

The Key to the Lock

Samuel Petrov
University of Minnesota
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Executive Summary

Since 1963 the Minneapolis Riverfront has hosted a lock and dam that has served as the focal point for St. Anthony Falls. Recently, the United States Congress declared that the lock portion of the system shall be closed indefinitely no later than June 2015, in an effort to stop the invasive species of Asian Carp from traveling upriver (St. Anthony Falls Heritage Board, 2014). As of right now, the current site that hosts the St. Anthony Falls lock has no publicly planned future. Arguably, the Twin Cities will soon lose a major transportation asset that has served its purpose for several decades. Just as the lock has been valuable to the transportation industry in the past, so too can it benefit the average civilian as an orientation center in the future. As the riverfront continues to evolve, we must look forward and determine how we can think for the long-term while also considering the historic past of the Mississippi's locale.

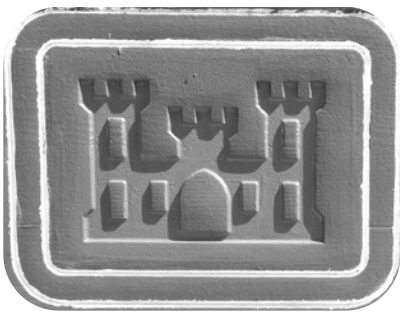
Just as the St. Anthony Falls lock prepares to permanently close, major long-term riverfront plans have been envisioned by the St. Anthony Falls planning committees. The St. Anthony Falls Regional Park Master Plan from March 2015

mentions the future potential of the lock structure only in passing (Minneapolis Park and Recreation Board, 2015). The idea of an orientation center, and even an interpretive site, has been proposed briefly, but no substantive details have thus far been elucidated. Because the site will undoubtedly be around for the foreseeable future and is located at the epicenter of Minneapolis, the lock has the potential to influence a large number of visitors every year. Therefore, careful planning and consideration must be taken in order to prudently present the Mississippi River not only to locals, but to tourists from all over the world.

An Orientation Center Focused on People, Place, and Story

This report supplies the Heritage Board with a framework of knowledge for a comprehensive revitalization of the St. Anthony Falls lock site. The lock has long been an iconic piece of St. Anthony Falls, and it has the potential to become the primary identifier for visitors to the Heritage Zone. With a felicitously planned orientation center, the Heritage Zone would be further enhanced into a recognizable world-class heritage site that promotes the Mississippi within both the Twin Cities metro area and the whole state. Grounded in classroom curriculum from the University of Minnesota, this report offers academic knowledge that can help improve the planning of an orientation center that is spatially set within the St. Anthony Falls Heritage Zone. As a modern project proposal, it integrates thinking from a range of liberal arts disciplines, and it also serves a greater purpose of including voices that may not have been previously salient. By incorporating thinking about climate change and open collaboration, this proposal intends to help the Heritage Board effectively cross-pollinate with sister organizations to successfully produce an orientation center that is not only inviting and inclusive, but likewise meets the demands of a world-class heritage site.

As the Heritage Board formed nearly 30 years ago, and only even more recently implemented today's oft taken-for-granted riverfront, we must look ahead to the next 30 years and consider how an orientation center would dynamically fit into an ever-evolving, 21st century outlook of a river as grand as the Mississippi.

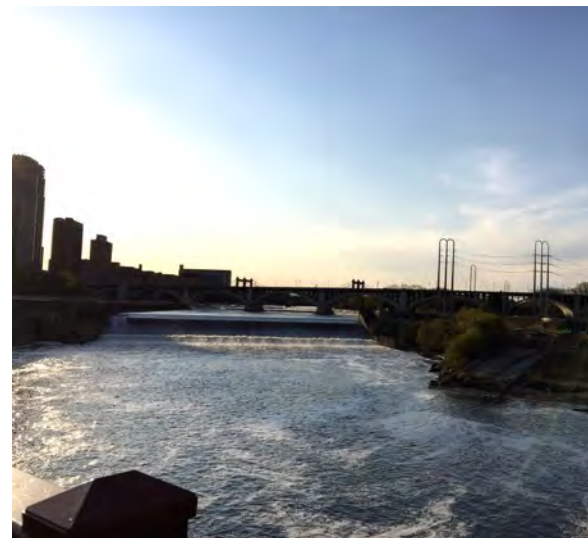


Problem Statement

St. Anthony Falls and its surrounding environment have the potential to become a world-class heritage site. Today, despite the work that has been conducted in the past two decades to revitalize and reinvigorate the downtown Minneapolis waterfront, the narrative involving St. Anthony Falls and its nearby geographic counterparts remains fragmented. With the transformation of the Stone Arch bridge into a non-motorized vehicle crossing, people have started to use the river as a lake-like recreation spot (Nunnally, 2015). With the relatively recent introduction of the Mill City Museum, visitors have begun to realize some of the commercial history that formed Minneapolis. With the marked parks and leisure spots, along the boundaries that map out the St. Anthony Falls Heritage Zone, civilians have learned about a few aspects of the Mississippi River, such as its use as a transportation hub or its significance to native peoples. Nonetheless, no single point of reference exists that informs visitors about the multi-faceted background and storyline that has created the river, both in abstract and physical forms, as we know it today.

Information only becomes useful when presented effectively. In the case of the Mississippi River, the various perspectives that have impacted the meaning of the Mississippi within the St. Anthony Falls region have only been partially taken into consideration. Visitors are prone to miss certain segments of the story, since placards and signs only sporadically spread the word about what the river's past entails. The St. Anthony Falls region must possess an allure that brings people to the spot. The space should invite people and evoke a curiosity to learn more about the river environment. The meaning of appeal, in this scenario, is two-fold: The pragmatic approach reminds us that the riverfront is missing amenities that help retain visitors, including restrooms and drinking fountains (St. Anthony Falls Heritage Board, 2009). Food attractions and other entertainment may also be warranted, but the basic facilities are the first step. At the second layer, certain perspectives have been brought forth more prominently than others, inadvertently in the same vein as agenda-setting: As certain signs and information receive higher salience due to higher visibility or greater frequency in dissemination, that knowledge perpetually spreads more effectively to a wider audience. Unfortunately, the riverfront has yet to bring different sources of knowledge, along with contrasting perspectives, under a single roof for people to contextually grapple with. The shared spread of voices needs to become more equitable because, difficult as it may be to convey, there is not merely one objective story of the river. Between a practical consideration for necessary amenities, combined with the need for a centralized place for learning, the riverfront still misses its potential to host a seminal reason for visitors to attend.

