Lewisburg as a River Town: Community Connectivity and the LNC

ENST 411
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**Background and Goals**

The small town of Lewisburg, Pennsylvania has recently been designated as a River Town through the Susquehanna Greenway Partnership incorporating it into “a network larger than [its] county or region” (Susquehanna Greenway Partnership). The focus of the River Town project is to create a connection between communities and the watershed in which they exist capitalizing on their proximity to the river. Developing the term “river town” and giving it meaning and context is a key part of the project because it is a reminder that towns like Lewisburg are more than just people and buildings; they are, in essence, their interrelatedness with their surroundings as well as their history.

River towns, like Lewisburg, developed originally as hubs for trade and commerce going back as far as when the land was inhabited mostly by the Native Americans. This was a result of the ability to travel into the valleys between ridges that would otherwise be inaccessible and the amount of flat fertile land for agriculture. From this establishment of locations, came development in more populated areas through establishing different goods, services and industries. Central Pennsylvania is well known for timber and coal, and Lewisburg itself had many old mills that are no longer in use. It is easy to see how, over time, the town has expanded and industrialized away from the river through the development of newer technologies, including housing and transportation. This expansion correlates with the distance, both physically and metaphorically, that is created between the community and the river (Marsh, 2016). While the physical connection to the Susquehanna River still persists as it runs adjacent to the town, the floodplain and flood hazards that it causes to the community also continue to be a source of reluctance to connect to the river and therefore only widen the gap of connectivity.

As a project team in Environmental Studies 411: Environmental Community Projects, we chose to work with the Lewisburg Neighborhoods Corporation (LNC), specifically the River Town Team, headed by our community contact and LNC Director/Elm Street Manager, Sam Pearson. The “Lewisburg Neighborhoods” are Borough neighborhoods in Lewisburg, PA, including the Bull Run Neighborhood, which is a part of the historic district adjacent to Bucknell University, and the North Ward neighborhood, which encompasses the quadrant of town north of the Market Street business district between the railroad tracks and the Susquehanna River. The LNC exists to promote cooperative efforts between neighborhood residents, the university community, and Lewisburg Borough to improve participation, safety, communications, image, streetscapes, and historic preservation in pursuit of neighborhood revitalization with environmental and economic balance. As a subset of the LNC, the River Town Team specifically works on community connectivity projects pertaining to the Susquehanna River. The work falls into categories of Events (clean ups and picnics), Planning, Conservation and Connectivity. Projects include connecting the rail trail to the river.
and said access, developing routes north and south along the river, improving biking and walking infrastructure throughout the community, and facilitating community-initiated gatherings. All River Town Team meetings are public and are held the 1st Friday of the month at 8am in the Borough Chamber AND the 3rd Monday of the month at 7pm at the LNC Office (2nd Floor, Borough Building), focusing on Connectivity and Conservation topics respectively (The River Town Team). Ultimately in the next six months, the River Town Team would like to make a prioritized list of projects pertaining to the public open spaces along the River, and gauge community input on what they would like to see in these spaces to increase community connectivity with the River. Image 1 shows the targeted public open spaces along the River. This is where our project team in ENST 411 stepped in.

As a group working with Sam Pearson, the LNC, and the River Town Team, we have three main goals that make up our project. **The first is to improve our understanding and gain knowledge about the current state of Lewisburg.** We want to know how the residents view and use the River before we can start to make changes. **The second goal is to start a dialogue about these views and perspectives.** It is equally as important for us to understand their thinking as it is for them to communicate that thinking to each other and it also gets community members engaged in the process. **The third main goal is to then take our knowledge of the town and use it to improve that connection, making community members more mindful and aware of the river.** In this way, the community will become better stewards of the river through their personal connection and investment in its health. Through our identified methods and study, we hope to be able to assist Sam and the River Town Team to get them to the point of creating a prioritized list pertaining to the public open spaces along the River, in addition to making recommendations as to what the community would like to see in these spaces, to ultimately increase Lewisburg Borough’s connection with the Susquehanna River.

**Site Descriptions**

Five sites were highlighted as priorities or target areas for the purposes of our study. Mainly they were focused upon because they are the only locations in the Lewisburg Borough that have public access to the River, mainly the Susquehanna as well as Buffalo Creek. These sites were introduced to us through a walking tour with Sam Pearson whose focus was to highlight the current problem areas and potential solutions to those problems. Another image of the sites in view are shown in Image 2.

Working North to South along the river, the first site was Wolfe Field and the St. Anthony Street Park. First of all, access to the park is hazardous, as the intersection has limited crosswalks and stop signs to slow traffic. Much of the parking for the park is on the other side of Buffalo Creek over a bridge. There are no continuous sidewalks over the bridge and it is dangerous curve for vehicles and pedestrians. When there is an event there is generally a lot of traffic and it can become dangerous for people walking to and through the park. This location is also the old site for the town dump and still serves as the site for recycling and brush collection. There are still a lot of remnant problems from filling and capping the dump as well as restrictions on digging into the cap, which can inhibit development on the site. Confusion over ownership of the
land and who has ultimate control over the use of the property also slows development due to discrepancies between the Lewisburg Township and the softball group that uses the fields. There are various river access points at this site, as the Northern border of the park is dictated by Buffalo Creek. However, these sites are dirty both from the old dump and from current land use upstream. They also are not easily accessible. One potential solution in the works is that the LNC wants to get a trailer and mobile dock that can be on Buffalo Creek when conditions are favorable and moved to a safe location during storms or out of season. Another potential at this site is the fact that the lower field floods easily and could have dual use as an outdoor ice rink in the winter when it floods and freezes.

Working south, the next site is the Lewisburg Community Garden on Water Street. As a recent start up the garden has been a great success among the Lewisburg and Bucknell communities. The disadvantages are the underutilized spaces that surround the garden and the river access points. The yard around the garden is simply just a mowed lawn and there is a lot of potential for what that yard could be used for instead. The river access is tricky because there is a private property in between the garden and the river, but parts of the riverfront are in fact public land. Promoting this as an additional site for river access is a primary focus at this site since it really is not known at all.

Further south on Water Street is Soldiers Memorial Park. A large priority here well known by many Lewisburg residents is the abandoned railroad tracks and bridge that cross over the Susquehanna. There is talk already of transforming it into something safe and usable by the public such as a ropes course or just a safe walk out. There is neither a lot of parking nor an easy way to walk to the park such as crosswalks or sidewalks for neighborhood kids and the park only has a few benches and tables. Such improvements would make it more of a draw for local people. Also many people don’t know it’s even there due to limited signs to let people know about the park. The river access point at this point is difficult due to an island in the way especially during low flow conditions. Creative ideas are needed at this site for it to be easier to get boats in and out. In the lower lying area near the water, there is also potential for having a river walk at the water’s edge, but there are issues with continuation of the walk due to private river front property. One final issue with the park is a small triangle of land adjacent to the highway. Even people who attend the park or drive over the bridge regularly don’t even know it’s there. It is not very pretty to look at or easy to get to but has an amazing view of the river so there may be potential for making it a garden and making it more accessible.

Once we move south of Market Street, much of the waterfront property is private until you get to Mariah’s Garden on Walnut Alley. This site is VERY unknown; in fact it doesn’t even show up on Google maps and many Lewisburg residents and Bucknell students don’t even know it exists because it looks like part of someone’s yard, sandwiched between two properties. Currently it is the borough’s responsibility for maintenance, but it appears as though they don’t really want to be responsible for it and there is a fear of it losing its appeal and appearing abandoned. The river access at this site is realistically more for visual purposes than practical purposes in that it is not easy to get to by any means. Awareness of this site might be the biggest issue and making progress on that might help to gain more direction about what should happen there.

