

Final Report:

Assessment and Recommendations

Resulting from the

2011 Bayou Lafourche Summit

Presented to

The Bayou Lafourche Fresh Water District



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SECTION

I

December 12, 2011

**Board of Commissioners
Bayou Lafourche Fresh Water District
1016 St. Mary Street
Thibodaux, LA 70301**

Re: Bayou Lafourche Summit Final Report

Dear Board of Commissioners:

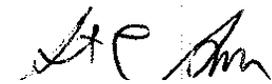
Thank you for allowing All South Consulting Engineers, LLC (All South) the opportunity to partner with the Bayou Lafourche Fresh Water District (BLFWD) in pioneering the very first Bayou Lafourche Summit.

We believe the Summit was successful in providing an outlet for the bayou community to express concerns and brainstorm solutions to lead us forward. In this report All South has documented, assessed and provided comprehensive recommendations based on the Summit. Also attached is a Recommendation Matrix, and a Logic Model. These tools provide timeframes, dollar estimates, and a big-picture approach to our recommendations. This report is the first step in implementing a large scale plan that will address and solve the obstacles Bayou Lafourche faces.

Our firm realizes that creating and implementing such a large scale plan is a process. Therefore, we welcome any revisions or modifications suggested by the BLFWD Board of Commissioners. All South is a leader among full-service engineering and management firms in the Gulf South. We feel confident that collaborating with the BLFWD will help provide bayou residents with an improved quality of life!

Please do not hesitate to contact me at 985.852.3445 or 985.537.8893 for any needs during this process.

Sincerely,



Stephen C. Smith, Vice-President
All South Consulting Engineers, LLC

SECTION

II

II. INTRODUCTION

The Bayou

Over 1,000 years ago, the Mississippi River was again trying to find the shortest route from the middle of the continent to the Gulf of Mexico. Flowing since the last ice age, the River brings water from what is now the United States and Canada to the Gulf of Mexico. Though the river has found many ways to the Gulf, Bayou Lafourche is the one we know best.

Bayou Lafourche leaves the main channel of the river in Donaldsonville, about 175 miles from the river mouth. From Donaldsonville, the bayou winds its way through 100 miles of cypress swamp, cane land, marsh, freshwater lakes, and saltwater bays to the Gulf of Mexico. Early on, the bayou proved its worth as a vital artery of commerce. More accurately, the bayou was commerce, in a time before roads connected towns and villages. Cane, cattle, and supplies could only move up and down the bayou to get to market. Even today, the bayou continues its role with active navigation and shipyards as high as the St. Charles community. At Port Fourchon, a world class facility is home to over \$1 Billion dollars in vessels from all over the world.



As our communities grew, the bayou was used in more and more ways. The bayou became a center of recreation. Everyone has used the bayou from time to time for fishing and hunting, but at one time there was a recreational water ski club in Thibodaux. Paddle Bayou Lafourche, an initiative of the Barataria Terrebonne National Estuary Program, puts people in the upper reaches, where many folks have not been for years.





In the lower reaches of the bayou, outdoorsmen from all over the world flock to catch reds and specks. They rely on the bayou as an artery of recreation.

In more modern times, members of our community use the bayou every day. Many are not aware that they do, but each and every time someone takes a shower, cooks a gumbo, or bathes the dog, they are using the bayou. This is because in 2011, the bayou is the primary source of water for over 300,000 people in South Louisiana. Bayou Lafourche is the source of water for these residents every time they turn on the faucet at home.

It wasn't always this way. In the early part of the century, most people in our part of the world did not have many of the modern conveniences we now enjoy. But just before World War II, our way of life improved dramatically. Gone were outhouses and cisterns. Each house was built with indoor showers, sinks, and bathrooms. Towns and cities began installing community water systems, systems that required a large source of water. In South Louisiana, that source was the Mississippi River, and anything connected to it. Where we live, that connection is Bayou Lafourche.

With that said, our people can't live without the bayou. If water is the source of life in the universe, then the bayou is literally a source of life for us all. Water flows down the bayou like the blood flows in our veins, providing energy and life to all the places it touches.



The Bayou Lafourche Summit



The purpose of this Report is to document the proceedings and provide recommendations resulting from the Bayou Lafourche Summit. The Summit is an initiative of the Bayou Lafourche Fresh Water District (BLFWD), a multi-parish district created by the Louisiana Legislature with responsibility for providing water down Bayou Lafourche. The BLFWD, is managed by an 8 member Board of Commissioners, and has been in operation for over 50 years. For many years, the BLFWD was primarily focused on pumping water in to the bayou at Donaldsonville, via a pump station built with State dollars in the 1950's. However, in recent years major changes on the bayou have required the BLFWD to expand its view.



Most importantly, water needs of the service area have grown exponentially. Ascension, Assumption, Lafourche, and Terrebonne Parishes have grown considerably over the past few decades, and water needs have grown with them. Besides the population growth, the industrial growth has been staggering. At Port Fourchon alone, the local water district provides water to most of the offshore drilling and production rigs in the Gulf of Mexico via offshore supply vessels. These boats transport thousands of gallons of water from shore to platform every day.

Recently, there has been a very high interest in using the bayou to restore Louisiana's coast. Our coast needs freshwater from the river to survive, and the bayou is an obvious conduit for that purpose. The BLFWD has been involved in these efforts, and is trying to accommodate this new "customer" for the bayou. But doing so requires additional resources, and unlike the other water users, there is really no one to foot the bill.



With these added pressures, and others, the BLFWD needed a plan to accommodate the population growth. The BLFWD needed a plan to handle the industrial growth. The BLFWD needed a plan to help restore the coast. The BLFWD needed a plan.

The Summit was organized to develop this plan. The idea behind the Summit was to gather the various persons, organizations, and interest groups with a tie to the bayou. To gather those people who need the bayou, who have an interest in the bayou, and who will work to build



a better bayou. By bringing these people together, the BLFWD sought to draw upon this collective wisdom, to develop a long range plan for the bayou, focused on the key issues up and down the bayou.

The Summit was conducted from October 10th – 17th, 2011, and was held at Nicholls State University, on the banks of the Bayou in Thibodaux. Prior to the event, the BLFWD worked to identify the citizens, businesses, State agencies and other groups most interested in the future of the Bayou. The District wanted to reach out to as many people as possible to make the Summit a reflection of the needs of the communities on the bayou. The BLFWD invited over 400 people to the Summit via multiple mails and e-mail invitations, and announced the Summit on the radio and TV prior to the event.

The Summit itself consisted of a Kick Off meeting on the 10th, followed by a series of issue meetings from the 11th to the 14th. At the kick off meeting, the BLFWD presented an overview of the Summit, and its purposes and goals. The BLFWD reviewed the schedule for the week, and also gave those in attendance a glimpse at the issues of interest, from the point of view of the BLFWD.



From Oct. 11th to 14th, the BLFWD hosted individual issue meetings. These meetings, which were open to anyone who wanted to attend, were organized as working-group meetings.

These meetings were scheduled as follows:

Oct. 11	Water for Industries and People
Oct. 12	Water for Coastal Restoration
Oct. 13	A Place for Water to Go
Oct. 14	Let's Play in the Water

At each meeting, the group was lead through a process of identifying issues related to the bayou, and tied to the subject for the day. For example, the first day was dedicated to the role the bayou plays in providing fresh water for drinking, bathing, and other everyday uses by people. Also included in that day was the role of the bayou in providing water for industries up and down the bayou, such as sugar mills. The group was asked to identify issues related to this topic, and then to prioritize those issues. As you might



expect, this lead to lively debates, and a generous amount of questions and answers, a true vetting of the subject.

During the second half of the meeting, the group was then asked to develop solutions to these issues, to think freely about solutions, and to assume if the collective will was present the required resources would be found.



As a result, the solutions were wide ranging and innovative, however many resulted in common themes between the participants, and between the days.

The work of these groups was documented during the meetings. All of the groups worked on poster boards and sheets that were stuck to the wall. The sheets themselves were transcribed and made part of the overall record of the Summit.

The preliminary results of this work were reported to the group at the Wrap-Up Meeting held Oct. 17th, again at Nicholls State University.

The following is a more comprehensive, detailed report of the Summit's results. This report includes more than raw data, it includes analysis and recommendations based on the emerging issues; and suggested recommendations are detailed, and augmented with appropriate budgets and timelines.

We understand that the BLFWD Commissioners will use this report as a basis to prepare for their own Master Plan specifying the financial, maintenance, and operational needs for Bayou Lafourche for the foreseeable future.