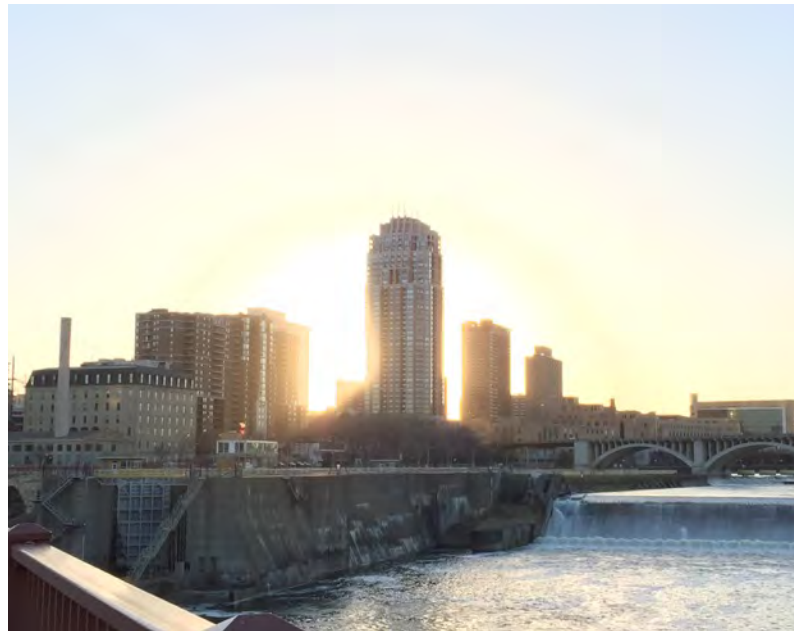
One of the major problems, for people who do end up at the riverfront, is an uncharismatic approach to education. Visitors can currently peruse stationary signs that carry bits and pieces of information here and there, but there are elements missing that would not only help knowledge retention, but also help reach a wider audience. For instance, families may not be inclined to stop at St. Anthony Falls, or anywhere along the riverfront of the Heritage Zone for that matter, because there is no current infrastructure for kids to enjoy. Even for pre-teens or teens, attention spans are not geared toward hours on end of reading dense, museum-esque prose. Long-term thinking implies that knowing about the St. Anthony Falls Heritage Zone requires young people to engage with multiple perspectives, but static



text no longer suffices as engaging material for millennials. Precedent could include the water play area currently contained within the Mill City Museum. The riverfront plans that have come to fruition hitherto have succeeded in bringing in white, adult history buffs who enjoy learning in the traditional sense—but to become world-class, the space needs to embrace the next generation (St. Anthony Falls Heritage Board, 2009). The opportunity to dramatically change *how* people learn about the riverfront becomes equally important as *what* people learn about the riverfront.

Along with a lackluster ambition to encourage learning along the riverfront, the region continues to emphasize a single-modality perception of how the world works and is going to work. That is, the area does not encourage dynamic thinking. Even for something ostensibly more static, like history, a sign or set of signs is not going to suffice to explain the full story. Perspectives and new information change how we look at past information. As an example, climate change, with particular emphasis on the Anthropocene and the forward-thinking mindset, can influence the river at large. Because the river changes over the long term, the information that illuminates the river's story and our thinking should also pose the unknowns of long-term consequences. As such, signs and information need to be more dynamic. Signs need to have the ability to change, because we admittedly do not know exactly how the river is going to change in next 20, 50, or 100-year time spans. Look at the lock beside St. Anthony Falls, which opened around 50 years ago. Already, the purpose of the structure has been invalidated because the transportation industry has changed, and invasive species have arisen that literally change the landscape of river planning. Habitats and ecology change. Flood patterns change. Transportation methods change. In order to truly educate the river-visiting populace around St. Anthony Falls, any and all information needs to be changeable and revisable, whether sources include classic text or in-person tours and speeches.

On top of the dated communication method, the riverfront currently does not explicate the awareness of human intervention that has structurally influenced the river. The river on the whole has been changed because of the actions we have taken upon a natural geographic feature of the land. Just as changes happen naturally, so too do changes take place due to humans. The public discourse has to yet to fully realize, for example, that disasters such as flooding occur due to a cascade of causes, starting with artificial water guidance via levees (Klein and Zellmer, 2014). In much the same way, locks and dams have also influenced how the river functions as an earthen characteristic. Locks and dams affect the spread of wildlife to different areas. Dredging affects sediment levels, further changing local ecologies. Currently, the problem is that where denotive signs do exist within the Heritage Zone, they only present cartographic sketches and superficial lenses of historical details. Sporadic signs about excerpts from the history books just do not cut it anymore. With St. Anthony Falls itself being a quintessential example of a man-made tool, failing to communicate our impact with respect to the environment, via the river, becomes a sore spot that should definitely be reiterated in some form along the St. Anthony Falls stretch.



Amidst all of the shortcomings along the riverfront, active engagement and participation certainly both come up short. Once again, signs are a passive form of getting ideas across to passerby. To truly convey the importance of concepts such as conservation and human-environmental interactions, we need to comprehend the plenitude of perspectives that have brought us to the point we are at today. With a river that has long been worked on by humans, no sole party is responsible for what has been done to the river, nor is any single group responsible for what will happen going forward. As a result, we need to understand the different realities groups have come from as they have altered and worked on the river. In reality, passive signs that have a logo of a certain organization (e.g. the Army Corps of Engineers) do not accurately designate what that party has contributed to the river. In person representatives, from places including the DNR, the Army Corps, the Heritage Board, the University of Minnesota—currently have no palpable place to address the public in an organized fashion with regard to relevant river matters. In-person engagement can capture attention much more consistently than text, but heretofore the river has had no discrete place to host speakers germane to the river.

The perspectives of the minorities, especially ethnic minorities, are also missing from the mainstream discussions that transpire around St. Anthony Main. Like the American Revolution, the Euro-centric approach that Americans have taken up in writing about history has similarly permeated into the local history about the Mississippi. Native American perspectives are not a principal way we look at the river presently. In fact, the ways in which native peoples interpret relationships between humans and nature provide a wonderful framework that all St. Anthony Falls visitors can embrace. At



the same time, other ethnic perspectives centric to the Mississippi, such as African Americans' perspectives, are frequently left out of the main Heritage Zone takeaways. Once more, the conscious awareness of topics like environmental discrimination are more commonplace than they were half a century ago, or even a couple decades ago, when the current state of St. Anthony Falls was in the planning stages. Nevertheless, as circumstances change and different perspectives of history are uncovered, the way history is narrated changes. (This is a perfect example of how, as mentioned before, the river never "stands still.") Abstractions such as B'Dote and environmental racism are important components that not only help illustrate the past, but help us understand what we can do going forward to connect the river to a wider spectrum of people in a more egalitarian manner.