Finally, the southernmost public access is the St. George Street Landing. This site is also sandwiched between two properties and has over time actually moved to fall at a weird angle. The problem here is that one property is a former industrial site, which has been capped similarly to the Wolfe Field site. This limits development on this land and the landing itself has migrated
away from the fill and into private property on the Southern side. The borough is pretty keen on wanting to maintain this site, as it is the best access to the river especially for large boats (not just hand carry). In additional component to this site on the South side is the Lewisburg Riverwalk. This path runs along the river through private property, which was done through an easement between the property owners and the Sierra Club. The Riverwalk leads from St. George Street south along the Susquehanna and ends on Brown Street. The easement was never done very well so now there are issues with being able to maintain or change aspects of the Riverwalk to make it easily accessible to Lewisburg residents.

As an additional note, there is also the Bucknell Landing located on Bucknell’s campus. However, this site is not a public access and is exclusively for the use of those affiliated with Bucknell. Bucknell does have its own plan for what is to happen with this site, but in order to improve connectivity with the Lewisburg community it would be keen of them to look into ways of making this site available to the public.

Methods and Feasibility
Phase 1

The first phase of our project was designed to target the goal of understanding how the people of Lewisburg and nearby towns view the Susquehanna and its tributaries and to what extent do they currently interact with it. To gather this information, we first designed a convenience survey (Appendix 1) to be distributed to Lewisburg residents and the surrounding community. The survey was broken into four general sections each with several questions. The first section got an understanding of the individual (their distance from the river and their residence) as well as other general questions. The second section asked residents how often they visit the river and the various access points from a recreational perspective and what activities they participate in when they do visit. The third section discussed the resident’s connection to the river from a programming perspective. For example, it asked whether or not they attended the Arts Festival or other river related events in either Lewisburg or nearby towns. The fourth section asked about the Bull Run Greenway charrette held in November 2015, whether they attended or not. If they did not, we asked them why, and if they did we asked them what could be done better. This information was for our own planning process with the charrette. The surveys were distributed online as a Google form survey with the link sent out through social media, the Bucknell Message Center, and in email to all Bucknell faculty and staff. In addition, the survey was made into a hard copy form and brought to public locations, such as daycares, churches, and nursing homes where people could pick up the survey and drop it off at the Lewisburg Borough office downtown once they had completed it. Each of these businesses were called prior to dropping off the survey to maintain a good relationship with the business. At some local businesses, such as grocery stores, and downtown cafes and shops on Market Street, we created a flyer with information about the project and the link so that people can access the survey from their own computer and on their own time. This was a way to still distribute the survey to the community, as individuals could easily tear a link off of the flyer, without having to go through a bulk mailing process. An example of the flyer is shown in Image 3. We also spent

Image 3. An example of the flyer that was distributed at business locations
Wednesday, April 20th, at the Lewisburg Farmers Market where we had a booth and spent the day collecting survey responses and asking people to take a survey on the River. To do this, we had 3G iPads and paper copies. The paper copies were definitely utilized more than the iPads at the Market, however, this still served as a good test run for a very similar data collection process that occurred at the Arts Festival just a few days later. The final form of distribution came in creating a smaller, half page versions of the flyer with the survey link and announcement about the charrette and going door to door around Lewisburg distributing flyers. To do this, Sam broke up the Borough into four sections and we each took one, distributing about 1200 flyers in total over the course of a few days during the week of April 18th. While it was a tedious process, we got lucky with nice weather for the week and the number of respondents to the survey went up after this distribution process. A condensed list of the locations for survey and flyer distribution can be found in Appendix 2, along with the map of the break up of the Borough that was used for on-foot flyer distribution. An example of the flyer distributed door to door is shown in Image 4.

An additional aspect of the first phase was to gather opinions and perspectives from the larger stakeholders in the community. For this component, we started by creating a set of questions in order to hold a focus group with some of the most important community leaders in Lewisburg. These were the people who potentially have the greatest influence or control over how Lewisburg will change and develop in the coming years. Many were members of the LNC, Susquehanna Greenway Partnership, the Borough Council, etc. The benefit to this is that we were able to hear their perspectives on the essential topics surrounding the river, and they also heard perspectives from each other (which began the transition into our second goal). Using this group as a pilot, we were able to gauge what issues were the most important to the residents, and not just what we think is important. The stakeholders for the focus group were selected from a list generated by Sam Pearson. The focus group list can be found in Appendix 3, while the larger list of community stakeholders can be found in Appendix 4. The questions asked at the focus group can be found in Appendix 5.

Phase 2

The second methodological phase of our project design was to take the information about the current state of Lewisburg as a river town, and create a dialogue around this connection. The perfect opportunity for this dialogue was at the Lewisburg Arts Festival, which was given the theme of the river this year. Throughout the project, we were part of the process of planning for the Arts Festival, to encourage as many people as we could to think and talk about Lewisburg and the Susquehanna River. At the Arts Festival on April 23rd, the Lewisburg Neighborhoods Corporation had its own booth located in Soldiers Memorial Park. We used this as an opportunity to advertise for the charrette, collect more surveys, and just encourage people to come to the booth and interact with the river. In order to get people to come down to the booth, we had River Ambassadors stationed at various locations throughout the festival encouraging people to walk down to the park. Both paper copies of our survey and iPads with the link were available at the booth for people to walk up and take the surveys. The River Town Team also organized a “Selfie Scavenger Hunt” where Festival attendees took selfies at different locations.
throughout the festival and posted them on Instagram with the hashtags #RiverTown, #ArtsFestival, and #Lewisburg. The participants who posted enough photos to meet the contest criteria were entered to win a River Town themed prize. We also had a slack line and a kayak both for kids to play. All of these plans were designed to encourage attendees to think and talk about the river while they were engaging in Arts Festival activities.

**Phase 3**

The final installment of our design was the River Town Planning Charrette on Wednesday, April 27th, from 6 to 9pm, at the Lewisburg Club on Market Street. This component of the project touched on the goal of reestablishing Lewisburg’s connection with the river by making a concrete plan for change within the town. The charrette began with a presentation from Sam Pearson, highlighting the development of Lewisburg over the years both from a general sense and at some of the key locations today along the riverfront. The presentation also included some of our own slides about the survey results and what we learned are some of the important issues in the town. Following this presentation, breakout sessions were lead by some key people including artists and architects who were able to draw the ideas presented by the community members and give them a more visual demonstration of what the possibilities are at these sites. We hosted two practice sessions with the artists prior to the charrette to help them understand what our expectations would be and were also able to use some of this practice art as part of our signs and advertisements. A total of five breakout sessions were held around the charrette each representing one of the five key sites of riverfront property that the borough owns. These five sites and their full descriptions can be found in the site description section earlier. About halfway through the breakout sessions, participants were encouraged to move to a different session in order to get as much diversity as possible in the perspectives presented at each table. Finally, after the two rounds of breakout sessions, the remaining participants and session leaders came back together as a group in order to debrief the important issues that had been talked about for each of the sites. More detailed notes from each of the sessions were collected for analysis, which can be seen in the results section of this report.

Although we have outlined these distinct components as contributing to separate goals, the reality is that there are overlaps through each of the phases. As we moved through the project, we worked towards the goals of collecting information on the town’s perspective, starting a dialogue about how the people of Lewisburg and surrounding communities view their connection to the River, and improving that connection by making community members more mindful and aware. By modeling our design this way, we strived to gain valuable input from community members in Lewisburg and the surrounding neighborhoods. In this way, we have now set up the LNC to take the data we have collected and suggestions we provide, and turn them into a more solidified plan for future action and work in the community based upon their needs and desires. A timeline of our study can be found in Appendix 6.