SECTION

III

III. ASSESSMENT

Methodology

The Bayou Lafourche Summit was structured in a way that would allow industry experts and citizens from our communities to express concerns and aspirations for the bayou, and to brainstorm solutions. As mentioned in the previous section, the Summit consisted of meetings over several days on individual issues. Within those issues meetings, working groups were developed to provide an outlet for separate and unique discussions. The groups were formed randomly to foster diversity of input from professionals and citizens. The work of identifying issues, and developing solutions was done in these smaller groups each day. Each of the smaller groups would then report their ideas and suggestions to the larger group, and allow for sparks of discussion to occur. This method provided each participant with a relayed but documented way of recording their points of view about the issues at hand. By having these working groups meet simultaneously, the summit was able to capture more qualitative input in less time.

Credibility of the Participants

The participants of the Bayou Lafourche Summit were from numerous professions, backgrounds, and industries. Naturally, with a complex topic such as uses and issues facing Bayou Lafourche, there are a number of parties involved. Regardless of education or profession, all of the participants are stakeholders in the future of Bayou Lafourche. The long term residents along the bayou provided a unique and valuable perspective. These citizens have the ability to recall from first-hand experience the condition of the bayou years ago, and the current condition of the bayou after years of neglect and degradation. All of the participants of the Summit hold represented distinctive and valuable view points on the problems and solutions to their water source.



Topics of the Bayou Lafourche Summit

Topics for the break-out group meetings were chosen based on impact to the region. The highest attendance topic of water needs for industry and people was chosen because it is essential to the quality of life of along the bayou. In addition to the physical concerns coastal restoration has on the bayou, it has become an increasingly popular topic due to the BP oil spill, tropical storms and hurricanes affecting the region. These events put a spotlight on Bayou Lafourche and the surrounding community. Drainage in the Bayou is becoming increasingly important as debris and poor drainage infrastructure ages, and affects residents, local businesses, and agriculture. The tourism and recreation topic was based on historical, cultural, and current and potential economic impacts to the region



Emerging Issues – Suggested by the Summit Participants

a. Water Needs for People and Industries

The first working group meeting of the bayou Lafourche Summit focused on “Water Needs for People and Industries.” As a wide encompassing topic, the attendance for this day was the greatest. As members presented their group break-out session results, there were consistent themes



amongst the groups, all participants agreed we need to dredge the bayou to restore its capacity and that we need to increase flow. Many discussed the negative impacts caused by invasive vegetation species such as Hydrilla, Wild Taro, Pas Pallum, and Water Hyacinth filling in the



bayou. All participants agreed that thinking of new solutions for overall existing problems facing the bayou was a good idea, however many felt that the BLFWD needed to begin creating and implementing regular maintenance plans for existing pump stations and resources simultaneously. Some felt that communication among

People & Industry Issues

1. *Water Quantity*
2. *Water Quality*
3. *Dredging*
4. *Funding*

the various industries and with citizens in the bayou was poor or nonexistent. Poor communication and education may be linked to another emerging issue the groups discussed, private intrusions in the bayou, and discharge from sewer treatment plants

Of all the presented issues relating to industries and people, there were four that were consistently mentioned: water quantity, water quality, dredging, funding. There was a consensus that water quantity was the first priority due to the notion that increasing water quantity creates better water quality. The amount and quality of drinking water was the bottom line concern for most. But some participants also realized that we must first think ahead to the issues that prevent us from dredging in order to increase water flow, and first obtain the adequate funding.

b. Water Needs for Coastal Restoration

The second day yielded similar themes regarding problems the bayou faces. However, there were distinctive issues brought up. Due to the larger impact that coastal restoration has on



the Louisiana coast, agency collaboration was seen as a critical issue. The question of whether federal, state, and local agencies are actually working together toward a common goal was brought up, along with the question of whose responsibility coastal restoration really is. The group believed



that the ability of the bayou to flow enough water was limited by sedimentation, pollution and manmade obstructions. Due to flow restrictions, the question of whether there is enough water to add flow to Bayou Terrebonne under current volume conditions was raised. While freshwater flow restriction was an issue for some areas, erosion and scouring were discussed as problematic in other areas.

Coastal Restoration Issues

1. *Water Capacity*
2. *Target and Feasibility*
3. *Funding*
4. *Public Awareness*

The issues voted as top priority by participants were similar to previous days: flow capacity, dredging, increasing flow, funding, and public awareness. Many felt that narrowing the target of such a large topic such as coastal restoration efforts from Bayou Lafourche would be difficult, along with the feasibility of accomplishing this goal once defined. The remaining top issues were the same as the previous day.

c. A Place for Water to Go – Drainage

On the day dedicated to drainage in the bayou, the discussion focused on flooding. Many described runoff as a potential source of the problem, and had witnessed first-hand the rise in



water after large rainfall events, especially from Donaldsonville South. Concerns of water quality were presented as Bayou Lafourche is a final stop for water from different sources. Highway runoff contains pollutants, in addition to residential and other sewerage, plant discharge, and debris clogging drainage canals in the bayou. Some described a strange taste, odor or color of water after a heavy rainfall event.



Drainage Issues

1. *Water Capacity*
2. *Define Drainage*
3. *Water Quality*
4. *Funding*

Natural and manmade obstructions such as invasive vegetation species, the Thibodaux weir, and floodgates were brought up as inhibitors to flow on this day. Local and state agencies were seen a part of the drainage issue, with a lack of collaboration and a lack of enforcement of pollutants draining into the bayou.

Of all the concerns participants offered, the highest priority was given to the following: capacity, defining drainage, water quality and, funding.

d. Let's Play in the Water- Tourism, Recreation, and Economic Development

The last working group session had some similar themes, but mostly took a different approach in regards to concerns. Overall, the premise was public awareness and how residents act and view the bayou in their community. Summit participants felt that the biggest impediment to tourism, recreation and economic development was trash and debris in the bayou. The feeling was that residents view the bayou as a dumping ground, instead of a healthy enjoyable source of life. Dumping was described as prominent by both businesses such as the crab industry and citizens. Many attributed the trash and debris issue to another problem, lack of awareness. Groups discussed that local residents are not educated about the uses and importance of the Bayou in their community.



Governance over Bayou Lafourche was voted a second major concern impeding tourism, recreation, and economic development. Participants described problematic scenarios of not knowing who to call when issues arise. Questionable governance was tied to poor regulations and enforcement of current policies. One group listed:



Army Corps of Engineers, Department of Health, Coast Guard, and Local Agencies as potential enforcers. Overall, participants were left with more questions than answers when they delved deeper into the jurisdiction debate. Many felt that the various agencies lacked collaboration or

*Tourism, Recreation & Economic
Development Issues*

1. *Trash & Debris*
2. *Access to Public*
3. *Governance*
4. *Defining Recreational
Uses*

communication. Another government related issue presented was the question of property rights. Residents are left with questions of where their property line ends on the bayou, who maintains banks and edges of the bayou, watercraft mooring, and habitation.

Other restrictions on tourism, recreation and economic development were access to the public and defining recreational uses for the bayou. Participants described the lack of promotion or access for the types of recreational activities they would like to have more of such as; boating, fishing, canoeing, kayaking, rowing, and even dining cruises. Lack of a master plan was seen as part of the problem related to uses. As for other issues, there are different needs for recreation and tourism North and South of the bayou. Regional needs are not the same for different geographical regions, leading to different recreational and tourism uses for the two parts. Once acceptable uses for the bayou are established, there is still an issue of access to the water. Groups stressed that there were not a sufficient amount of boat launches or public parking facilities to handle increased recreation or tourism.

The breakdown of issues hindering tourism, recreation and economic development along Bayou Lafourche are listed in order of importance voted on by summit participants: trash and debris, lack of promotion of activities and access to the public, poor governance, and how to define recreational use.



Emerging Solutions – Suggested by the Summit Participants

a. Water Needs for People and Industries

After finishing the issues discussion, the working groups focused on developing solutions for the key issues. Many felt that additional dredging of Bayou Lafourche and removal of invasive vegetation were essential, and as the solutions portion of the meeting continued, it became apparent that cleaning out the bayou and increasing flow was the key recommendation. Additional suggestions were presented for improving water quality, for example, closer monitoring of sewerage and other pollutants draining into the bayou.