All in all, the St. Anthony Falls Heritage Zone has yet to consciously take part in connecting the river to humans beyond the conduit of recreational space. Perhaps the standard museum-like "signs along the walkways" approach has been a decent starting point, but as we look into the future of what the river can actually become, more work in public education must be done. The broader ideas that are intertwined with the Mississippi River, which include climate change, human intervention (viz., the Anthropocene), and long-term thinking, are still not a part of the Heritage Zone's daily information flow. By taking into account academic discourses as well as corresponding on-the-ground implementation methods, we currently have the ability to genuinely plan for a better tomorrow by educating the public and creating an appealing place for all.



Proposed Intervention

Despite the plenitude of aforesaid problems that plague the Mississippi, the riverfront still has the ability to connect everyday laymen to underplayed notions. A central orientation center would help introduce newcomers to the area, regardless of whether the newcomers are locals or tourists. To be sure, the St. Paul Riverfront already hosts a miniature river-related National Park Service kiosk hidden within the Science Museum of Minnesota, but the setup does not engage the public to think critically about the river's history and future. By providing a single spot to interpret and learn about the river's intricacies from its past, present, and future, visitors can better understand the context of the Mississippi insofar as how it came to be in its present state of existence. An interpretive orientation center would also permit higher public engagement with critical questions of perspective, inclusion, and diversity when planning for an increasingly equitable riverfront of the future.

With the present situation of the lock beside the St. Anthony Falls dam, the U.S. Army Corps of Engineers' lock structure would be the ideal space for the planned visitor center. The location of the building is directly accessible from the west bank, and it taps into the high traffic from the Stone Arch Bridge. Because the building has a direct look over St. Anthony Falls, the spot would help visitors understand one of the most critical elements within the Heritage Zone. The interior of the building could be slightly renovated to enable conducive learning, but overall most of the building could remain intact. By re-using a structure that already exists, the Heritage Board would be able to integrate recent history, including the closure of the lock, into the narrative about place. The spot also provides a view of other elements adjacent to the actual dam, which would help visitors connect theoretical ideas to the real-world.

The location would be a gathering place for representatives from different river-involved organizations to come together, discuss history, and talk about future plans with the general public. The lock could have a classroom-sized space for groups to learn firsthand what the various stakeholders have done, or plan to do, when interacting with the Mississippi River. Question and answer sessions could also be a part of the schedule. Guest speakers could include spokespeople from the National Park Service, the Minnesota DNR, the Heritage Board, state representatives, Native Americans, and local Minneapolis city or park board members. Guest lecturers could be scheduled based on the time of year and season, and in-person talks could help connect bigger ideas to the visible details of the Mississippi River.

As a central station, or hub, for the Mississippi and its capacity to teach, the location would need to be accessible by the largest number of people possible. Of course, the spot is already alongside the terminus of the Stone Arch Bridge, which attracts people as it is. In order to improve accessibility, the former lock could have a Nice Ride bike sharing station in order to promote local transportation. For public transit, a current bus route could possibly be amended in order to accommodate Metro Transit users. Bike racks would also be provided. As part of the transit network accessible by foot, bike, car, and bus, the orientation center would at least be physically accessible to the maximum amount of potential visitors. To play on the strengths of involved organizations, the Heritage Board could call on organizations like the Metropolitan Council, which has looked into ethnic considerations with respect to

