</p>	<p>N=44</p>	<p>N=43</p>	<p>N=43</p>	
Natural Resources Data Access	Develop programs to provide greater awareness of and access to data (e.g. Coastal GEMS, Natural Heritage Explorer website, etc.)	<p>N=45</p>	<p>N=44</p>	<p>N=42</p>	<p>N=44</p>	
Public Education for Family Legacy and Forest Conservation	Develop watershed-wide programs to engage and educate landowners about forest conversion and conservation easement and legacy planning to discourage forest fragmentation and help keep family tracts intact and economically viable by connecting families with local family land trusts.	<p>N=45</p>	<p>N=44</p>	<p>N=43</p>	<p>N=44</p>	

Results for Goal Six “enhancing public outreach” follow the same general pattern as previous goals, with the four proposals for policies and strategies receiving favorable “overall viability” scores of between 71% to 82%.

The two proposals to increase the quality and frequency of signage for river access in the Lower Chickahominy, and for increasing advocacy for the Lower Chickahominy watershed by establishing an umbrella organization or coalition such as a “Friends of the Lower Chickahominy,” received the highest overall viability scores of 82% and 84% respectively. Much of the James River system (including the Lower Chickahominy) has been at the forefront of nonprofit “Friends of” advocacy efforts for decades. This response suggests that the Lower Chickahominy may need and benefit from its own specific advocacy efforts, particularly as more natural resources data becomes available and the importance of the ecosystem becomes evident. For example, data gathered during Year One of the LCWP by the Department of Conservation and Recreation’s Division of Natural Heritage shows the LCW features unique and important populations of biota that could benefit from additional conservation and protection efforts.

The high score for increasing signage to support river access are similar to the high scores for other proposals above relating to increasing river access reflects general high support for the overarching goal of increasing river access. Here, the proposal to increase signage may also represent a simple way to educate recreationists about how the river system contributes to overall ecological and socio-economic health in the watershed.

While respondents gave the proposal to develop programs to provide greater awareness of and access to data (e.g. Coastal GEMS, Natural Heritage Explorer website, etc.) an overall viability score of 72%, respondents had high uncertainty of 27% “neutral” responses about its economic viability, as well as 20% “neutral” responses for its ability to support economic development. This suggests that respondents are unsure about the cost of this strategy, as and also whether greater access to data would make a positive contribution to economic development.

Similarly, respondents gave the proposal for public education about family legacy planning and forest conservation opportunities an overall viability score of 71%, while only 55% thought it would have economic viability and a significant 36% indicated uncertainty about its economic viability through “neutral” responses. Still, it is important to note that 80% respondents viewed this proposal as probably or very likely to garner public acceptance, and 75% indicated they thought it would make a positive contribution to economic development.

SURVEY SUMMARY

Year three of the five-year Lower Chickahominy watershed project involved outreach efforts to stakeholders. An electronic survey was sent to several hundred stakeholders in the Lower Chickahominy watershed, following initial stakeholder engagement through sixteen thought leader interviews and three focus groups with 27 individuals. The survey was opened by 101 individuals, of whom 71 individuals completed the demographic portion of the survey, and 53 completed all or most of the remainder of the survey. The expressed purpose of the stakeholder survey was to further test and validate the proposals for policies and strategies that emerged from the interviews and focus groups, by asking respondents to assess for each proposal the likelihood of public acceptance, its likely contribution to economic development, political viability, and economic feasibility. A five-point Likert scale was used to allow respondents to express how much they agreed or disagreed with the specific viability metric.

Proposals for 26 specific policies and strategies were organized under six overarching goals: 1. Promoting policies and programs that promote and support natural resources and river protection, 2. Using written agreements to achieve our goals, 3. Advancing business and ecotourism efforts, 4. Increasing historical engagement and citizen education, 5. Expanding watershed knowledge and 6. Enhancing public outreach. Each proposal was scored according to the viability metrics described above.

Overall, all 26 ideas received generally favorable scoring from the respondents, with the proposal for policies to address river noise receiving the lowest viability score. This may reflect that significant refinement and prioritization of proposals occurred during the first two stakeholder outreach components of thought leader interviews and focus groups. The broad stakeholder survey was an important third step to confirm that the thought leader and focus group process produced viable policy and strategy proposals that were widely accepted in the watershed. With the few exceptions and specific areas of concerns noted in the above analysis, most of the 26 policy and strategy proposals are viable for further development. Several ideas rose to the top as with the highest overall viability scores. These were as follows:

- **Increase river access** via public access and trail easement agreements., Goal 1 (87%);
- Develop policies or programs to obtain **water quality monitoring data** relating to human use (e-coli), habitat and fish populations and ensure that these monitoring costs are not borne by local businesses, through an MOU process with the Department of Environmental Quality, Goal 2 (84%);
- Increasing local **river advocacy** efforts through a “Friends of...” group, Goal 6 (84%);
- Increase the quality and frequency of **signage** for river access, Goal 6 (82%);
- **River as economic driver** - Develop watershed-wide policies and programs that support using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming, Goal 1 (81%);
- **Natural resources data** - Develop watershed-wide policies/ programs for improving data on contiguous forest blocks. Increase geospatial mapping, Goal 5 (78%);
- **Comprehensive Plan** - Engage stakeholders in how **local and tribal history can be integrated into the three county Comprehensive Plans** for both ecological significance and business opportunity, Goal 1 (77%);
- **River access through bridge restoration** - Strengthen or augment the existing Memoranda of Understanding (MOU) between VDOT and other state agencies to consider public access when planning bridge restoration work, Goal 2 (76%);

- **Packaging Economic Opportunities with History** - Combine different types of tourism experiences to create larger tourist packages, such as combining winery and estate tours with ecotourism, Goal 3 (73%);
- **Economic Development**, by developing watershed-wide programs to educate residents and visitors about how economic development can be undertaken in a way to support ecological integrity and natural resources and to integrate into each county's comprehensive plan, Goal 4 (73%);
- **Water safety** - Develop programs to better educate recreationists about water safety and to enforce existing safety and boating regulations and establish a buoy system for safety, Goal 4 (72%)
- **Expand the Capital Trail** - Develop watershed-wide policies/ programs to expand on the Capital Trail by creating spur trails heading north from the existing trail, Goal 2 (72%);
- **River Shoreline Erosion:** Establish policies to better support "living shorelines" for river restoration projects where feasible, allowing seasonal access where appropriate, including policies that promote low-impact activities and "no wake" zones to mitigate the erosion on the living shoreline from foot traffic and larger waves, Goal 1 (72%);
- **Natural Resources Data Access**, by developing watershed-wide policies/ programs for improving data on contiguous forest blocks, Goal 6 (72%);
- Public Education for **Family Legacy and Forest Conservation**, Goal 6 (71%).
- Conduct a **river carrying capacity assessment** to better understand boat users and access points, Goal 5 (70%);
- **Tribal History**- Develop watershed-wide policies and programs to systematically integrate tribal and other history into public access points including family-owned fishing industries, Goal 4 (70%);
- **App** - Develop an app that provides all appropriate ecotourism opportunities and historic landmarks/other educational features, Goal 4 (70%).

Of the ideas that received less favorable response, the general idea of regulatory approaches such as regulations to address "river noise", for example, were not as popular. Also, developing a river assessment without formally engaging the public were regarded less favorably. The political ramifications of using state assistance funding drew a less favorable response. This could be due to drawing comparisons to other funding opportunities that would be missed if funding were directed to the Lower Chickahominy watershed project.