Water for People & Industry Solutions

- *Water Quantity =>Water Quality*
- *Bayou Assessment Report Card*
- *Additional Dredging*
- *Obtain Additional Funding*

The issue of funding yielded a variety of potential solutions. Some participants felt strongly about passing a Bond Issue to raise funds, while others suggested increasing user fees and surcharges, or tying Bayou Lafourche in with tourism or coastal restoration fundraising efforts. Public awareness and increased education about Bayou Lafourche was discussed.



Specifically, one group suggested an assessment of the condition of the Bayou in the form of a “Bayou Lafourche Report Card”, to not only increase public awareness, but to also provide positive peer pressure for local government. This would lead to the appropriate sense of urgency for officials to locate funding to provide adequate resources for increasing water quality and quantity.



b. Water Needs for Coastal Restoration

Many felt the topic of coastal restoration is a large one to tackle, participants began discussing how to do it. Better defining the goal as needed, since some felt that by creating measurable goals such as “how many of acres of wetlands we will restore” would make the undertaking more feasible.

Coastal Restoration Solutions

- *Narrow the Goal*
- *Establish Public Awareness*
- *Locate Funding*

For the issue of water capacity, many agreed that the starting point should be to define the limiting factors relative to capacity, therefore determining a practical capacity target, and then to define how much more of the bayou be dredged to attain the target. In terms of capacity there were a variety of methods that would serve as solutions. A few groups discussed the importance of improvements to the current pump station. Most agreed that there should be a plan in place to regulate natural and manmade obstructions in the bayou, along with consistent obstruction mitigation techniques.



Funding once more landed at the top of coastal restoration concerns. One solution for funding concerns was yet again passing a Bond Issue. Other suggestions included forming a tax structure, increasing the millage, and creating a state coastal restoration trust. In addition to funding, a public awareness campaign was suggesting again to educate

residents about Bayou Lafourche and its relationship with coastal restoration. Specific examples included creating a task force, increasing community involvement projects, and ecotourism.



c. A Place for Water to Go – Drainage

Participant solutions for concerns to drainage echo many similar solutions presented on previous days. Given that capacity was the largest problem facing drainage related to the bayou, dredging was the most popular solution. One group suggested that siltation removed from the dredging process could be used to build up land mass in needed areas. Other suggestions for increasing capacity were to remove culverts from the train bridge in Donaldsonville and the weir in Thibodaux. The removal or control of aquatic vegetation was seen as an additional resolution to the capacity problem.



As before, defining the drainage concerns or breaking down the big-picture was seen as a problem in itself. Summit participants presented ways that this could be done. While many agreed that a comprehensive drainage master plan was essential, some thought of such a plan to already exist in some parishes. Some suggested that having a comprehensive study of the current

Drainage Solutions

- *Dredging*
- *Obstruction Removal*
- *Quantity => Quality*
- *Define Drainage Area*

drainage situation was the first step. The use of local experts and professionals in this type of process was seen as plus.

For the issue of water quality, a natural filtration process was suggested to remove chemicals and other contaminants from water. Some felt that going a step further and increasing pollution enforcement efforts, including sewerage improvements was an additional way to tackle the problem. However, participants agreed that once much more water began flowing in Bayou Lafourche it would counter negative effects and increase water quality.



Funding once again played a part in the discussion. Similar suggestions of passing a Bond Issue and increasing millage rates were possible ways to raise funds. One group suggested creating development impact fees to assist with allocating funds for new and existing drainage projects.

d. Let's Play in the Water- Tourism, Recreation, and Economic Development

When summit participants were asked to devise solutions for the top issues related to tourism, recreation and economic development, the most creative suggestions were responses to the trash and debris problem. A public awareness campaign was suggested to educate local residents about where their drinking water comes from. This campaign would stress that the



bayou is an integral part of their community and should be respected. Summit participants felt strongly about assessing strict fines on individuals or businesses that litter. One group suggested an “Adopt-a-Bayou” program be implemented to promote a healthy, clean bayou. A trash reporting hot-line “1-800-My Bayou” was suggested as a reporting tool to be

used by residents. The “Report Card” concept from previous days was also suggested to assess the current presence of trash and debris. A Bayou Lafourche paddling advocate suggested a “Paddle on the Bayou” event to promote awareness and education about keeping the bayou clean. Additional suggestions ranged from simple changes such adding additional garbage cans, to major modifications to beautifying LA 1 and 308. Many felt that regardless of which campaign is implemented, they should all begin with school children. The notion that educating kids would allow them to motivate their parents and families to keep the area clean was discussed.



In regards to access and use of Bayou Lafourche, some felt that the best way would be to begin by developing a task force to create a master plan of how the public space should be used and where to incorporate certain modifications. The majority of participants agreed that

Recreation, Tourism & Economic Development Solutions

- *Public Awareness Campaigns*
- *Education about the Bayou*
- *Agency Collaboration*

additional boat launches, parking facilities, bike paths, walking trails, and benches are needed to increase access and use. The idea of shuttling visitors and locals via buses would assist in the access problem. Another suggestion was for the Bayou Lafourche Fresh Water District to obtain grants in order to purchase additional land along the bayou for these improvements.

In terms of governance over the Bayou, many felt that expanding the mission of the Bayou Lafourche Fresh Water District would help clarify roles. Most believed that improving the communication among the parishes within the district was essential to make the needed improvement projects and succeed. This was particularly mentioned to increase not only communication but also work together to obtain additional funding sources. One group wanted to begin addressing water patrols at the parish level, while another wanted to see a reduction of the number of involved agencies. Participants felt that the largest areas of concerns were governance in relation to enforcement, authority, and liability.



SECTION IV

IV. RECOMMENDATIONS

Common Themes Among Issues

In the days since the Summit ended, the consulting team has reviewed the notes, suggestions, ideas, and data generated during that week of work. Not surprisingly, there are consistent themes that arise. Several common issues were brought up in more than one of the working groups during the week, such that work on one of these issues can have a positive impact in several areas. This section contains an analysis of those common themes, tying together the issues among groups where appropriate. This analysis is meant to help the BLFWD focus on the areas where it can achieve the greatest benefit in the shortest time.

a. Capacity of Bayou to Accept and Move Water

In each day, there was discussion about the capacity of the bayou to accept more water, and the ability of the BLFWD to manage that capacity. Whether it was to provide more water for the water plants, to provide more water for coastal restoration, or to provide more space for drainage water to flow, the discussion consistently went back to capacity.

This theme was discussed in terms of flooding after excessive rainfall in the upper reaches, as the need to flush out polluted water after a rain, and as drought in the lower reaches that exacerbates salt water intrusion, a problem for the water plants in Schriever and Lockport, and for the marshes on our coast. It was apparent throughout most, if not all, of the issue meetings.

Capacity in the bayou includes improving the pumps so we can move more water in to the bayou, but it first requires includes dredging the bayou so it can accept more water.



Vegetation, which is a real problem in a lot of areas, is also related to capacity, for example in the first 60 miles the bayou is overgrown with Hydrilla, and you can't push water down.

All of these discussions lead back to the demand that the bayou be cleaned out to have more capacity to move water. The bayou does not have that capacity today.

b. Increasing Pumping Capacity

Once the bayou is cleaned out it will then be able to accept the water which is needed. Even when all four pumps can be turned on, doubling the current flow, participants in all of the sessions indicated that more pumping capacity will be needed.

c. Coordination

Who's in charge? Who do I call? Where do I go to get me questions answered?

These questions came up day after day during the Summit. Whether we were talking about trash in the bayou on Friday, or piers and obstructions on Tuesday, there was general uncertainty about who was in charge. Comments like:

“If you see someone dumping untreated sewerage in to the bayou, do you call DEQ or the Department of Health?”

If I call one, can't they call the other ones?”

“Every time I do something in the bayou, I have to get a permit from the Corps of Engineers, but the guys building a dock in the middle of the bayou don't have a permit?”

“Do I call my Parish Councilman?”

It is clear that there is confusion up and down the bayou about who is in charge, and who can take action when there is a problem. This confusion is justifiable. Worse, because the BLFWD is probably the most visible entity in the bayou, many people look to it to take charge of these issues. But the reality is the BLFWD has limited authority within the bayou.



One of the common themes from the week was a need for some refinement of jurisdiction among and between the various parish, state, and federal agencies up and down the bayou, to clarify governance. There is a need for these agencies to clarify their roles to the population. And this is more than just regulatory roles; it is also leadership, and improved project identification, management, and maintenance.

d. Funding

We cannot implement what is needed without money.