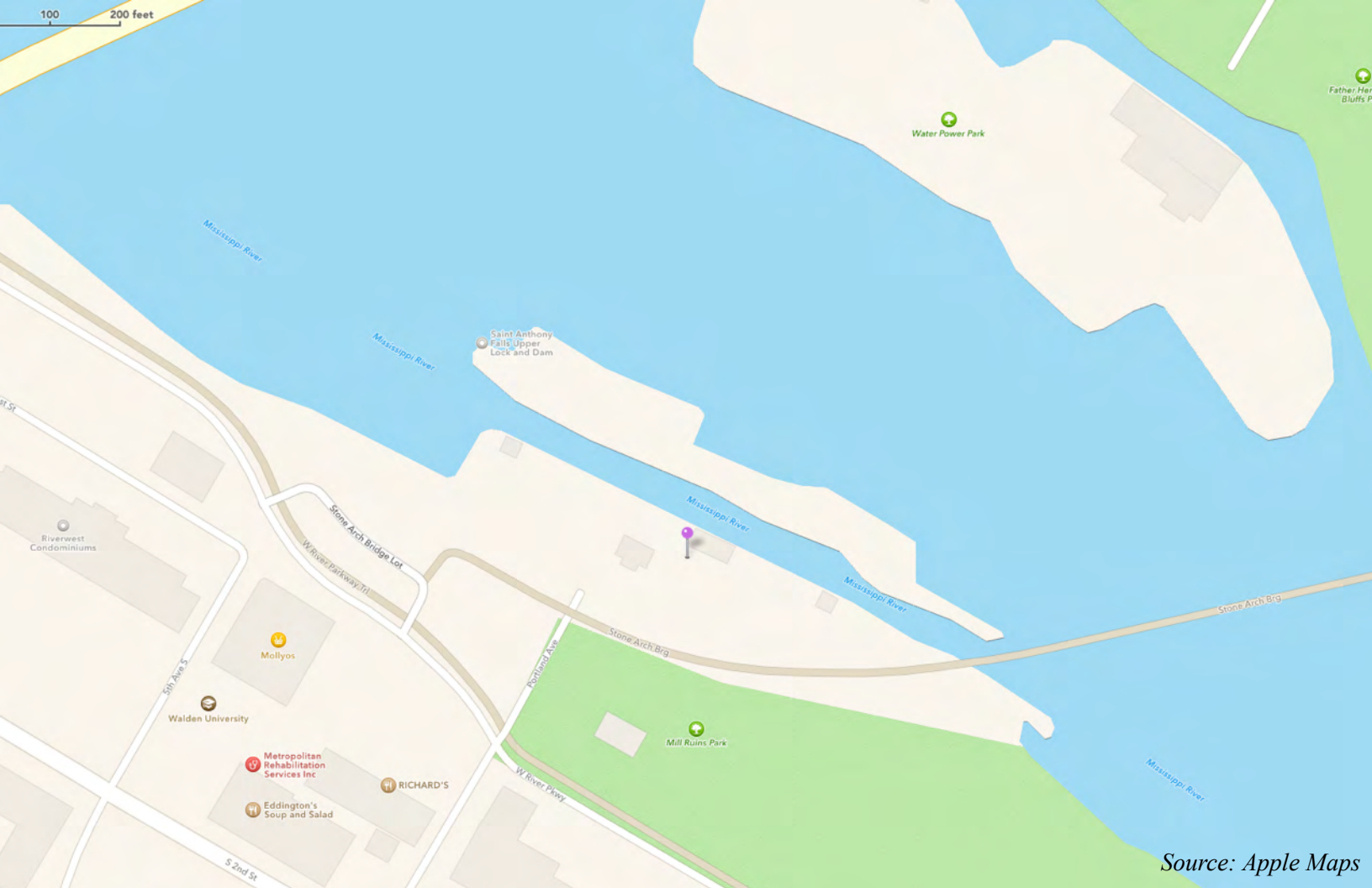
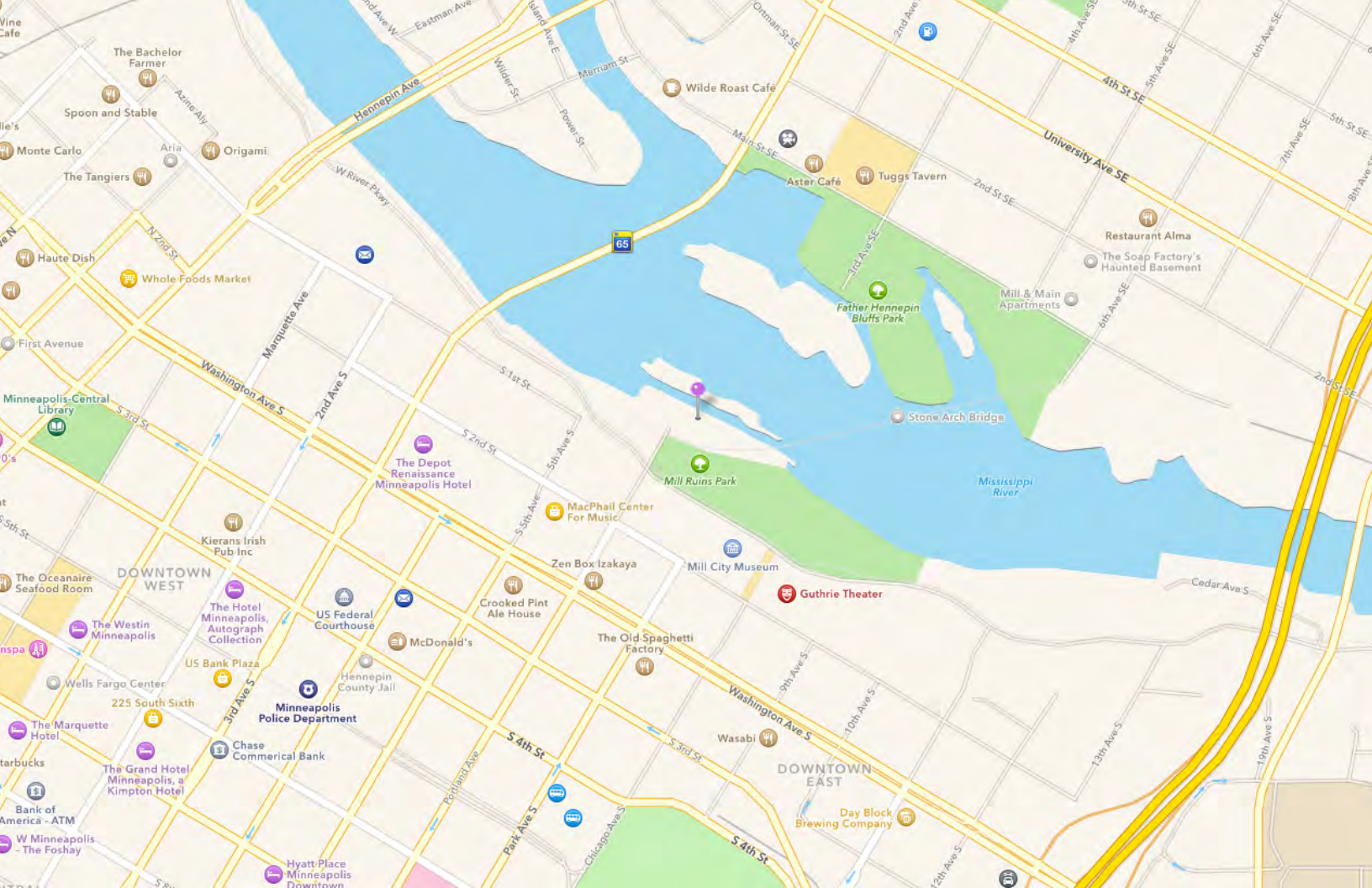
public resource planning and management. In its recent park-planning reports, the Met Council has strived to “Strengthen equitable usage of regional parks and trails by all our region’s residents, such as across age, race, ethnicity, income, national origin, and ability” (Metropolitan Council, 2014). Though the center may likely vary from traditional park tracts, pre-existing strategies (from organizations like the Met Council) to appeal to newcomers and minorities could offer insights.

As a means to attract more families and be more open to youngsters, the orientation center could house a model of St. Anthony Falls and also a number of toy levees that depict how artificial manipulation could ultimately produce higher levels and increased flooding. When the space is not used for children to play, perhaps presentations by staff could illustrate how levees change the flow of water, and not always for the better. Other components to engage visitors could include virtual models, maps, or even brief movies. Models and maps could show historical changes in water flow, caused by levees or changes in water levels. The movies could be narrated by the same representatives who come to speak at the center in person. If so, the movies would enable a more practical amount of staff to be present, and also account for instances where guest representatives may not be available in person. The movies could also complement what guest speakers discuss in their presentations.

Though not all parties may willfully contribute in the form of live in-person representation, focus groups that formulate the digital exhibit's matter could still portray the multi-perspective quality of the river’s persona. In planning the digital display system, the content matter would be able to change frequently based on the latest findings and perspective changes that have recently occurred. Similar to digital menus that are now springing up at restaurant chains nationwide, the easily-changeable digital signs would allow user interaction while also stating the latest information—and encouraging visitors to come back later to learn about current events and the latest river developments. The engrained wherewithal to source different perspectives for the project’s material goes deep into the core of the proposal. Because the in-person guest lecturers would provide face-to-face engagement schedule-permitting, the use of digital media to communicate via proxy could complement the in-person speeches.