**Ethical Considerations**

To ensure that the ethical research standards and guidelines were abided by during our surveying and interviewing process, each member of our group took the necessary steps to be certified by the Collaborative Institutional Training Initiative, and submitted a detailed research proposal to the Institutional Review Board. Being permitted through IRB allowed us to conduct research and ensure that we promised to do so in an ethical way that does not compromise the
wellbeing and safety of the individuals that were surveyed or interviewed. The IRB Form that was submitted and approved can be found in Appendix 7.

It was important that each of us uphold our commitments to conducting ethical research throughout the entire process of data collection. In order to do so, there is a series of guidelines that we followed during our research process. First, when we begin collecting our data from public surveys, our team provided a personal statement attached to each survey, whether online or in paper form. This statement served to introduce us as the proprietors of the survey, clearly expressed the purpose of the survey at hand, and explained to participants the details of our River Town project. Along with the purpose statement, there was also an appropriate consent form in which the participant was told that by completing the survey, that they were accepting the terms and conditions. This consent form was incredibly important to the ethics of our research so that we could be sure that each participant had voluntarily chosen to take part in our research process.

This consent form also included an explanation to inform the survey participant of their rights during the process. This included, making it known that all participation must be voluntary and that the individual can withdraw from the survey at any point, that the benefits of taking the survey outweigh the potential risks of taking the survey, and that the personal identification of each participant and their individual responses was to be kept confidential. Also, we made it known that all personal identification was kept confidential. By making it clear that the survey responses were private and confidential, the participant was likely to feel safer in the survey process and more inclined to be honest and to express their true opinions.

While choosing whom to survey throughout the Lewisburg Borough, it was also important to avoid bias at all costs. For the most accurate representation of opinions and ideas of Lewisburg residents, we aimed to get as many survey responses as possible from a diverse pool of residents, not only individuals who have already expressed an interest in the river. By adhering to these ethical guidelines, our group was able to produce a wide sample of community members’ thoughts and ideas, without compromising their wellbeing or safety in any way.

**Results**

**Survey Analysis**

As described in the methods, the survey was broken into four general sections each with several questions. As of Sunday, May 8, 2016 there are 230 survey responses from community members. This is right around where we expected to be at this point, as the survey has been active for about three weeks. The numbers increased after the Arts Festival and after we distributed the flyers for the surveys door to door in Lewisburg Borough. For this analysis, we have chosen to highlight some key aspects of the responses that helped us gain a greater knowledge of community connectivity to the River in Lewisburg. Appendix 8 shows selected charts from the survey. Figures 1 and 2 show how often community members engage in recreational activities on the River compared to how often they would like to engage in recreational activities on the River. Generally, this indicates that the community has an interest in increasing River usage, as almost fifty percent of the participants would like to use the River more than ten times a year. Additionally, as seen in Figure 3, Lewisburgs’ greatest assets according to the community surveyed are Hufnagle Park, the St. George Street Landing, Bull Run Creek, Buffalo Creek, and the Community Garden.

Further, while each of these three questions were meant to gauge current community connection to the River, we also directly asked participants to rank how strongly the
community’s connection to the River is (Figure 4). This was important to the first section of the survey because it asked community members to reflect in a way on their previous answers and then compare their own actions to what they perceived of those in their own community. The results of this question reflected that much like a bell curve, as a majority of the participants ranked the community’s connection as a two or a three, with five being a strong connection on the scale. This is interesting because not only do the prior questions display that the community connection to the River is somewhat low and that the community would like to increase this connection, but also that they know themselves that there are areas that can be greater taken advantage of on a community-wide scale. The first part of the survey also included some open-ended questions, including “To me, the Susquehanna River is…” Here, we received responses such as, “an integral part of our natural and cultural landscape,” “the spirit and soul of Lewisburg,” and “the lifeblood of the region.” However, similar to the previous question, we also got responses like, “endangered,” “underutilized,” and “forgotten,” showing the range of some participants recognizing that the community is not fully connected to the River and would like to see enhancements in this connection.

Moving to the community viewpoints on what they would like to see to enhance connection to the River, participants were asked how strongly they agreed with the statement, “I would like to see more community involvement/activities at the River” on a five point scale, with five being strongly agree (Figure 5). A large majority of participants responded with a five, as well as on the questions “I would like to see more walking trails along the River” (Figure 6), and, “I would like to see more natural habitat along the River” (Figure 7). However, the question with the most overwhelming majority of participants ranking a five was, “I would like to see a cleaner River” (Figure 8). This is important to recognize because while there are priorities to increase connectivity such as walking paths, community activities, etc., one of the strongest results of rankings came from seeing a cleaner River, which could ultimately enhance the community connection to it.

Additionally, a very important question asked in this section was what additional amenities would community members like to see in the Borough’s River frontage (Figure 9)? This was an important question to ask because it touched on somewhat was discussed at the design charrette in having community members think about what they would like to see and utilize on the open spaces along the River. By far, the top response was walking trails, followed by Rail Trail connection, and canoe/kayak access. These amenities were also general themes for the question, “What would make community connection to the River stronger?” This is important when thinking about the design charrette and what the LNC should prioritize. While there are not many location-specific requests outside of making the old railroad bridge a walking trail, the general feeling of being able to access and enjoy the open space in the Borough more through amenities such as these is clear.

It is important to note, as we spoke to Sam about when surveying community members at the Farmer’s Market, that the people who do not take the survey are just as important as those who do. For example, some people when asked to take a survey on the River responded negatively, saying that the River was too dirty, could never be changed, or shared grievances about environmental hazards such as flooding. For future study, if there was a way to capture these opinions by recording the way people respond when being asked to even take the survey, it would answer a beneficial and interesting question of why the number of respondents are sometimes low. As Sam mentioned in this conversation, if those people who responded negatively when asked had actually taken the survey, they could have elaborated on the reasons
why they don’t use it, no matter the reason. Rather, their response goes undocumented and is not a part of the research, yet still poses an interesting viewpoint. Even still, this is why we used the survey as only one phase of our research. We wanted to be able to collect as much community opinion as possible, but also utilize the Arts Festival, focus group, and design charrette to work towards our project goal of creating conversations surrounding community connectivity to the River. Writing down personal opinions and connections is important, however, we are looking to the later phases of our project design to facilitate a greater awareness of Lewisburg community connection to the Susquehanna River. Only from there can the LNC move forward with the projects that they ultimately prioritize from these conversations.

Focus Group

For the focus group, our analysis involved pulling some of the major themes from the notes of the discussion. We were able to refer back to the notes and see which topics came up frequently or were most focused upon by the key people that were involved. One such theme was conservation. This came up as an issue in that, generally, conservation is acknowledged on a widespread scale but it becomes more of an implicit issue rather than being the explicit focus of conversation. The theme that usually takes a more prominent role, and was also discussed, is the economics of any project and of the town. This encompassed a range of issues, including where the money for a project should come from, or the cost of damages that are caused by regular flooding of the river and how to cope with that issue.

Flooding itself was a major theme across many different components of this project and seems to be a real issue that locals, homeowners, and especially those on waterfront property are slow to forget. This is a difficult topic to address because obviously no one can control the force of nature that is the Susquehanna River, but it still needs to be a part of the conversation and planning process for future development. Along these lines, it was discussed that the river is a powerful force not only for damage but also for good, and it is our job to figure out how we can utilize this positive force.