During the Summit, folks in attendance offered over 200 recommendations for solving issues related to the bayou. The suggestions were varied and innovative. Some were obvious and easy to implement. Some were complicated and will require a lot of help. But almost invariably, all require money.

Each day, one or more people in the working groups would ask “how are we going to pay for that?” This is a valid question. There are several options for funding physical improvement projects, and typically many more for management or process changes. These options are discussed in greater detail in the Recommendations section, but it is important to note here that funding was a recurring theme throughout the week.

Importantly, the discussion herein was always about additional funds. The BLFWD relies on ad valorem taxes and water sales to keep the pumps running and the bayou clear of obstructions. The total budget is about \$1.8 M. Most of the major recommendations are beyond the financial ability of the BLFWD and will require additional funds for implementation. So when summit participants discussed funding, they were referring to additional money from new or outside sources.



e. Communication and Public Awareness

Many people simply do not know the role the bayou plays in our communities. That comment was made time and again during the Summit. Many people believe that the bayou continues to function as it did when they were kids that it has not changed in the last 40 years.

The feeling among Summit participants, repeated on several days, and in relation to several issues, was that there is a general lack of knowledge about the bayou in 2011. This opinion was certainly shared by the BLFWD members in attendance. The people of the bayou do not know the role it plays in providing the very water they use every day. It is likely they do not know, because the BLFWD and the water plants are so reliable and dependable.

Communication is a very broad subject. Sure, it includes letting the public know when and where the BLFWD meets, but it also includes reaching out to the BLFWD customers from time to time to let them know what is going on. Selling water is a business, and like any business, the customers need special attention from time to time. It also includes helping people understand the role the bayou can play in broader issues like coastal restoration. We also need to be clear about the limits of what we can ask the bayou to do.

Let's face it; the needs of the people along the upper reaches of the bayou are much different than the needs of the people down the bayou. If nothing else, a little communication might help those neighbors better understand each other.

Finally, communication was brought up as a way to generate more interest in the bayou, and by that method, develop greater ownership of the bayou along its banks. This would help with the debris, trash, and pollution issues.



f. Understanding the Physical System

There were several discussions during the Summit about questions that were unanswered, questions that dealt with the physical system of the bayou itself. Things we didn't know the answer to, and we didn't have anyone in the room who could answer. A great example was the drainage in to the bayou discussion. Everyone knew that a large area drains in to the bayou, but no one really knows exactly what area. So when you try to plan for capacity, you need to figure out how much water will flow in to the bayou. Then you can answer the question of how much the bayou needs to handle.

There were also questions about defining the target area for coastal restoration related to the bayou, for example what areas will benefit by flowing water down the bayou.

The fact that we ended up with unanswered questions should be no surprise. If we had all the answers, the BLFWD would not have needed the Summit to begin with. However, it did point to a recurring theme that we should plan for some data gathering and analysis, so that we can make intelligent decisions on these matters.

Recommendations

This section summarizes the recommendations made at the Summit for action by the BLFWD. These recommendations are based on the work by the attendees of the Summit, and thoughtful analysis by the consulting team since the conclusion of the Summit. This information is presented in several formats throughout this report.

In the narrative that follows, there is a description of each recommendation, and a rationale for the recommendations presented, followed by a logic model including many of the recommendations that depicts the benefits of implementation, and the interrelationships between



them. The reader may find that this visual presents the information more clearly. Lastly, there is a recommendation matrix which contains the nuts and bolts of each recommendation – cost, funding source, responsible party, etc.

For a variety of reasons, this section does not include every recommendation made at the summit, some were deemed unclear, and in other cases, not accurately directed at the true problem.

a. CAPACITY OF BAYOU TO ACCEPT AND MOVE WATER

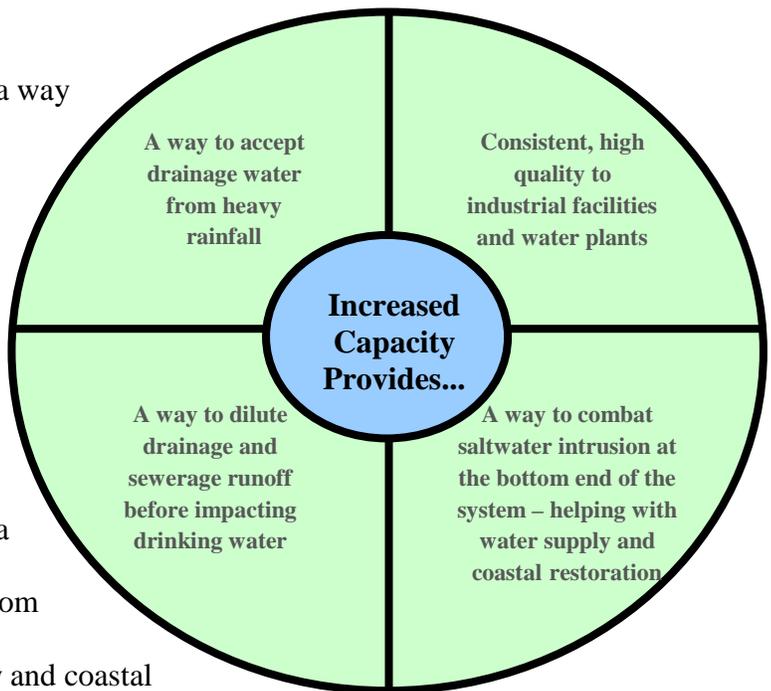
This was the highest priority area based on the work done by the groups at the Summit, and based on the review of the information by the consultant team. In the words of one group, “increased water capacity will lead to better water quality.” Actions to address this problem lead to benefits in several areas.

Increased capacity of the channel provides consistent, high quality water to the water plants and industrial facilities.

Increased channel capacity provides a way to accept drainage water from heavy rains.

Increased channel capacity provides a way to dilute drainage runoff, and sewerage runoff, before it negatively affects the drinking water.

Increased channel capacity provides a way to combat saltwater intrusion at the bottom end of the system, helping with water supply and coastal



restoration.

With that understanding, there are several recommendations that the consultant team believes are important to implement as soon as practicable.

➤ *Short Term (1-3 years)*

- **Continue the Dredging Program**

The BLFWD has recently completed a project to clean out the first 6 miles of the bayou, beginning in Donaldsonville. This project, which was funded by the State of Louisiana, was in

direct response to recent problems experienced following Hurricane Gustav. While this project was difficult to implement, it has proven very successful as a first step toward increasing the ability of the bayou to provide fresh water and drainage capacity. The BLFWD should continue the dredging program begun in partnership with the state last year. The BLFWD should dredge an additional 5 miles, down to the La. 70 Bridge. This appears to be the most needed improvement. The BLFWD should partner with the State to complete this effort.

The next dredge project should be just above Thibodaux. Based on current information, it appears the 5 miles or so just above Thibodaux should be the following area of focus, and should provide the greatest benefit in terms of channel capacity. Again, the State should be a partner in this effort due to the amount of funds required, estimated to be in excess of \$20 M.

**Short Term
Recommendations to
Capacity**

- ❖ Continue Dredging Program
- ❖ Refurbish Existing Pump Station
- ❖ Add Harvesters to Combat Vegetation



- **Refurbish the Existing Pumps**

Concurrent with this dredge program, the BLFWD should proceed with refurbishment of the existing pump station at Donaldsonville. Again, the State is a willing partner in this endeavor with monies currently available. There are opportunities to improve the capacity and efficiency of this station, and when coupled with the dredging, should allow the BLFWD to provide a more dependable source of water to its customers in a relatively short time period.

- **Add Equipment to Combat Vegetation**

Related to capacity, the BLFWD should also add to its equipment fleet to address the vegetation problem in the bayou. The BLFWD should consider adding additional harvesters to its fleet to meet the ever growing need to remove the Hydrilla and other invasive vegetation from the bayou channel. The BLFWD should invest in another 2 harvesters to stay ahead of the vegetation problem.

- **Perform Hydrologic Model of Bayou**

There were many questions raised during the Summit about the capacity of the bayou to accept water, either from the pump station or from other sources. The attendees suggested the BLFWD, in association with the State, develop a computer model to determine the existing capacity of the bayou to accept such flows, and use that as a tool to make improvements to the system. There was some discussion that an existing model was built by the State for the Bayou Lafourche Diversion project, if so it may still need to be updated to account for recent improvements.