Last of all, but certainly not least, the exhibition would be able to integrate a tone of a changing river into the overall experience end users undergo while visiting the orientation center. The lock’s spot besides St. Anthony Falls would provide a historical springboard to talk about the past—and thence lead into discussions about the present river (how we got here) and the future river (how to think going forward). Through the practical considerations of the elected lock structure, along with the in-person support vitally absent from the area, the lock structure would be able to serve a key purpose in ushering in a new era of river thinkers, one in the realm of climate change, up-to-date interpretive thinking, and inclusive perspectives.





Solving the Problem Through Intervention

The central location of information in one place helps engage people from the get-go. The non-traditional presentation styles, including interactive maps and forecasts, permits users to understand just how much, and to what extent, humans have changed what we know as the Mississippi River. An extended range of information becomes possible because an overview of the entire Heritage Zone can be provided all at once, and visitors can decide which parts appear interesting to them and which ones they should proceed to visit.

Furthermore, families are able to engage on a more intimate level with ideas that may have otherwise been inaccessible. Facilities such as restrooms and drinking fountains invite a broader audience to partake in the learning experience. Children and adolescents can begin to see what certain elements of a river waterway can do to the broader river gorge, and even if the ideas are not fully absorbed upon first blush, the seeds are planted and may inspire curiosity about river topics down the road. For millennials and teenagers, who are not infamously known for their extended attention-spans, short but active films and in-person presentations can further facilitate the learning process. Films can combine visual and oral narrative elements into consumable shorts that engage with the audience and help explain how rivers and our ideas about rivers have changed with time. By catering to a wider scope of visitors, with special emphasis on a group that will be here for the long haul (young people), a centralized orientation center can help educate a broader portion of the public audience.

By employing face-to-face staff members at the orientation center during peak times, the public is not only able to interact more directly with real-world stakeholders, but the public also gets to see the different contingents who comprise the governing bodies of the larger Mississippi. The intimate, localized bodies, such as Heritage Board Members or Native Americans, provide a direct link to the St. Anthony Falls region. By presenting contrasting perspectives, visitors can glean the complexities that lie beneath the surface in river preservation. National bodies, like the National Park Service, can show how St. Anthony Falls connects, both physically and figuratively, to other parts of the Mississippi River. In this way, people are able to fathom how the river affects the bigger picture of the Twin Cities, the state, and even the country. Local political representatives can bestow wisdom from a public policy perspective, revealing how the public can get involved and extrapolating upon the policies that have already been passed. They can also explain all the factors that must be considered to make prudent river decisions, especially as the river constantly changes and will continue to change going forward. Indigenous group members can elaborate on the spiritual meaning of the area, including B'Dote and select spots that are meaningful to natives' upbringing. The native perspective may juxtapose the traditional outlook (i.e. the Euro-centric perspective) and it would provide insight into a world that visitors may have never otherwise considered. Academic representatives, such as sustainable planners or faculty from the Institute for Advanced Study at the University of Minnesota, would be able to explain academic frameworks that have only recently started to enter the river discourse. Through in-person lectures and small discussions, individuals who work with the river on a regular basis would be able to open up and enable a public transparency with respect to what goes on in designing a long-term vision for the Mississippi River.



The digital presentation system of the orientation center should not be underestimated. With an openness to accept all kinds of visitors, the orientation center's location as a transit hub would only be the first step to engage other cultures. Inevitably, certain cultures may not be as prominent within the exhibit of St. Anthony Falls because their voices have not yet been heard. As we know, the visitor demographic is quite dissimilar when compared to the residential demographic of the riverfront area (Minneapolis Park and Recreation Board, 2015). Thus, as aforesaid, the dynamic method of presenting information, through digital panels and multiple media, allow the presentation of new information when necessary. Digitization could even permit translation into other languages, if desired. It is possible, as newcomers arrive at the orientation center, that new perspectives are brought to light, such as the river's importance in Somali culture along Cedar Avenue. As a case in point, the interpretive vision of the Mississippi River never stands still. Because the orientation center can be built with this purpose in mind, the dynamic presentation system—a combination of digital and interactive screens alongside face-to-face interactions—would allow new ways of interpreting the Mississippi as new perspectives are discovered. The presentation system would also enable the sharing of up-to-date river data, such as that concerning invasive species, from places like the University of Minnesota. The way information is presented using today's technology could help provide up-to-date research results, along with information that is accessible in different languages.

By bringing together diverse points of view, the proposed orientation center would solve one of the biggest problems along the Mississippi Riverfront: visitor retention and constant appeal. A few different factors would contribute to the success of bringing visitors back to a place they have already visited. Foremost, the center would utilize interactive forms of communication, such as the guest lectures; with real people involved, and different people at different times, the center would provide different perspectives as time progressed. With a summer schedule, for instance, a river scholar from the University of Minnesota could visit one day with a representative from the Minneapolis Park and Recreation Board visiting the following day. While the visitors with enough keen interest to return may be limited by the number of different guests available, bringing back visitors even a second time would help improve Mississippi visitation and even spread the word about why people would engage in river discourse in the first place.

Connection to Broader Ideas

On a broader level, the orientation center is much more than just restrooms and a delightful view of St. Anthony Falls. Inevitably, some may only use the space to the extent of micturition, but the ideas and prospective intellectual aspects of the center are what truly make it valuable as a public asset. Most of the work proposed in this document concerns the application of broader thinking at a local, practical level. Parts include how to present information, how to communicate ideas, and how to interest the public. At the heart of the Mississippi, however, is a discussion forum that propagates forward-thinking and allows society to move forward with progressive intellectual processing. This section concretely connects to the broader ideas that have been implied in the background, brings those ideas to the foreground, and explains why the ideas are paramount to the American understanding of the Mississippi River, a valuable natural asset.



As we venture into the realm of what some call the Anthropocene, we must continue to recall what all of the following academic references have in common. Author William Cronon deals with the construction of the term “wilderness.” Christopher Morris redefines the phrase “natural disaster.” For Morris’s part, he brings in human manipulation of the river (Morris, 2012). Then there is Dan McGuinness with The Upper Mississippi River Conservation Committee (UMRCC), who discusses the ramifications of degradation due to the Mississippi’s locks, dams, and levees (McGuinness, 2000). Finally, everything can be interpreted through Luna Leopold’s reverence for rivers, which evokes a “balance or harmony in natural systems” (Leopold, 1977).