On a local scale, people want to see the river used as more of a gathering space, emphasizing on better utilizing the spaces that we already have to access the river, and giving them a sense of community. Feedback across the board has touched on the idea of the river being a beautiful, but underutilized resource. The charrette, therefore, was an ideal opportunity to address this issue and look at the places where the public can access the river and find ways to maintain the spaces and make them more accessible and safe. Additionally, having more attractions near the river like waterfront dining and more dog friendly attractions would benefit the town as well.

On a regional scale, the important issue is connectivity between river towns. For example, it was brought up that Lewisburg was once a hub on the Susquehanna River and that it should be maintained or reestablished as such to benefit the borough and its economics as well as the entire region. There is potential for this connectivity to occur from Lewisburg to many of the surrounding areas such as Milton, Montandon, Mifflinburg, and Sunbury through many modes of travel, including biking, walking and paddling on the river itself. This would connect the many river towns of the Susquehanna together and would also encourage more sustainable modes of transportation throughout the region. One further factor in addressing connectivity is accessibility to a diverse range of community members, so that no one feels that they have barriers to accessing the river, whether it is class, age, gender, race, ability, etc. The Lewisburg Borough and the Bucknell community (especially the risk management department) must also
focus on their connectivity to each other in terms of ownership, access, and general collaboration on these issues, as well as incorporating educational aspects into any of the potential projects. This could be through encouraging educational spaces or outreach in projects for all ages, as well as including Bucknell students in the design and implementation process.

Finally, visibility was expressed as an important issue, in both the way that work is conducted and also in the way that the town can connect to the river. Steps have already been taken in this context in looking at the way that the LNC has conducted research and made all actions as public as possible. In fact, we have been striving to access as many people as possible and ensure that there is awareness of what changes may be occurring. Additionally, one of the biggest issues with the Lewisburg community feeling connected to the river is just the fact that so many people forget that it is even there if they don’t see it on a regular basis. One of the only ways to physically see the river is to walk over the bridge. Changing this in ways that allow and encourage the Lewisburg community to view the river more regularly will change their attitudes about Lewisburg as a river town and therefore fuel the desire to see a healthier and more accessible river.

**River Town Planning Charrette**

All of the preparation, research, and fieldwork that was done throughout this semester was working towards our culminating goal of holding the River Town Planning Charrette. The occurrence of the charrette was the one thing that remained certain throughout this entire project and served as an end goal for keeping our group on track. The River Town Planning Charrette was held on Wednesday, April 27th from 6:00 to 9:00 pm at the Lewisburg Club on Market Street. By holding this charrette, we were able to successfully address the goal of reestablishing the lost connection between the town of Lewisburg and the Susquehanna River by holding a public opinion forum to create a concrete plan on how to improve the accessibility and public spaces alongside the riverfront. The charrette served as a space for concerned, interested, or invested community members to come together to learn about the current circumstances of the public space along the river and to brainstorm ideas of how these spaces could be improved and better utilized for future usage.

The charrette began with a presentation from Sam Pearson, highlighting the development of Lewisburg over the years both from a general sense and providing important information about the five public access sites that we are focusing on along the river. These public sites along the river include the Community Garden on Water Street, Wolfe Field on St. Anthony Street, Soldiers Memorial Park also on Water Street, Mariah’s Garden on Walnut Alley, and the St. George Street Landing with the old industrial site and the River Walk. During a small portion of the presentation, our group presented a few slides about important information gathered from the preliminary analyses of the surveys that had been collected. This information included how often community members currently use the river versus how often they would like to use the river in the future, individual barriers to the river and issues with access points, what the Susquehanna River means to each individual, and ideas for improvement and amenities that community members would like to see added to the sites. After the short presentation, the five breakout sessions were lead by key people including artists, architects, and professors who presented questions to the group to encourage thoughtful creativity. Each table created a document with lists of information and ideas for the site, and then expressed these ideas visually by sketching on maps to provide a more tangible demonstration of the possibilities. All five of the tables
discussed the challenges of the site and produced many great ideas for improvement and better usage of the space.

The breakout group focusing on the Community Garden made a point of first expressing how this site has become a positive community location and then discussed a few of its drawbacks and ideas for the future. Everyone at the table agreed that the Community Garden is an asset to the community that not only brings us closer to nature, but it brings us closer together as a community as well. The Community Garden is a public space where connectivity and sharing are promoted. The garden also encourages community service, by growing food to donate to local food banks and hosting the weekly Community Harvest dinner, and education through the many programs that the garden hosts for plot renters and local children and summer camps. Since 2012, the Community Garden has been a place “to get our hands dirty,” connecting us with nature and the local community. However the location of the Community Garden has created some drawbacks to the site. These drawbacks include being in the floodplain, lack of parking, lack of safe sidewalks and crosswalks, and an overall need for more public amenities.

To make this a more attractive and user friendly public space, the community suggested that there be more public amenities, such as public restrooms, sidewalks, a place for children to play, benches, picnic tables, a pavilion and more community events at the garden to attract all ages and demographics. Ideas included having a Picnic in the Garden day, a harvesting festival, or having a small-scale “farmers” market to sell excess produce at the garden. The community would also like to make the river more visible from the garden and to create walking paths along the riverbanks for the public to use.

Wolfe Field on St. Anthony Street is most known for the busy Saturdays when the park is filled with hundreds of softball players and fans. With several different fields on site, softball and baseball games seem to be the only priorities of the park, but there are many more recreational possibilities available than are currently being utilized. Wolfe Field is built on an old dumping ground, making it difficult to build on the site due to construction easements. The site is also home to a recycling center and community brush pile. Unfortunately visitors have to walk through the recycle and brush piles to get to the river access point. This site also has issues with traffic, parking, and a lack of safe crosswalks to get to downtown Lewisburg. Although the field is directly next to the river, the river is never seen as the focus point of this area. How can we make it more visible? Community members suggested creating more user-friendly walking trails along the river and areas to walk dogs and ride bike. It was also suggested to use this space as a “Community Tree Nursery.” By planting many trees in the area and connecting Wolfe Field to the Community Garden, this area could be the “Garden District” of Lewisburg. Users also stated that it would be helpful to create walking paths that connect Wolfe Field to the nearby AYSO soccer fields and possibly even a trail that could connect to Route 15. The site would also become more connected with the river if there could be a boat access point created on site and possibly a canoe/kayak rental program made available.

Soldiers Memorial Park, located along Water Street right next to the Market Street Bridge, is known for being a nice, quiet place to sit and enjoy the beauty of the Susquehanna River. With an ample amount of land at this site, it is open to many possibilities for improvement. This area has a lack of useable parking spaces and a lack of decent walking trails along the river, which desperately needs to be improved upon. One of the ideas from the breakout session included developing the space into a type of “urban park.” This would include benches, picnic tables, a bike-sharing program, a stairway reaching down into the river, and adding artistic pieces in the park. Also, perhaps we could make this site into an environmental
education space for young children to explore and learn. A very popular idea that has been discussed is to turn the old railroad bridge into a walking promenade across the river. Also community members supported the idea of having a type of floating boardwalk out into the water. The community also suggested having public restrooms, creating a demonstration garden, having proper signage to commemorate the history of the park, creating a “Kid Zone,” and holding more community events in this location.