➤ *Long Term (3-10 years)*

- **Maintain Sand Trap**

As part of the recent dredging improvements at Donaldsonville, the contractor built a sand trap in the channel to capture sediment. The purpose of this trap is as the name implies, to trap the sand and sediment that flows down the channel. This sand trap is easily accessible by dredge equipment, and can be cleaned from time to time as necessary. This method traps the sediment in a location that is easy to remove from the channel, and prevents excessive sediment build up further down the channel.

The trap must be maintained (dredged) regularly to be effective. The BFLWD should plan to remove this material every three to five years.

- **Remove the Flow Restrictions from the Railroad Crossing at Donaldsonville**

Currently, the railroad crosses the bayou at Donaldsonville via an earthen embankment. The bayou flows under the railroad through 3 large culverts. This embankment is a restriction on the ability of the bayou to accept more water from the river, and more drainage from the City of Donaldsonville. In order to increase the capacity of the bayou to accept more water from any source, it is recommended that more culverts be added or this railroad crossing be replaced with another so that this crossing does not restrict flow. This improvement was suggested in the Bayou Lafourche Reintroduction project, with a suggested cost of \$14 M, simply adding culverts would be significantly less.

This is no small task. The railroad is an active line, and replacement will require maintenance of the existing line until the new line is complete. In addition, the bridge



required is fairly substantial, in order to handle the loads associated with train traffic. Railroad companies are also notoriously difficult to negotiate with when such improvements impact their lines.

The BLFWD should plan to remove this flow restriction at this crossing, and should partner with the state to do so. The State can be helpful in funding this project, and/or helpful in negotiating with the railroad companies.

- **Remove Weir at Thibodaux**

There was significant interest in removing the weir in Thibodaux as soon as practicable. The previous list of suggestions is impressive and far reaching. Assuming these improvements are made, there should be a substantial improvement in water quality and quantity flowing down Bayou Lafourche. Under those conditions, the BLFWD may consider removing the weir at Thibodaux.

This weir was installed in 1970 as a way to ensure a certain pool level for the water plant in Thibodaux. By that measure, it has been a success, but, as with most major actions, there have been some impacts. There has been a lot of sediment buildup above the weir. Removing the weir would keep this sediment from building up and should improve water flow below Thibodaux.

Again, assuming the previously described

**Long Term
Recommendations
to Capacity**

- ❖ Maintain Sand Trap
- ❖ Replace Railroad Crossing
- ❖ Remove Weir
- ❖ Evaluate Gate
- ❖ Replace Pump Station



improvements are underway or complete, the BLFWD should consider removing the weir; this removal should be done after careful study, and in partnership with the various water plants on the bayou, particularly Thibodaux.

- **Evaluate Gate at Donaldsonville**

There were several suggestions during the Summit that perhaps a gate or diversion structure, other than a pump station, could work at Donaldsonville. The suggestion was for some type of control structure that did not rely on pumps to move water, merely on gravity to move the water down the channel. This idea has several obvious benefits, such as reduced operational and maintenance costs, and the potential to flow an almost unlimited volume of water when the river is high.

The BLFWD should commission a study of this proposal to determine the initial construction, operation and maintenance, and other costs of this option. This option will likely be very expensive, and will certainly require coordination with the State, and the US Army Corps of Engineers. As such, it deserves careful study, and comparison with other options. The BLFWD can pursue this option as resources arise, but the suggestion in this report is to undertake that study in the long term.

- **Replace Pump Station**

The existing pump station is over 50 years old, and while functional, will eventually need replacement. If the previously suggested improvements to the channel are made, the BLFWS will be able to pump more water for longer periods of time, and will likely do so. There will be greater wear and tear on this veteran station. The BLFWD will need to replace it.



This option was also considered in an earlier report related to the Bayou Lafourche Reintroduction project, with an estimated cost of \$25-30 Million. The BLFWD should pursue that option with the State as a partner.

b. COORDINATION

As has been mentioned earlier in this report, there was much discussion during the summit about governance and coordination between agencies with authority in and around the bayou. This discussion was often focused on pollution and trash in the bayou, but can be applied to many different circumstances. It is also very closely related to the need to communicate with the residents and businesses up and down the bayou.

The issue seems to be a general lack of knowledge about who to call when there is a problem related to the bayou. This situation is not unique to Bayou Lafourche, as citizens around the world are often confused by the bureaucracy surrounding them.

- **Refine BLFWD Mission**

The BLFWD was created with “the purpose of furnishing fresh water from any available fresh water source” to the businesses and residents along the bayou. In furtherance of that mission, the Legislature also granted broad powers to the District to collect monies, sell bonds, and build improvements to fulfill that goal.

“The purpose of furnishing freshwater from any available freshwater source”



The district was also granted broad powers to regulate activities along the bayou, including pollution, trash, and obstructions to water flow. The BLFWD has not been as active in these areas as it has been in its primary goal.

Based on review of the legislation and the operation of the District, the consultant team does not recommend major changes to the legislative authority of the BLFWD. The BLFWD should consider becoming more active in the regulation of activities along the bayou. Activities such as untreated sewer and other discharges into the bayou, trash in the bayou, and obstructions in the bayou. It is apparent that the citizens along the bayou want action in these areas, and feel comfortable bringing it to a local agency.

This recommendation comes with some warnings, as any mention of increased government regulation can be met with a negative response. But in this situation, it appears a good case can be made for doing something about sewer and trash being placed in the primary drinking water supply for 300,000 people.

It appears the Summit attendees are truly searching for a champion for the bayou. They are searching for an entity to take the lead on matters of pollution, water quality, and coastal restoration along the Bayou. The BLFWD should consider whether that agency should be this champion.

c. FUNDING

Each and every one of these recommendations requires some level of resources to get done. And thankfully, each of the recommendations presents unique circumstances that may provide a partnership opportunity for funding.



The following funding options are presented for consideration by the BLFWD. The options below are not specifically tied to any recommendation in this section, and certainly represent a broad range. Each of these will apply to a specific recommendation depending on those unique circumstances.

- **Partner with State**

Certainly the most important option for the BLFWD recently has been its ability to partner with the State of Louisiana. In the last few years, the state has made over \$20 Million available for improvements to the bayou. These funds have helped to clean out the bayou following Hurricane Gustav, and to finally begin the dredging program in the upper reaches. The state has recently announced another \$3 M for pump station improvements, and potentially another \$20 M for dredging. These dollars have come primarily from Hurricane relief dollars.

There are other significant sources of money still available at the state level, including capital outlay, and from time to time surplus dollars. Both of these resources are appropriate for improving the bayou. In addition, the BLFWD may be able to tap in to the Coastal Wetland Trust Fund for the coastal restoration aspects of this program, and the State Wide Flood Control Program for drainage improvements along the bayou.

- **Federal Dollars**

At the Federal level, there are a few options that are available to fund the recommendations in this plan. The Federal government is a good resource for just about any initiative. Unfortunately, funding through the federal bureaucracy can be time consuming and fraught with red tape. With the current state of the federal budget, it is also somewhat uncertain. Suggested funding sources are as follows;



The US Army Corps of Engineers has primary authority over most water related projects, and is the agency to work through to tap into federal dollars related to such projects. Such funding can be applied to channel improvements, pumps, and related items. Actual funding in the Federal budget has not been near the actual need in the last few years, and the outlook from here on out is not promising. However it is a potential resource, and should be kept in the mix.

There are significant federal dollars that should be coming to Louisiana via a new revenue sharing formula for offshore oil and gas drilling. Commonly referred to as GOMESA, the larger amounts of funding will not come until after 2017. The state is going to play a role in how these dollars are expended, and these dollars are appropriate for the uses outlined in this report.

The last category of federal dollars is the fines and penalties associated with the BP oil spill. Although not technically federal dollars, these monies will flow through the federal government to the affected communities. Again, the recommendations in this report are appropriate for funding via this source.

- **Add Members**

One of the most current issues facing the BLFWD is how to change its relationship with Terrebonne Parish. Terrebonne has been a customer of the BFLWD for over 40 years, buying water at a fixed rate under a contract. This contract provides water to Terrebonne at a rate well below that of other customers. This contract will expire within the next 3 years, and there has been much discussion about the future of the relationship with Terrebonne Parish.



One of the options considered is for the Parish to join the BLFWD as a member, in accordance with a recently passed state law. This law requires a vote of the citizens of the parish for Terrebonne to join the District. If that occurs, the property in Terrebonne will be subject to the District millage. As a result, there will be a substantial increase in the ad valorem taxes collected by the BLFWD. These additional dollars are estimated at \$1.5 M.

If Terrebonne were to join, these dollars could be used to fund some of the recommendations in the plan, or could be partnered with other dollars as needed.