Leopold’s thinking applies to rivers in the balance between manipulation and natural flow ways. With these works in mind, a great deal of the work in river academia has to do with facing change in times of uncertainty. The thought of thinking short-term or without the context of what’s going on elsewhere along the river, or even around the world, seems trite and almost foolish. In the 21st century, many of us (including millennials) have come to expect critical thinking and historical contexts as a part of making bold decisions, since humans can usually learn from past mistakes. Oddly enough, decisions as recent as those in the 20th century did not consider facets of the river like increased flooding from levee construction or the spread of invasive species, when animals like Asian Carp were introduced. The common thread through all of these ideas, which comes through microcosmically at St. Anthony Falls and within the wider St. Anthony Falls Heritage Zone, is the framework river planners today can use to plan for an ever-changing river. The concepts may seem abstract, but they do possess real-world connections in how planners think about the river going forward. There is no better place than the site of a now-closed lock—only one of many sites that planners of yore once considered beneficial—to demonstrate how thinking changes. With the right mindset, knowing what we know now about the river and how we have altered it, we can try to strategically plan for the long-term river and balance as many foreseen pros and cons of our actions as possible.

Because planners will be present in person, the visitors to the new orientation center would be able to consult and hear about practical discussions that are not only relevant to future river planning, but also time-sensitive and ever-evolving. Consequently, visitors can attend lectures and hear about how

contemporary river planners take on projects today when contrasted to the river planners of yesteryear. One of the things that speakers can talk about is the overall balance that must be achieved between the river as a natural occurrence and the river as an earthen element with which humans interact. Indeed, academic texts, like “A River that Works and a Working River,” show that the Mississippi in everyday use is about striking an equilibrium between letting the river run its course and utilitarianism (McGuinness, 2000). (Utilitarianism has historically transpired with the river as a transportation route and the river as a power source.) The balance between a river that works and a working river are important within the St. Anthony Falls area, the broader Heritage Zone, and the state and country with respect to the mighty Mississippi. With the proposed space being the former St. Anthony lock, the discussion has a material starting point since the lock was once used as a utility, but has since been closed because circumstances change over time. By hosting guests with firsthand knowledge not only about how the river works, but how we as a governing public have altered the river over time, insight can be bestowed upon visitors as to how the river should be treated going forward and what a sustainable balance between a working and functional river looks like in the long term.

The academic framework that guides the planning of the orientation center also allows for a contemporary outlook for the river with respect to climate change. As Stephen Pyne points out, the approach to the river must consider both the private sectors and civil public; by providing a space to share what the river means, the idea of a “national cohesive strategy,” as Pyne coins it, is a viable frame for the orientation center to demystify for the end user (Pyne, 2014). The era of climate change and reactively innovative thinking is upon us. As a result, we must deal with the consequences. No, we are not able to go back to the past. Wilderness, and its savage connotations, have since passed. Indeed, as William Cronon explicitly points out, wilderness as we romantically think about it today never really did exist the way we tend to think about it. In fact, nature as a neurological phenomenon has been idealized and manipulated to become so detached from reality over time that our construction of “wilderness” may not be viably attainable, especially in a developed nation such as the United States (Cronon, 1995). Part of the reason that nature has become so distant from reality is due to its longstanding cultural ties. The river, by itself, has turned into an icon that semiotically relates to a number of different aspects, from water to beauty to climate change. For what it is worth, climate change and culture are tightly related. As written by Dagomar Degroot, the “relationships between climate change and humanity are inexplicable without a rigorous analysis of culture” (Degroot, 2014). On the converse, just as climate change affects our culture, changing our culture, and the way we think, can change how we understand climate change. We can teach others about what it means to work with a river that has been gradually altered over time. By showing what has happened before us, how our thinking has thusly changed, and what we are proposing as we look forward to the future of the Mississippi River, we can propagate a new body of knowledge that focuses less on how we can undo past mistakes and instead emphasizes how we can feasibly adapt to a changing climate, both metaphorically and literally.

In the midst of significant anthropogenic arguments, we must not neglect the racial tensions that have formulated around water. As an exemplar, we can examine how water has been historically racialized with African Americans. In this case, the negative past can hopefully help us devise a positive future. With the likes of Richard Mizelle, stories have arisen that place African Americans at odds with water because water has been frequently used as a weapon against African Americans. At the River Symposium that took place at the University of Minnesota campus in April 2015, Mizelle mentions that, “the Mississippi River moves with people” (Mizelle, 2015). He refers to his works of “Backwater Blues,” which explains floods as events impacting disenfranchised black families. The blacks were economically driven to the floodplains of the river, making them the victims associated with a naturally

occurring water body. In much the same way, the Twin Cities (and of course the Heritage Zone specifically) have hosted cultural diasporas in the past that have led to an inevitable “hierarchy of altitudes,” as phrased by Patrick Nunnally (Nunnally, 2015). The differences in income circumstances, which correlates with the quality of living conditions one can afford, results in people living in different places along the river—hence the correlation of literal altitudes along a hierarchy of living conditions. In the past, floodplains have had little or no housing infrastructure in Minneapolis, and living within the confines of the river’s floodplains was a sign of poverty. The meaning behind an identity as fundamental as one’s living quarters may be obvious or even memorable to some—but at the same time, a handful of others never knew this ever happened. As a paragon of ethnic river identity, the concepts that Mizelle discusses are probably only one of many that could be unearthed with more research. Presenting powerful historical influences at an orientation center could indeed help the planning process of river life going forward, as planners and citizens help promote a more equitable ideal between river life and residency.

Along the lines of ideals, within urban life, a not-for-profit governing body like the National Park Service or Heritage Board seems to often be thought of as master hands that sagaciously plan a river that is best for everybody. As Pyne reminds us, though, the aforementioned “national cohesive strategy” includes “all jurisdictions, both public and private” (Pyne, 2014). While in some rare cases this may be reality, oftentimes the process is much more collaborative. Take, for instance, the use of private organizations and companies that can benevolently make use of local river land. By increasing the attraction of the Mississippi through a collaborative project like the orientation center, local businesses likewise attract more visitors. A partnership with a few local businesses may even be worthwhile for the proposed orientation center. Business partners would not only gain recognition and exposure, but they could also offer yet another perspective that many may neglect altogether. One way businesses would interact with the orientation center would be to send guests to speak to visitors on how the private sector gets involved. These speakers could be small business owners, such as those from restaurants, or they could be realtors for up-and-coming residential complexes that play on the river’s appeal of elegance. Though funding is more of a technical consideration, incorporating sponsorships from nearby business would both get the word out from a marketing perspective and simultaneously reiterate the real-world merits of the private and public partnership. All in all, the blend of the public and private sectors can lead to an increase in visitors and assists both sides of the equation.