Mariah’s Garden, tucked away along the river on Walnut Alley, is one of Lewisburg’s best-kept secrets. This meditative memorial garden provides community members with a quiet, tranquil place to enjoy the beauty of the Susquehanna River. Although Mariah’s Garden is a lovely place to enjoy nature, this site is not very well known to the public. This lack of information is one of the main problems at the site. Many people do not even realize that the Garden exists, and those who do are uncertain of which areas are public and which areas are private properties, since the garden is bordered by houses. One of the biggest challenges with Mariah’s Garden is preserving that sense of privacy while still marketing and enabling public access. During this breakout session, the group suggested preserving the meditative quietness to the space, but liked the idea of adding a few amenities, such as benches, swings, and improving the landscape by adding more trees, flowers, and shrubs that are both native to the area and aesthetically pleasing to the visitor. Also the site would need a careful maintenance plan to control the Japanese knotweed issue and a signage system to improve clarity on the meaning and boundaries of the site. Overall the community would like to continue using Mariah’s Garden as a quiet space for picnicking, bird watching, reflecting, and just enjoying the view of the river.

The St. George Street Landing is crucial to the viability of recreational activities on the Susquehanna River in Lewisburg. This landing is one of the only locations that the public can access the river with boats, kayaks, canoes, and other recreational devices. The St. George Street Landing also is home to the River Walking Trail that only the community knows exists. The River Walking Trail has the possibility to provide a lovely walking space to enjoy nature along the river, when it is well maintained and not defaced with litter and dumped garbage. The breakout session attendees suggested the great idea of creating this space as a destination. By revamping this space, Lewisburg could become a destination for other kayakers and boaters. The remodeled location could have a new loading ramp, with less muddy sediment, a kayak “house” where individuals could rent/share kayaks, and a pavilion area for enjoying the views and picnicking. This area could even serve as a hospitality stop for kayakers that would include restrooms, changing rooms, water fountains, and possible food options. It would also be helpful for the location to have a sort of visitors center with maps, information about the town, ideas for places to eat/stay. With the landing remodeled as a welcoming center for kayakers, many out of town visitors would be drawn to the area. It is also important for this site to include a maintenance plan to care for the River Walking Trail and to implement a signage system to mark public and private areas. If this site implemented these suggested improvements, the St. George Street Landing and River Walking Trail could be a great asset to the River Town community.

Overall, the River Town Planning Charrette was definitely a successful night and provided our group and the LNC with a great deal of useful information on what community needs and wants to see in the neighborhood. With more than 60 people in attendance, we were able to collect valuable data, as well as giving publicity to the River Town Team. Fortunately the charrette attracted a wide audience of individuals, including the mayor of Lewisburg Judy Wagner, key stakeholders, river front property owners, many interested community members, and Bucknell faculty and staff, as well as a few students. Since the charrette was held downtown
at the Lewisburg Club, less Bucknell students were able to be in attendance in comparison to the previous design charrette that was held last semester in Larison Dining Hall. All five of the breakout discussions were engaging and creative and provided our team with a clearer understanding of what the River Town Team should prioritize when moving forward with future projects. As the event was coming to an end, the many compliments and thanks that we received made it clear that the community of Lewisburg has appreciated our work on the project and enjoyed providing their opinions on the topic. Images from the Design Charrette can be found in Appendix 9.

Next Steps
All of the stages culminating to the River Town Planning Charrette successfully fulfilled our goal of assessing public opinion and gathering ideas about how we can make the community of Lewisburg more connected to the Susquehanna River. With this information, we now have a more detailed understanding of the public sites that need improvements and attention and what the community wants most. Since the survey and the charrette targeted the five areas of the Community Garden, Wolfe Field, Soldiers Memorial Park, Mariah’s Garden, and the St. George Street Landing with the old industrial site and the River Walk, it is clear that Lewisburg is home to many great natural areas, but all of them are in need of improvements. This makes it incredibly difficult to prioritize one location over another. However, through our analysis of the ideas presented through the survey and charrette process, it became clear that many ideas overlapped and were brought up many times. The most important issue that was discussed frequently and in every break out session is the idea of increasing accessibility to the river. The survey results showed that the main reason why people do not spend more time participating in recreational activities in the river is due to the difficulty of finding access to the water. The River Town Team should focus on reconstructing the St. George Street Landing and/or creating a new landing location for the public to be able to easily access the river. This issue with a lack of access to the water also includes the lack of walking trails along the river. Every break out session at the charrette suggested that the community needs more walking trails for people of all ages and abilities to be able to enjoy along the river. Increasing the number and accessibility of walking trails will allow community members to interact with the river on a more regular basis, improve their connection to their surrounding environment, and be beneficial to the overall health of the community. Finally, no matter what changes and improvements are made to these public sites in the coming years, conservation of the river and the land must always be the most important aspect to keep in mind. A future project team in ENST 411 can focus on assisting the LNC in continuing to prioritize the projects, helping hold a community engagement activity at the River, or continue to seek ways to connect the Lewisburg Community to its natural areas. With the assistance of students and faculty from Bucknell University, the balance between conservation and improvements to these areas provide the opportunity to allow the community to continue to utilize open space short term, while in the long term, allow each of us to become better stewards of our environments.

Acknowledgements
We cannot thank enough Sam Pearson of the Lewisburg Neighborhoods Corporation for all of her assistance and guidance throughout the course of this project. The persistence, organization, and strength she shows as a community leader for Lewisburg Borough to continue to strive to engage the community with their environments and the River is unparalleled. We would also like to thank the LNC and the River Town Team for allowing us to collaborate and
assist on this project with Sam. Finally, thank you to Professor Amanda Wooden and the entire ENST 411 class for their guidance, advice, and support throughout our research process.
Appendix 1: Lewisburg River Town Survey

Lewisburg River Town Survey
URL: http://tinyurl.com/LRTTsurvey

You are being asked to take part in a research survey on your personal connection, as a Lewisburg area community member, to the Susquehanna River. Please read this form carefully before proceeding with the study. Your participation in this survey will require approximately 15 minutes. There are no known risks or discomforts associated with this survey, and we ask you to complete the following questions to the best of your ability. This survey will be used to gather knowledge on individual perspectives of the Susquehanna River and Lewisburg as a River Town. Taking part in this study is completely voluntary, and you are free to withdraw from the study at any time. Your responses will be kept strictly confidential. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified. If you have questions or want a copy or summary of this survey’s results, please contact the researchers. The researchers conducting this study are Bucknell University students, Traci Eschbach, Amanda Fazio, and Meghan Reilly and Lewisburg Neighborhoods Corporation executive director, Samantha Pearson. If you have any questions during or after the survey, you may contact Traci Eschbach at tae008@bucknell.edu, Amanda Fazio at akf008@bucknell.edu, Meghan Reilly at mer039@bucknell.edu, or Sam Pearson at elmstreet@dejazzd.com. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Bucknell University Institutional Review Board Chair, Matthew Slater, at 570-577-2767 or at matthew.slater@bucknell.edu.

Completing this survey indicates that you are 18 years of age or older and that you have provided consent to participate in the study.

Relatively how far away do you live from the Susquehanna River?
- Less than 1 mile
- Between 1 and 2 miles
- Between 2 and 5 miles
- Between 5 and 10 miles
- 10 + miles

Which best describes you?
- Bucknell Student
- Lewisburg Borough Resident
- Greater Lewisburg Area Resident (17837, 17847, or 17850 zip codes outside of the Borough)
- Owner of waterfront property
- Local Business Owner
- Other: ____________________________________________

Please complete the following sentence: "To me, the Susquehanna River is...