- **Increase Millage**

The BLFWD currently collects 2.11 mils on the property within the district. This millage generates about \$1.5 M per year in revenue, which the district primarily uses for operational expenses. The District has the authority to raise or lower the millage, with approval of the voters within the district, as called for in state law. Each mil generates about \$710,000 currently.

The BLFWD could increase its millage to fund some of the improvements. For example, if the district were to increase its millage to 5 mils, the revenue generated would be approximately \$3.5M per year. While this amount is not enough to fund all the improvements listed in this report, it is enough to fund some of them. More importantly, it could provide the necessary cash to match dollars from other sources listed in this report. Matching dollars are often required for many of these outside funding sources.

- **Increase Water Fees**

The BLFWD currently charges its customers \$0.03 per 1000 gallons of water. This rate is set by the BLFWD, and is a relatively small part of the revenue stream of the



BLFWD. It is however, the most direct correlation between the needs of the users and the revenue generated by the resource.

The BLFWD can increase the water fees for its customers over time. The BLFWD sold approximately 8.1 Billion gallons of water in 2010. Assuming the same usage rate, every penny increase in the water rate will generate about \$82,000 in additional revenue, a relatively modest increase in the revenue stream.

Still, it bears mentioning that there was pretty solid support during the Summit for this type of revenue measure. For the water plants, it was an easy sell because it is a pass through to their customers, and is a very small cost of their process. The majority of their costs are in processing the water and delivering it to the customers. For the citizens in attendance, it was a direct connection between the services they demand (water) and the price they were paying, as opposed to the millage, which is not directly connected to amount of water you use, or if you even use it.

The BLFWD should consider increasing its water fees over time, with the commitment to use the increased revenues to make the improvements listed in this report.

- **Bonds**

The BLFWD has the authority to issue bonds to fund activities and improvements related to its mission. These bonds can be issued based on the ad valorem tax the BLFWD collects, or on the water fees charged to its customers. The amount of bond proceeds available at any given time will certainly be dependent on the prevailing interest rates and the amount of revenue dedicated to pay off the bonds.

Bonding is an uncertain business. It does provide cash to make improvements now, but the bond payments require a long term dedication of cash flow. Typically, in



the absence of new sources of cash, an entity such as the BLFWD issues bonds relatively infrequently (every 5 – 10 years). Considering the millage and water fee revenues of the BLFWD, bonding should be thoughtfully considered before action.

While a financing team can provide accurate figures, the consultant team estimates the BLFWD could bond out its existing millage, and generate up to \$5 to 10 Million.



d. COMMUNICATION AND PUBLIC AWARENESS Many problems can be solved with simple communication, talking to each other. As previously mentioned, Summit participants felt strongly that the general public needed a lot more information about various aspects of Bayou Lafourche. Most felt the BLFWD should play a role in getting that information out.

- **Establish a Task Force**

The BLFWD should gather a working group with common interests in the bayou. The purpose of this task force would be to share information pertaining to the bayou, particularly as relates to the folks who use the bayou every day. It would be a forum to go over issues any of the members have, and to hopefully resolve them. It would also be a good forum to spread the word about happenings and events up and down the Bayou.

As a suggestion, the group could consist of representatives from:

- Water Districts
- Cities
- Parishes



- State Agencies
- BTNEP
- Chambers
- Other Business Groups
- Restore or Retreat

Ideally, this group would meet informally about once every quarter. It would be a great opportunity for the BLFWD to communicate with the communities it serves, and for the communities to respond accordingly.

- **Develop a Bayou Report Card**

There is nothing like community involvement to improve a situation. One of the folks at the Summit suggested the BLFWD should consider developing a Report Card to be used in tracking the health and beauty of the bayou. The BLFWD can decide if they would like to have one report card for the entire bayou, or report cards for individual segments of the bayou to compare to one another. Part of the idea being that the process of reporting various conditions of their stretch of bayou to others would generate some level of ownership in the bayou. It was also thought that by recording, and publicizing the report card, areas with an “A” would be admired, and areas below the “A” would strive to get there. Of course, anybody with a bad report card would hopefully be inspired to make changes, and the BLFWD could help make those changes.

The BLFWD should develop a report card for folks along the bayou to use, and encourage them to report the status of their stretch of bayou on a regular basis, say every 6 months. The BLFWD could then publicize these report cards, either at their meeting or in other ways.

- **1-800-MY-BAYOU**



In a previous section, there was a discussion regarding confusion among the residents and businesses about who is in charge. The consultant team has already made a recommendation regarding governance and coordination, and suggested that the BLFWD may want to take a greater leadership role in some areas to avoid that confusion.

In addition to that recommendation, another person suggested establishing a 1-800 number for the bayou. The purpose of this effort would be, much like the report card, a way for the people up and down the bayou to report pollution, trash, and other threats to the bayou. It would also be a way for the BLFWD and others to share info up and down the bayou, as necessary.

The BLFWD should establish the 1-800 number as suggested.

- **School Visits**

The summit participants were very passionate that any public awareness campaign should involve the schools up and down the bayou, encompassing elementary schools, middle schools, high schools. The thought process is that by educating the children, we can educate the parents.

The BLFWD should implement an outreach program to the schools in the district. A program where, from time to time, a board member, or a member of the staff, gives a presentation to a class at one of the schools in the area. The Board is, by law, geographically diverse. The board's make up lends itself to certain members of the board reaching out to the schools in their community.

The staff can prepare a simple presentation for the members to use that explains a little about the district, where their water comes from, and the importance of the bayou.



e. **UNDERSTANDING THE PHYSICAL SYSTEM**

There were several questions that were raised during the Summit, where the answer was, we just don't know. Not surprising when you consider the complicated nature of the bayou, and the many issues that arise. In fact, if we didn't have unanswered questions, we would be a little closer to having all the problems solved.

Many of these questions had to do with the physical system that includes the bayou. In a previous section, the consultant team discussed one of these questions dealing with the capacity of the bayou. Other such ideas are addressed in this section.

- **Define the Drainage Area Feeding the Bayou**

Although most people don't think of the bayou as a drainage artery, it is. When there are severe rainfall events, the bayou rises substantially. For hurricanes and tropical storms, the bayou may rise in some areas up to 4 feet. But when it does that, where does the water come from?

In south Louisiana, most of the time, water will drain away from a bayou. That's because in this part of the world, the high ground is close to the bayou, and the low ground is to the back, away from the bayou. Still, there is obviously a good portion of land, close to Bayou Lafourche along the 100 mile route to the Gulf that drains in to the bayou. And in Donaldsonville, there is probably a good deal more that does, just because of the way the drainage system works.



*Recommendations for
Understanding the Physical
System of the Bayou*

- ✓ Define drainage area feeding the bayou
- ✓ Define area for coastal restoration work

The BLFWD should, in partnership with the Parishes and Cities along the bayou, develop a drainage area map depicting the areas that drain in to the bayou. This map can be used by the BLFWD to calculate the needed capacity in the bayou for certain rainfall events, and also to help the Parishes

and Cities to plan development activities.

- **Define the Target Area for Coastal Restoration Work**

There is a great interest in using the bayou to restore the coast, and with good reason. The bayou is an existing conduit between the resource of the Mississippi River, and the areas with the greatest need. It only makes sense to try and use it.

But there is some uncertainty as to how effective the bayou can be, and where will any benefits accrue. There was some work on this as part of the Bayou Lafourche Reintroduction project, but those results are not well known, and may be somewhat dated. As a result, there is no consensus on who will benefit by using the bayou in this manner.

The BLFWD should do a couple of things here. First, the most cost effective path forward is to become familiar with the conclusions of the analysis from the Reintroduction project mentioned above. With some familiarity, the BLFWD can take a lead in explaining those conclusions to those interested, and question them if necessary. With this type of information, the BLFWD can lead the discussion, and the decision to use the bayou for this purpose.



If that information is unavailable, or dated, the BLFWD should pursue a study to determine the areas that will benefit. Partners for this effort might be Lafourche or Terrebonne Parishes, as these communities are the most likely to be affected. The State may also be a partner for this effort.

- **Feasibility Study of Bayou Terrebonne**

There is interest in providing some of the water from Bayou Lafourche in to Bayou Terrebonne. Between Thibodaux and Houma, Bayou Terrebonne has little flow driven exclusively by rainfall. There has been increased interest in the bayou recently, and particularly flow down the bayou.