The project laid out herein also has the advantage of educating for a greater purpose. The acquisition of knowledge is a crucial component of the proposed visitor orientation center. As University of Minnesota courses like the "Living with the Mississippi River" Honors Seminar (HSEM 3039H) have discussed, the river is a body that is influenced by a plenitude of voices and those voices do not talk in a vacuum. By building a physical space—namely the orientation center—for visitors to learn, many voices can converge under one roof, deploying perspectives into the larger discourse. Typically, visitor centers are run solely by a single unit or organization. For the situation at hand, with the river’s hand in voices ranging from the National Park Service (a federal organization) down to the more communal indigenous tribal people, the multitude of voices need to be included in a single place in order to be digestible to normal people. For the native people, who today do not receive a significant amount of

recognition outside of passive placards sporadically placed along the river gorge, the orientation center would be a place to teach about an entirely separate, perhaps even novel, way to think about St. Anthony Falls and the Heritage Zone. Spots like the University of Minnesota power plant, stationed beside the Stone Arch Bridge, are sacred places where some Native Americans have launched their watercraft for centuries; it is much more than a power-generating space for them (Nunnally, 2015). Furthermore, St. Anthony Falls itself, which people would be able to see up close and personal through the access provided by the former lock structure, acts as a healing place. With water as a sacred abstraction for the natives, the close relationship should be brought to light for the people who visit. The orientation center would provide an equitable space that could host multiple parties, perhaps even simultaneously, in one spot. Even if the building is logistically run on a daily basis by one or two governing groups, the building would be open for lectures and guest speakers on a regular basis and therefore encourage a constant flow of information to visitors.



The orientation center, as it is explicitly proposed here, longs to transcend the expected boundaries normally associated with museums and display centers. In hopes of educating for a greater good, the orientation center would be able to display more than just historical facts, figures, and information; the center would present people with river questions that possess clear and eminent consequences.

Consultation and Plan Alignment

Amidst all the micro details that contribute to the bigger picture, one of the macro abilities of an orientation center would be the creation of an identity for the riverfront. The mere existence of a visible visitor center helps create an awareness that the river is a cohesive place for people to visit. On a deeper level, the people involved in the project would inherently produce an identity for the Mississippi within the St. Anthony Falls area. In reality, by inviting a set of delegates from different involved river entities, a centralized place for visitors advances the observable quality of different constituents uniting in one place. Ergo, when visitors witness the different people involved with the river lecture about relevant river information, the building beside St. Anthony Falls changes identity from an old, now-irrelevant lock into an iconic center for publicly-engaging, long-term river thinking. Altogether, one place can allegorically represent the extensive range of the Heritage Zone's boundaries.

As an orientation center open for public use, even with a nominal fee for entrance (if the Heritage Board so chooses to implement one), an area that is small and ostensibly insignificant like the former St. Anthony lock somehow has a hard time proving its worth in monetary evaluation.

Fortunately, the bias that may inhibit the project from coming to fruition may not be as true as some think. According to the Heritage Board, “In recent years, each dollar of public funding has been



followed by five dollars of public investment” (St. Anthony Falls Heritage Board, 2009). The stat, which is brought up ever so appropriately beneath the page header that reads “Neglected-Desirable-Memorable,” helps fit the orientation center into what the Heritage Board has been doing for at least three quarters of a decade. Once development began on making the Mississippi River a viable tourist attraction, people began to realize the ability of the riverfront to act as an economic engine as well. The times have undoubtedly changed, as the river now is surrounded by consumer-driven businesses rather than industrial rail yards, but the reality of a money-driving force has yet to disappear.

The collaboration that has been outlined in this proposal also turns out to be aligned with what the Heritage Board deems valuable in its long-term vision for the St. Anthony Falls area. The Heritage Board has explicitly outlined workable strategies that will further its ideas and make them a reality. As part of those strategies, one way to further river planning is to “Develop a shared approach to raising funds with organizations such as the Minneapolis Riverfront Corporation, Mississippi River Fund, Minneapolis Park Foundation, National Park Service, City of Minneapolis, Metropolitan Council, University of Minnesota, and Minnesota Historical Society” (St. Anthony Falls Heritage Board, 2009). Though an orientation center as described herein may not obviously function as a way to raise inter-organizational funds for a common cause, the idea does lay the groundwork for different parties working together. As the different stakeholders work together in presenting the Mississippi to the world, money could be mutually raised since it ends up as a favorable proposition for all those involved.

Similarly, the Heritage Board has an intent to increase “opportunities for discovery” (St. Anthony Falls Heritage Board, 2009). The Heritage Board specifies that it would like to increase the on-site presence of involved organizations. Moreover, the Heritage Board would like to increase the on-site

presence of volunteers in various roles. Both of these can come to fruition with the introduction of an orientation center as hereby delineated. For the organizations, periodic lectures from organizational representatives provide a conduit for information to flow from the planning bodies into the hands of the public. The representatives would be present face-to-face, enabling high engagement for visitors interested in the river. The speakers would also be able to implicitly reveal the connections that organizations have with one another when planning for a long-term and sustainable river. To fulfill the ambition of volunteers, the orientation center may be able to utilize locals with a passion for river life to share the latest news and details about what is currently underway within the Heritage Zone. We have already ascertained that frequent visitors to the riverfront are interested in history and already visit about seven times per year (St. Anthony Falls Heritage Board, 2009). By recruiting volunteers from the local visitor populace, the Heritage Board could further engage with the public on a more intimate level and likewise prudently educate newbies about the river. As an educational focal point, the orientation center could host school groups and explain what the place holds in the eyes of students, addressing another goal from the Heritage Board (St. Anthony Falls Heritage Board, 2009). By investigating all the audiences who have a hand in the river, especially within the Heritage Zone, the Heritage Board can help combine a range of perspectives together to provide an outstanding experience for everyone.