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

What are Lewisburg’s biggest environmental challenges?
- Flooding
- Litter
- Invasive plants
- Loss of personal and cultural connections to the local setting
- Waterborne pollutants
- Unsure
On average, how many times per year do you partake in recreational activities in, on, or by the Susquehanna River?
- I do not spend any time at the river
- 1-4 times
- 5-9 times
- Greater than 10 times

How many times per year would you like to partake in recreational activities in, on, or by the Susquehanna River in the future?
- I do not want to spend any time at the river
- 1-4 times
- 5-9 times
- More than 10 times

Which of the following recreational activities do you currently participate in, on, or by the river?
- Biking
- Walking/Jogging
- Dog walking
- Kayaking/Canoeing
- Hiking
- Bird watching
- Fishing
- Boating
- I do not participate in any of these activities
- Other:_________________________________________________________________________________

Which of the following recreational activities would you like to participate in, on, or by the river in the future?
- Biking
- Walking/Jogging
- Dog walking
- Kayaking/Canoeing
- Hiking
- Bird watching
- Fishing
- Boating
- I do not want to participate in any of these activities
- Other:_________________________________________________________________________________

What are the top barriers to greater engagement with the river for you? (List up to three.)
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
On a scale of 1 to 5, how strongly would you rate the community's connection to the Susquehanna River?

<table>
<thead>
<tr>
<th>Weak connection</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strong connection</th>
</tr>
</thead>
</table>

What are Lewisburg’s greatest assets connected to the river? (Select the top 6)
- Bull Run Creek
- Buffalo Creek
- Hufnagle Park
- Wolfe Field
- St. George Street boat ramp/walking trail
- Lewisburg Community Garden
- Mariah’s Garden
- Montandon Marsh
- Red Rock

What would make the community's connection to the river stronger?
______________________________________________________________________________
______________________________________________________________________________

Which of the following local river-related events have you attended? (Check all that apply)
- Arts Festival activities in Soldiers Memorial Park
- Picnic in the Park in Soldiers Memorial Park
- River Road Holiday (previously held on River Road south of the Borough)
- Polar Bear Plunge at St. George Street boat ramp
- River Clean Up in Lewisburg or Sunbury
- Dinner by the River at First Presbyterian Church
- Other: _______________________________________________________________________

Are there any river festivals or activities that you have attended in other places that included features that you would like to see incorporated in Lewisburg?
______________________________________________________________________________
______________________________________________________________________________

Please respond to the following statement: I would like to see more public access points to the Susquehanna River.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

Please respond to the following statement: I would like to see more community involvement/activities held at the river.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
Please respond to the following statement: I would like to see a cleaner river.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly agree</th>
<th>5</th>
</tr>
</thead>
</table>

Please respond to the following statement: I would like to see more natural habitat along the river.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly agree</th>
<th>5</th>
</tr>
</thead>
</table>

Please respond to the following statement: I would like to see more walking paths to or along the river.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly agree</th>
<th>5</th>
</tr>
</thead>
</table>

What additional amenities would you like to see for the Borough's river frontage? (Select your top 5)

- Walking trails
- Picnic tables
- Park/play areas
- Canoe/kayak access
- Rail Trail connection
- Promenade on the railroad bridge
- Waterfront dining
- Covered pavilion
- Public restrooms
- Other:____________________________________________________________________________

Did you attend the Lewisburg Greenway Design Charrette in November of this past fall (2015)?

Yes    No

If no, what was your reason for not attending?

- The day/time did not work with my schedule
- I was not interested in the event
- I did not know about the event
- Other:____________________________________________________________________________

The Lewisburg Neighborhoods Corporation is holding another design charrette on April 27, 2016 from 6-9 pm at the Lewisburg Club. If you did attend the charrette last fall, is there anything that you would like to see more of at the next one or any suggestions to make it better?

____________________________________________________________________________

____________________________________________________________________________

To receive more information about the design charrette on April 27th at the Lewisburg Club and to be on the email list to receive more information about Lewisburg river-related events, please provide your name and email address:

____________________________________________________________________________

For more information, please see the web pages of the following organizations: Lewisburg Neighborhood Corporation, Linn Conservancy, Buffalo Valley Rail Trail, Susquehanna
Greenway Partnership, Buffalo Creek Watershed Alliance, and Middle Susquehanna Riverkeeper
Appendix 2: Survey and Flyer Distribution Locations and Map

- River Woods Nursing Home
- Elmcroft Nursing Home
- Buffalo Valley Lutheran Village
- Sunflower Child Care
- SUM Child Development
- Kids of the Kingdom
- Kinderfolk
- Lewisburg Cooperative Preschool
- First Presbyterian Church
- First Baptist Church
- St Paul’s Methodist Church
- Christ Evangelical Lutheran Church
- Sacred Heart Church
- Lewisburg Borough Building
- Lewisburg Farmer’s Market
- Bucknell Message Center
- Weis Market
- Giant Foodstore
- Lewisburg Arts Festival
- Amami Café
- Cherry Ally Café
- Pronto
# Appendix 3: Focus Group List

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
<th>Phone Number</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>Borough Planning Commission</td>
<td>Borough Planning Commission</td>
<td>570-716-0870</td>
<td><a href="mailto:swm@dejazzd.com">swm@dejazzd.com</a></td>
</tr>
<tr>
<td>Judy</td>
<td>Mayor</td>
<td>Mayor</td>
<td>570-524-9604</td>
<td><a href="mailto:jtw@dejazzd.com">jtw@dejazzd.com</a></td>
</tr>
<tr>
<td>Stacey</td>
<td>Buffalo Valley Recreation Authority</td>
<td>Buffalo Valley Recreation Authority</td>
<td>570-524-4774</td>
<td><a href="mailto:director@bvrec.org">director@bvrec.org</a></td>
</tr>
<tr>
<td>Sam</td>
<td>LNC</td>
<td>LNC</td>
<td></td>
<td><a href="mailto:elmstreet@dejazzd.com">elmstreet@dejazzd.com</a></td>
</tr>
<tr>
<td>Amanda</td>
<td>Bucknell Professor, Director of Environmental Studies Department</td>
<td>Bucknell Professor, Director of Environmental Studies Department</td>
<td></td>
<td><a href="mailto:Aw021@bucknell.edu">Aw021@bucknell.edu</a></td>
</tr>
<tr>
<td>Tony</td>
<td>Bucknell Director of Outdoor Education</td>
<td>Bucknell Director of Outdoor Education</td>
<td></td>
<td><a href="mailto:ajs049@bucknell.edu">ajs049@bucknell.edu</a></td>
</tr>
<tr>
<td>Brian</td>
<td>EBT Bike/Ped Committee</td>
<td>EBT Bike/Ped Committee</td>
<td></td>
<td><a href="mailto:brianauman11@gmail.com">brianauman11@gmail.com</a></td>
</tr>
</tbody>
</table>
Appendix 5: Focus Group Questions

1. What is your biggest priority with respect to the river in Lewisburg?

2. What is your biggest concern with respect to planning for the river in Lewisburg?

3. What is your vision for the river in Lewisburg in 2050?
Appendix 6: Timeline

<table>
<thead>
<tr>
<th>SUN</th>
<th>MON</th>
<th>TUE</th>
<th>WED</th>
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<td>30</td>
</tr>
</tbody>
</table>

**3 Submit poster for printing**

**4**

**5** Distribute paper copies of surveys to identified locations, Publish survey link

**6** Sustainability Symposium Poster Session

**7**

**10**

**11**

**12**

**13**

**14**

**15**

**16**

**17**

**18** Focus Group

**19** Distributing flyers this week

**20**

**21** Practice Presentations

**22**

**23** Lewisburg Arts Festival

**24**

**25**

**26** Public Presentations

**27** Charette

**28**

**29**

**30**

[www.free-printable-calendar.com](http://www.free-printable-calendar.com)
Appendix 7: IRB Form

IRB Project Proposal Summary

Tracking Number: 1516-087
Principal Investigator: Amanda Fazio
Co-PI(s): Traci Eschbach, Meghan Reilly
PI Status: Student
Submitted By: akf008
Submit Time: 3/7/2016 at 17:11
Title: Environmental Studies 411
Elm Street Project Sponsor: aw021
Department: Environmental Studies
Department Rep:
Address: 701 Moore Avenue, C285 Lewisburg, PA 17837
Phone: 973-309-1946
Email: akf008@bucknell.edu
Review Type: EXPEDITED

Answers To Part I:

1) The research DOES NOT involve prisoners, fetuses, pregnant women, the seriously ill, or mentally or cognitively compromised adults as subjects.