The BLFWD should consider partnering with Terrebonne Parish Consolidated Government to study this possibility. The BLFWD should be cognizant of the other water needs below that connection as this study proceeds.

f. RECREATION

The Summit included a day on recreation, tourism, and economic development related to the bayou. Much of the discussion on that day centered on beautification along the bayou, access, and trying to decide who was in charge! Some of those subjects have been discussed in previous section of this document, but a few recommendations were not previously mentioned. These recommendations follow.

- **Access**

Access to Bayou Lafourche is limited, particularly above Lockport. In fact, after the boat launch in Donaldsonville, the next one that most people know about is in



Thibodaux, 35 miles downstream. Lack of access is a strong deterrent to people trying to enjoy the recreational value of the bayou.

The BLFWD, in association with the surrounding Parishes, should pursue a plan of providing greater public access to the bayou. Although this plan should include one or more additional boat launches, there are other aspects of this plan that may not include the same liability or cost. Take-in and take-out locations for canoes and kayaks can be as simple as a bare piece of ground along the bayou. The BLFWD may be able to do this with arrangements with willing landowners, short of actual purchase, such as an access servitude or lease. There are federal funds available to fund these types of activities through the Wallop Breaux fund.

- **Define Recreational Use of the Bayou**

As the attendees at the Summit discussed the various recreational opportunities related to the bayou, they also discussed which opportunities were the best fit for the bayou. In other words, which recreational activities should be pursued, and which were not appropriate for Bayou Lafourche. It was a recognition that not all uses would fit with what Bayou Lafourche has to offer.

The attendees suggested the BLFWD should define the most appropriate recreational uses of the bayou. This effort should recognize that, as with many other aspects of the bayou, there are different recreational advantages in different sections of the bayou. The BLFWD should seek to partner with the Parishes and the State Office of Culture Recreation and Tourism in this effort.



*Recreational
Recommendations*

- ❖ *Access*
- ❖ *Define
Recreational
Uses*



Ascension, Assumption, and Lafourche Parishes, along with the towns along the bayou, participated in the Bayou Lafourche Corridor plan several years ago. In this plan, there are several suggestions for improvements along the bayou. Although not all of the improvements are directly tied to Bayou Lafourche, all are tied to the communities along the bayou. The BLFWD should take advantage of that effort.



SECTION

V

V. CLOSING REMARKS

Overall Aim

What was achieved?

The Bayou Lafourche Summit generated questions, spawned discussion, stirred debate, created a sense of urgency, and produced enthusiasm about one of our regions most important , if not the most important resource, water.

As a result of the Bayou Lafourche Fresh Water District pioneering the first ever Bayou Lafourche Summit, the local community was able to benefit in numerous ways. Participants were from various backgrounds, and had different objectives for why they were in attendance. The professionals were able to provide expertise, government officials were able to further understand the cause, business owners and citizens were able to voice their concerns regarding the bayou. Regardless of background or intention, all stakeholders had one thing in common, a general concern for Bayou Lafourche.

Simply put, the summit has taught us that we need more high quality water, coordination among our government agencies, communication with the public, more money, and a better understanding of the bayou.

Next Steps

Where do we go from here?

The Summit was a success and the first step toward revival of a vital resource. While this report expands on ideas generated and provides in depth recommendations, it is only the first step in a longer process. The bayou did not transform to its current state



overnight, and will therefore not be converted back overnight. We all need to do our part to express the relevance of Bayou Lafourche to federal agencies, state agencies, and our local communities.

The first step is for the BLFWD to examine what occurred during the summit and review the recommendations suggested. The BLFWD will receive this report, review it, and suggest changes. Once changes are made accordingly, BLFWD is expected to adopt the plan as its master plan.

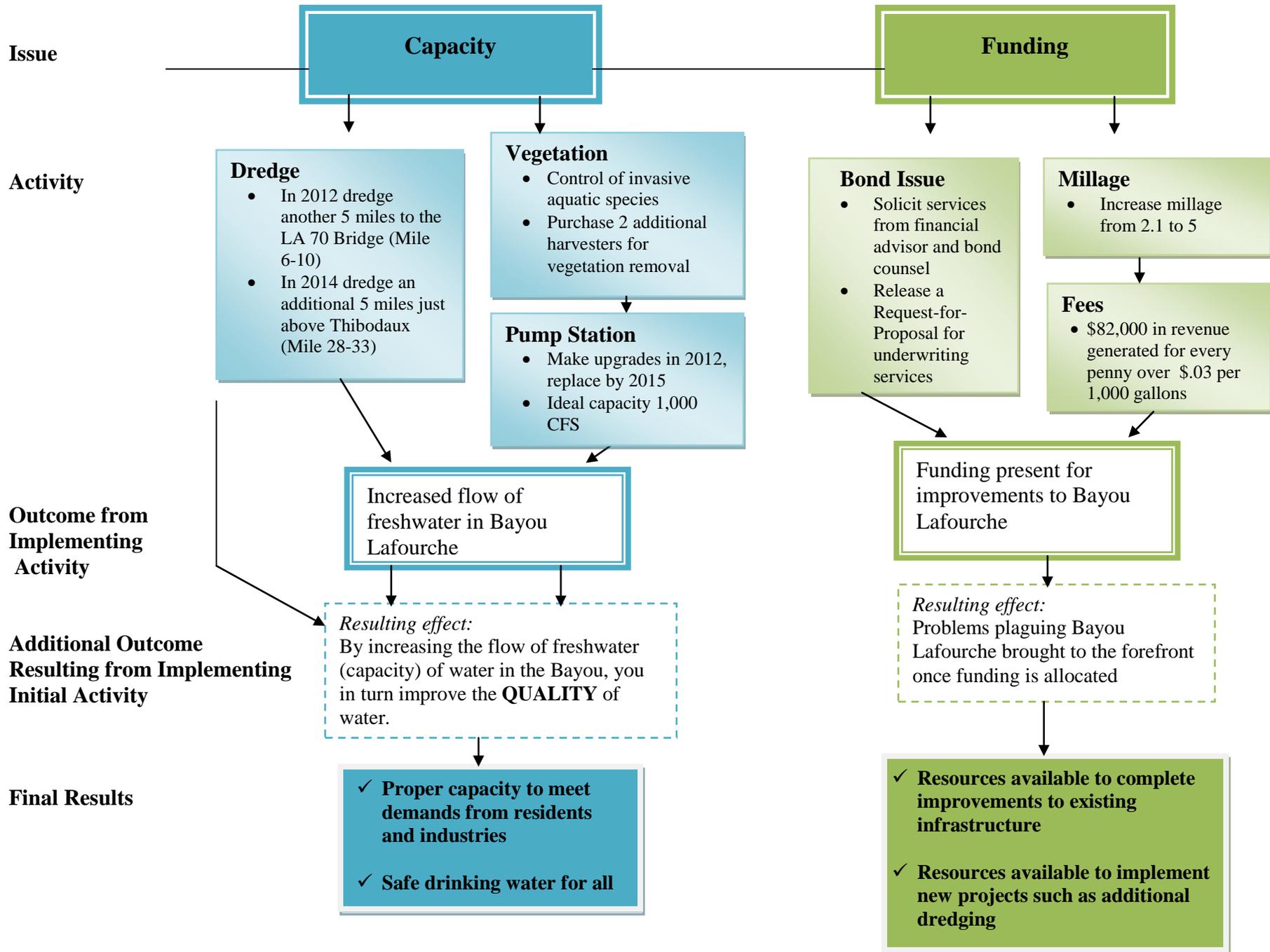
“The Summit was a success and the first step toward revival of a vital resource”

It is important to remember to take the large process one step at a time. Breaking down problems by finding the root of the issue, then generating solution based from that core. If the BLFWD is to implement some or all of the recommendations presented in this report, the key is to have tangible measures of success for solutions acted on, and finally generating measurable goals to achieve in the future.