In the more recent publications created by the Heritage Board, the longing for an orientation center has prevailed. From the Heritage Board itself, discovered in a 400 local river visitors survey conducted in 2009, “half of the respondents expressed high interest in a ‘visitor and orientation center’” (St. Anthony Falls Heritage Board, 2014). The plan citing the survey just came out in 2014, and the goal of establishing an orientation center has still not been met. Despite the lack of a visitor center today, the plan does offer potential places for effective interpretive locations, including an observation room at the upper lock (St. Anthony Falls Heritage Board, 2014). The plan herein lays out the necessary essentials and draws a cohesive plan that integrates multiple elements of the river together. At the same time, the idea of an orientation center fits into the grand scheme of the entire West Bank Interpretive plan. Other plans underway, like the Water Works project, with a revised pathway system and an outdoor pavilion, would correspondingly go hand-in-hand to create an ever-appealing riverfront area (Minneapolis Parks Foundation, 2015). The Water Works project would lie beside the proposed orientation center, adding a nearby park for visitors to enjoy. An orientation center could be the starting point for visitors, functioning as a big picture overview with points of interest for visitors to look at more in-depth in person. An orientation center as described elaborates on a long-needed place to improve interpretive framework that also practically engages visitors and provides a bird’s-eye view of what the Heritage Zone has to offer.



Goals, Success Criteria, and Conclusion

The key to the former lock, adjacent to St. Anthony Falls, supports a step in the right direction for supporting a localized river narrative. We have come a long way since the original European colonists settled around the Mississippi. More importantly, there is a river story to the Mississippi that started even earlier with native peoples. The narrative of the Mississippi, in tandem with powerful interpretive frameworks, may matter as much as the river itself. Meanwhile, the less academic, logical steps to make an appealing environment for everybody must also come into play. The orientation center blends academic solutions with pragmatic regional planning tactics. Multiple voices are included, and the plan extends a flexibility to add additional sources of information, such as those of up-and-coming cultural immigrants. The plan exercises the strengths of the Mississippi as it lies today, and it emphasizes past and future real-world plans to help explain changes within [what today is known as] the St. Anthony Falls Heritage Zone.

Coinciding with the pre-existing reports recently planned by the St. Anthony Falls Heritage Board, the proposed orientation center has certain pre-defined characteristics that will ideally be achieved. In summary, the goals that have been spelled out within this report eventually tunnel into several “pillar” objectives:

- A. Produce a diverse Mississippi River interpretive narrative that is openly accessible to the public.
- B. Create a cohesive space that establishes a sense of place and outlines as many aspects within the Heritage Zone as possible; this includes points of interest as well as educational opportunities.
- C. Lead by example with a collaborative strategy that includes voices from multiple river-involved parties, including cultural groups.

These goals aspire to accomplish somewhat abstract ambitions that may not exactly line up with typical quantitative and qualitative measurements. Because of this, there are also a few success criteria that may prove helpful in evaluating the worthiness of such a project in the long-run. The following measurements would also assist in the adaptation process over time, as the orientation center project matures and continues to remain relevant based on current events and distinct humanistic stories:

- A. Assess the number of parties involved in the planning process from the get-go. If the project truly amalgamates a group of different voices into one, those voices—ranging from the voices of Native Americans to city planners—need to be engaged early on in order to be efficacious.
- B. Pursuant to point A, the cross-collaborative success can further be measured by the type of governing body allocation of the structure. The way the Heritage Board has phrased the idea thus far, the structure appears to remain in the hands of either the Park Board or some other public governing body. The diversity of the literal stakeholders group, including Native Americans and perhaps other localized minorities, could be a gauge for the project’s success.
- C. With respect to the volunteering mentioned earlier, the project could lead volunteers in an effort to collect scientific data through open citizen science. The data could pertain to water levels or ground or water temperatures, becoming a part of the larger anthropogenic narrative. The data could be evaluated on its own, but it could also become a part of the exhibit and may also be relevant in discussions from guest speakers. Since climate change is gradual, this goal would only be viable in the long-term, in five years, ten years, and beyond.
- D. One could measure the extent to which ideas from symposiums like “Nature 3.X” are a part of the planning process. Nature 3.X, which took place in April 2015, describes the broad and interdisciplinary form factor of nature in the 21st century. The project could be judged on its ability to deviate from “traditional” thinking of classic environmental restoration and its embrace of Nature

3.X concepts, comprised of a new definition of restoration that strongly emphasizes resource management rather than bringing back romantic nature (Institute for Advanced Study, 2015).

- E. Scaled models of levees and interactive computer-generated mockups of probable ecological changes serve to tell a story about how people have changed the river. Hence, the ease of presenting ongoing dynamism could contribute to the overall success or failure of this project's mission. Knowing we are dealing with a constantly changing river, the ability for the exposition to explain up-to-date ideas and theories in a practical sense will be of utmost importance. Whether this comes in the form of frequent software updates, interpretive film renditions that are updated annually, or an open-source software to which multiple parties constantly contribute, the ever-evolving river must not be forgotten. (Software updates would contain input from as many involved perspectives as possible; as alluded to previously, focus groups may be a good way to extract vital pieces of information that should make it into the final exhibit.)

The proposed project would be, almost needless to say, a challenge to execute. Creating an interpretive framework on its own can present hurdles. Creating an interpretive framework that ultimately consists of interpretive sub-frameworks from different perspectives furthers the original challenge. And, if it was not enough to try to bring multiple perspectives to a single place, try to schedule a myriad of cultural perspectives with different expectations and norms to visit and engage with a spot along the Mississippi River that (rightfully so) means something entirely different to each group. The Heritage Board has faced other challenges like this before, so this is not completely new territory. Notwithstanding previous successes, the Heritage Board would need to invest an earnest zeal to meticulously carry through with the orientation center's task. It may not be easy, but looking forward for the next generation, it certainly has the promise to pay off in the long run, both educationally and monetarily.

Since we received advance notice that the St. Anthony Falls lock is planning to close, renovating the pre-existing building into an orientation center is not brand new. The way this proposal approaches the problem, however, is what makes these recommendations unique. In passing, the Heritage Board has already thought about making the lock and dam structure into an orientation center that possesses the basic amenities, including restrooms and river interpretation (Minneapolis Park and Recreation Board, 2015). That said, this proposal fleshes out the details and makes connections to an academic framework that has yet to enter the mainstream river discourse. The orientation center resolves a number of outstanding shortcomings that still persist at the river level, too, including a need for public restrooms and a place that cohesively identifies and encapsulates the scope of the river's tale. Today's evident scarcity of any in-person river resources, let alone knowledgeable volunteers or river-governing representatives, helps solidify the riverfront's need for a place to learn. The orientation center as described in this proposal suggests making a space that integrates multiple perspectives, in-person resources, and pragmatic execution in order to encourage long-term river planning that builds on the academic knowledge humans have accumulated thus far.





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All images were personally acquired unless otherwise denoted.