2) The research DOES NOT involve the collection or recording of behavior which, if known outside the research, could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subject's financial standing, employability, or reputation.

3) The research DOES NOT involve the collection of information regarding sensitive aspects of the subjects' behavior (e.g., drug or alcohol use, illegal conduct, sexual behavior).

4) The research DOES involve subjects under the age of 18. Note: Research involving children cannot be classified as Exempt if the research involves: SurveyInterview proceduresObservations of public behavior when the investigator participates in the activities being observed. Research involving children can be considered as Exempt if the research involves only educational tests and observation of public behavior where the investigator does not participate in the activities being observed and meets the other conditions of 45 CFR 46.101(b)(2). These conditions stipulate that the information obtained cannot be recorded in a manner such that subjects can be identified, directly or through identifiers linked to the subjects. For example, because audio-or videotapes allow subjects to be identified, using such a data source would make it impossible for a study to be considered as exempt. Please refer directly to CFR 46.101(b)(2) for additional details. Studies that include minors are typically considered at either the expedited or full level of
review depending on the level of risk involved in the study.

5) The research DOES NOT involve deception. 6) The procedures of this research are generally free of foreseeable risk to the subject.

Answers To Part I (continued):

7) The research WILL NOT involve existing identifiable data, documents, records, or biological specimens (including pathological or diagnostic specimens), where these materials, in their entirety, have been collected or will be collected solely for non-research purposes.[NOTE: To be considered exempt, data sources must be either publicly available OR the information must be recorded anonymously (i.e., in such a manner that subjects cannot be identified, either directly, or through identifiers linked to the subject). For example because audio-or videotapes allow subjects to be identified, using such a data source would make it impossible for a study to be considered as exempt.]

8) The research WILL NOT involve collection of data through use of the following procedures: a) non-invasive procedures routinely employed in clinical practice excluding procedures involving x-rays or microwaves; b) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; c) weighing, testing sensory acuity, electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, echography, sonography, ultrasound, magnetic resonance imaging (MRI), diagnostic infrared imaging, doppler blood flow, and echocardiography; d) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

9) The research WILL NOT involve collection of data from voice, video, digital or image recordings made for research purposes where identification of the subjects and/or their responses would not reasonably place them at risk of criminal or civil liability, be stigmatizing, or be damaging to the subjects' financial standing, employability, insurability, or reputation.

10) The research WILL study individual or group characteristics or behavior (including but not limited to research involving perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior, or research employing surveys, interviews, oral history, focus groups, program evaluation, human factors evaluation, or quality assurance methodologies).
11) The research WILL involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior. [Although confidentiality will be strictly maintained, information will not be recorded anonymously, e.g., use will be made of audio-or videotapes, names will be recorded, even if they are not directly associated with the data].

12) The research WILL NOT involve deception[NOTE: Deception must be scientifically justified and de-briefing procedures must be outlined in detail. Based upon the judgment of the reviewers, some protocols involving deception may qualify for expedited review. In other cases, the deception will be of sufficient consequence to require full IRB review.]

13) The research WILL NOT involve prospective collection for research purposes of biological specimens; research on drugs or devices for which an investigational new drug exemption or an investigational device exemption is not required; and collection of blood samples by finger stick or venipuncture.

14) The research HAS NOT BEEN previously approved by the convened IRB as follows: (a) where (i) the research is permanently closed to the enrollment of new subjects; (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or (b) where the research remains active only for the purposes of data analysis; or (c) where the IRB has determined at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified; or (d) where no subjects have been enrolled and no additional risks have been identified.

Answers To Part II:

1) What is the purpose of the proposed study (the research question) and what is the research hypothesis?

The small town of Lewisburg, Pennsylvania has recently been designated as a River Town through the Susquehanna Greenway Partnership incorporating it into "a network larger than [its] county or region" (Susquehanna Greenway Partnership). The focus of the River Town project is to create a connection between communities and the watershed in which they exist capitalizing on their proximity to the river. Developing the term "river town" and giving it meaning is a key part of forming this connection because it is a reminder that towns like Lewisburg are more than just people and buildings; they are, in essence, their interrelatedness with their surroundings as well as their history.
River towns, like Lewisburg, developed originally as hubs for trade and commerce going back as far as when the land was inhabited mostly by the Native Americans. This was a result of the ability to travel into the valleys between ridges that would otherwise be inaccessible and the amount of flat fertile land for agriculture. From this establishment of locations, came development in more populated areas through establishing different goods, services and industries. Central Pennsylvania is well known for timber and coal, and Lewisburg itself had many old mills that are no longer in use. It is easy to see how, over time, the town has expanded and industrialized away from the river through the development of newer technologies, including housing and transportation. This expansion correlates with the distance, both physically and metaphorically, that is created between the community and the river (Marsh, 2016). While the physical connection to the Susquehanna River still persists as it runs adjacent to the town, the floodplain and flood hazards that it causes to the community also continue to be a source of reluctance to connect to the river and therefore only widen the gap of connectivity. Our goal as a project team in Environmental Studies 411: Environmental Community Projects, is to start a dialogue about how the people of Lewisburg, as well as surrounding areas, think about their connection to the river and how to improve that connection, making community members more mindful and aware of the river. In this way, the community will become better stewards of the river through their personal connection and investment in its health.

2) Describe the proposed subject sample. If subjects under the age of 18 will participate in your research, indicate the expected age range of the samples. If your research involves prisoners, fetuses, pregnant women, the seriously ill, or mentally or cognitively compromised adults as subjects, you must indicate clearly why the use of these subjects is scientifically necessary.

The proposed subject sample is Lewisburg residents, as well as residents in Milton and Montandon. The subjects of the survey are anticipated to be homeowners and business owners in these three areas. In addition, Bucknell students and faculty are also within the subject sample, with the possibility of some of the Bucknell students being under the age of 18. This makes the expected age range of our sample to be 17 and over.

3) How will subjects be recruited and selected?

We have designed a convenience survey, so there will be no randomization or specific sampling process to select residents. The distribution process includes mass mailing to Lewisburg Borough residents, social media, online distribution to Bucknell professors who are residents of Lewisburg and the surrounding area, and distribution to Bucknell students on Bucknell’s Message Center. The addresses for the mass mailing distribution will come from a list generated
by Sam Pearson and will be sent to all Lewisburg residents, with a drop off location of the Lewisburg Borough for the completed surveys. There will also be an online link to the survey on the Lewisburg Neighborhood Corporation Facebook profile and on the Facebook page for the Lewisburg Downtown Partnership. The survey will also be distributed online through the Bucknell Message Center, serving as a way to reach Bucknell students.

Describe fully the following:

4a) all research methods and procedures that will be employed in this study.