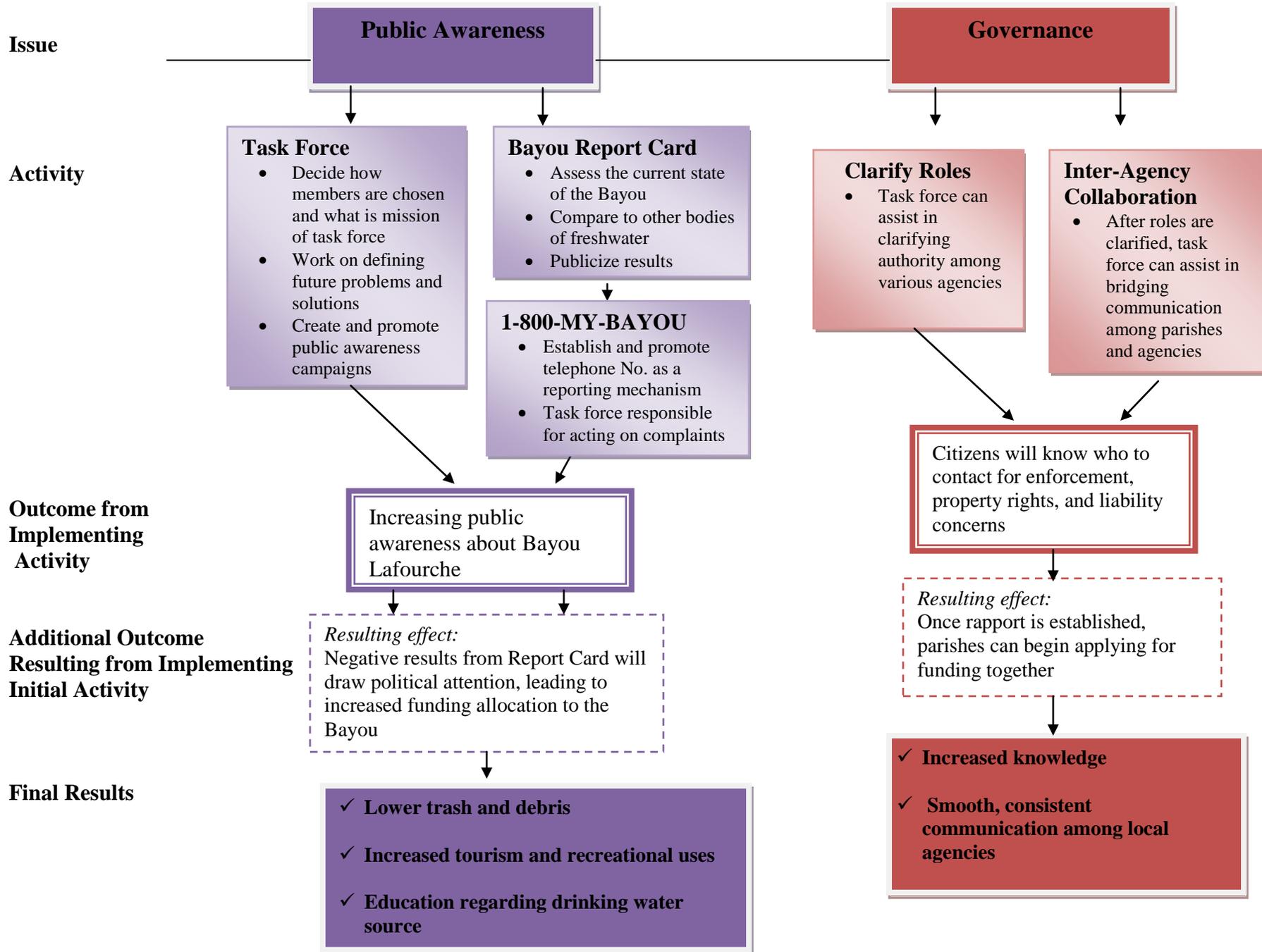


SECTION VI

Logic Model of Recommendation Implementation



Logic Model of Recommendation Implementation



Bayou Lafourche Summit Final Report
RECOMMENDATION MATRIX



Category	Recommendation	Partner	Schedule	Cost	Funding Source
Capacity	Dredge Mile 6 to 10	State	2012	\$ 20,000,000.00	CIAP/State Capital Outlay/BLFWD
	Refurbish Pump Station	State	2012	\$ 3,000,000.00	CIAP
	Build New Choppers to Clean Out Bayou		2013	\$ 125,000.00	BLFWD
	Chopper (2)		2014	\$ 125,000.00	
	Dredge Mile 28 to 33	State	2014	\$ 20,000,000.00	State Capital Outlay/BLFWD
	Replace Pump Station	State	2015	\$ 25,000,000.00	State/BLFWD
	Remove Weir		2016	\$ 2,000,000.00	BLFWD
	Replace RR Crossing at Donaldsonville	State	2015	\$ 25,000,000.00	State/BLFWD
	Maintain Sand Trap	State	2016	\$ 3,000,000.00	State/BLFWD
	Evaluate Gate at Donaldsonville	State	2017	\$ 100,000.00	State/BLFWD
	Perform Drainage Model	Parishes	2015	\$ 100,000.00	BLFWD/Parishes
Coordination	Refine BLFWD Mission		2012	\$ -	
Funding	Partner with State	State Delegation	Ongoing		
	Federal Dollars	Federal Delegation	Ongoing		
	Expand Membership in BLFWD	TP CWW #1	TBD	\$ -	
	Increase Millage	Water Districts	TBD	\$ 175,000.00	BLFWD
	Increase Water Fees	Water Districts	TBD		BLFWD
	Bond Revenue Stream		TBD	\$ 10,000.00	BLFWD
Understanding the System	Define the Drainage Area	Parishes	2012	\$ 50,000.00	BLFWD/State/Parishes
	Define the Target Area for Coastal Restoration	State	2012	\$ 100,000.00	State
	Is it feasible to move water to Bayou Terrebonne?	Terrebonne	2013	\$ 20,000.00	BLFWD/Terrebonne
Communication/Public Awareness	Bayou Lafourche Task Force	Customers	2012	\$ -	BLFWD
	Report Card		2012	\$ 1,000.00	BTNEP/BLFWD/Parishes
	1-800-MYBAYOU		2012	\$ 1,000.00	BLFWD
	School Visits	School Districts	2012	\$ 1,000.00	BLFWD
Recreation	Increase Access - 2 new boat launches above Thibodaux	Parishes	2013-2014	\$ 50,000.00	BLFWD/Parishes/Grants
	Define Recreational Use	State/CRT	2012	\$ 10,000.00	BLFWD/Grants

Bayou Lafourche Summit Final Report
FIVE YEAR CAPITAL BUDGET



Year	Recommendation	BLFWD Share	Other Share	Total Cost
2012	Dredge Mile 6 to 12	\$ 5,000,000.00	\$ 15,000,000.00	\$ 20,000,000.00
	Refurbish Pump Station	\$ -	\$ 3,000,000.00	\$ 3,000,000.00
	Define Drainage Area	\$ 100,000.00	\$ -	\$ 100,000.00
	Define Targer Area for Coastal Restoration	\$ 25,000.00	\$ 75,000.00	\$ 100,000.00
	Define Recreational Use	\$ 10,000.00	\$ -	\$ 10,000.00
	New Boat Launch	\$ 25,000.00	\$ 25,000.00	\$ 50,000.00
		\$ 5,160,000.00	\$ 18,100,000.00	\$ 23,260,000.00
2013	New Chopper	\$ 125,000.00	\$ -	\$ 125,000.00
	Bayou Terrebonne Feasibility Study	\$ 10,000.00	\$ 10,000.00	\$ 20,000.00
		\$ 135,000.00	\$ 10,000.00	\$ 145,000.00
2014	New Chopper	\$ 125,000.00	\$ -	\$ 125,000.00
	Dredge Mile 28 - 33	\$ 5,000,000.00	\$ 15,000,000.00	\$ 20,000,000.00
		\$ 5,125,000.00	\$ 15,000,000.00	\$ 20,125,000.00
2015	Replace Pump Station	\$ 6,250,000.00	\$ 18,750,000.00	\$ 25,000,000.00
	Replace Railroad Crossing - D- ville	\$ 6,250,000.00	\$ 18,750,000.00	\$ 25,000,000.00
	Perform Drainage Model	\$ 100,000.00	\$ -	\$ 100,000.00
		\$ 12,600,000.00	\$ 37,500,000.00	\$ 50,100,000.00
2016	Remove Wier	\$ 500,000.00	\$ 1,500,000.00	\$ 2,000,000.00
	Maintain Sand Trap	\$ 750,000.00	\$ 2,250,000.00	\$ 3,000,000.00
		\$ 1,250,000.00	\$ 3,750,000.00	\$ 5,000,000.00
2017	Evaluate Gate at Donaldsonville	\$ 25,000.00	\$ 75,000.00	\$ 100,000.00
		\$ 25,000.00	\$ 75,000.00	\$ 100,000.00
	Total	\$ 24,295,000.00	\$ 74,435,000.00	\$ 98,730,000.00