Prior to facilitating and creating a connection to the river with Lewisburg and the surrounding communities, we must first gauge the state of the current connection. This is why our first step is to design a convenience survey to be distributed to Lewisburg residents and the surrounding community, targeting those living on waterfront property, attendees of the Bull Run Greenway charrette held in November 2015, and community stakeholders such as business owners in Lewisburg. By framing the survey in this way, our goal is to not just receive feedback on connections to the river from local residents, but also those who have a large stake in the river, as well as receiving feedback on the previous charrette to see what attendees liked or did not like. This is especially important because if an individual did not attend, we would like to understand why to try to encourage more participation at the next one. In this way, one individual may not be answering all of the questions in the single survey, but rather, we are able to reach a large number of individuals with different roles in the community without having to distribute multiple surveys.

We plan to distribute the survey through mass mailing to Borough residents, social media, online distribution to Bucknell professors who are residents of Lewisburg and the surrounding area, and distribution to Bucknell students on Bucknell’s Message Center. The addresses for the mass mailing distribution will come from a list generated by Sam Pearson and will be sent to all Lewisburg residents. Within the envelope will be a paper copy of the survey with the return location to be the Lewisburg Borough Office, in addition to a small slip of paper with an online web address to take the survey online. The link to the survey will also be posted on the Lewisburg Neighborhood Corporation (LNC) Facebook profile and on the Facebook page for the Lewisburg Downtown Partnership to garner larger survey feedback. At the Lewisburg Arts Festival on April 23rd, the Lewisburg Neighborhoods Corporation will have its own booth where we will be advertising for the Elm Street Design charrette with signs and pamphlets, as well as by continuing to collect surveys, having an interactive activity, and potentially having an activity held by the river to encourage people to continue to access the river at the Festival. The survey
will also be distributed online through the Bucknell Message Center, serving as a way to reach Bucknell students. We will record survey responses as we receive them in order to stay organized in our data collection.

In addition to the survey, we will be conducting a series of individual interviews and some focus groups with key stakeholders throughout the community to get their perspectives on community engagement with the River. These individuals and groups have been selected from a spreadsheet formulated by Sam Pearson based on the work she has done with the LNC. The subjects will be asked to answer a series of questions pertaining to their relationship with the Susquehanna River and Lewisburg community, as well as what design plans they would like to see for Lewisburg in the future. Proposed focus groups are the Lewisburg Neighborhood Corporation (LNC), the River Town Team, and the Borough Council. All recorded responses by the research team will be coded to ensure confidentiality. The focus groups and individuals interviewed will then be sent the coded responses to read through to ensure accuracy.

4b) approximately how much time each subject is expected to devote to the research.

We expect each subject to devote a maximum of 15 minutes to the research due to the time it takes to complete the survey. The focus groups and individual interviews should take no longer than 30 minutes.

4c) how data will be collected and recorded (with or without identifiers? what instruments, materials, or equipment will be used? Will audio or videotapes be employed in data collection?).

In the final step of this form, please append electronic copies of all written instruments and/or describe any apparatus with which subjects will be in direct contact.

The data will be collected based off of an address list of Lewisburg residents generated by Sam Pearson. However, the survey does not have any identifiers once it is returned, as the survey will remain anonymous. There will also be an online link to the survey distributed on Message Center and on social media, including the LNC and Lewisburg Downtown Partnership Facebook pages. There will be no audio or videotapes employed in data collection. The only written instrument employed in this research is the paper survey being distributed.

For the focus groups and individual interviews, responses will be recorded by the research team and then coded to ensure confidentiality. The focus groups and individuals interviewed will then be sent the coded responses to read through to ensure accuracy.

4d) methods for obtaining and documenting informed consent of subjects (or assent in the case
of minors; for minors, please also indicate how the consent of parents or legal guardians will be obtained). In the final step of this form, append electronic copies of all materials used to obtain informed consent or assent.

On the survey portion, there is a line in the introduction that states, "If you are under the age of 18, you are not permitted to take this survey" in order to rule out any minors taking the survey.

For the focus groups and individual interviews, consent forms will be given to participants.

4e) use of deception in the proposed study and justification for its use.

There is no use of deception in the proposed study.

4f) methods for preserving confidentiality (including plans for storing/disposing of tapes and other data records at the conclusion of the research).

The survey does not ask for subject names or identifiers, so there is no concern for confidentiality.

For the individual interviews and focus groups, the responses will be coded by the research team. For example, instead of using a business owner's name, the code, Business Owner 1 (BO1) will be used to ensure confidentiality and limit identifiers. Only the researchers will have access to the information that is not coded.

5) Indicate any benefits that are expected to accrue to subjects as a result of their participation in the research. In the event that subjects will be paid, describe all payment arrangements, including how much subjects will be paid should they choose to withdraw from the study prior to completion of the research.

There are no benefits that are expected to accrue to subjects as a result of their participation in the research.

6) Describe any relationship between researcher and subjects, such as: teacher/student; superintendent/principal/teacher, employer/employee. If such a relationship exists, how will it affect the subject's ability to participate voluntarily and how will the Principal Investigator handle it?

Due to the anonymity of the survey, there will be no relationship between research and subjects.
Appendix 8: Survey Graphics

On average, how many times per year do you partake in recreational activities in, on, or by the Susquehanna River?
(228 responses)

![Pie chart showing survey responses]

Figure 1

How many times per year would you like to partake in recreational activities in, on, or by the Susquehanna River in the future?
(227 responses)

![Pie chart showing survey responses]

Figure 2
**What are Lewisburg’s greatest assets connected to the river? (Select the top 6)**

(210 responses)

- Bull Run Creek: 110 (52.4%)
- Buffalo Creek: 98 (46.7%)
- Hufnagle Park: 53 (25.2%)
- Wolfe Field: 137 (65.2%)
- St. George S...: 92 (43.8%)
- Lewisburg C...: 62 (29.3%)
- Mariah’s Gar...: 56 (26.7%)
- Montandon...: 35 (16.7%)
- Red Rock: 17 (8.1%)

**Figure 3**

**On a scale of 1 to 5, how strongly would you rate the community’s connection to the Susquehanna River?**

(223 responses)

- 1: 21 (9.4%)
- 2: 70 (31.4%)
- 3: 79 (35.4%)
- 4: 35 (15.7%)
- 5: 18 (8.1%)

**Figure 4**
Please respond to the following statement: I would like to see more community involvement/activities held at the river.
(226 responses)

Figure 5

Please respond to the following statement: I would like to see more walking paths to or along the river.
(229 responses)

Figure 6
Please respond to the following statement: I would like to see more natural habitat along the river.
(229 responses)

Figure 7

Please respond to the following statement: I would like to see a cleaner river.
(229 responses)

Figure 8
What additional amenities would you like to see for the Borough's river frontage? (Select your top 5)
(228 responses)

- Walking trails: 207 (90.8%)
- Picnic tables: 151 (66.2%)
- Park/play ar.: 170 (74.6%)
- Canoe/kayak...: 139 (61%)
- Rail Trail con...: 114 (50%)
- Promenade...: 65 (28.5%)
- Waterfront di...: 103 (45.2%)
- Covered pav...: 17 (7.5%)
- Public restro...: Other

Figure 9
Appendix 9: Images from Design Charrette

Participants discuss what they would like to see at the targeted sites, with a member of the River Town Team facilitating each table. At the end of the night, a short debrief was held where the main ideas for each site were presented.
With the help of the facilitators, participants were encouraged to draw, write lists, and look at images to assist in visualizing what these spaces could look like in the future (Left).

A week prior to the Design Charrette, a sketching session was held to allow community artists to think about what these spaces could look like (Right). This ultimately helped participants visualize ideas at the Charrette.
Bibliography


