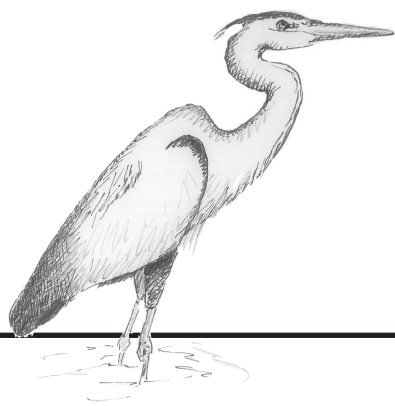


# Bank-line Management Guide *for Bayou Teche Watershed Landowners*



Provided by  
The TECHE Project





# Bank-line Management Guide

## *for Bayou Teche Watershed Landowners*

---



### Credits:

Written by Patti Holland

Design by Erin Z. Bass

Illustrations by Tami St. Germain

Cover photo by Denny Culbert

The TECHE Project  
P.O. Box 165  
Arnaudville, LA 70512  
[techeproject.org](http://techeproject.org)



## ACKNOWLEDGEMENTS

Special thanks to Acadiana Native Plant Project, the Bayou Vermilion District and Whitney Broussard III, Ph.D., for their assistance in this publication. Portions of this guide were drawn from the Arizona Department of Environmental Quality's Streambank Management Stabilization Measures document and from a U.S. Forest Service's guidebook addressing soil bioengineering techniques. This publication can also be downloaded for free from our website at [techeproject.org](http://techeproject.org).



# INTRODUCTION

*The Bayou Teche/Lower Atchafalaya River is Louisiana's only federally designated National Water Trail.*

The U.S. Department of the Interior bestowed that prestigious designation because of the waterway's cultural significance and natural beauty. The Bayou Teche Corridor thrives with ecological richness, from the pastoral live oak terraces in its upper reaches to the tidal marshlands and swamps where it terminates into the Lower Atchafalaya River.

Because of the corridor's federal importance, The TECHE Project nonprofit organization (managers of the Bayou Teche National Water Trail) believes that the Bayou Teche Watershed should be held to a high standard when it comes to water quality and aesthetic beauty: two attributes that all of us who live, work and play along the bayou can appreciate.

The waterway has historically provided for our ancestors through its resources and transportation ability, and today these "trail towns" are returning to the water. Businesses and town governments are investing on the bayou to encourage locals and visitors to embrace the riverfront, and we encourage landowners to do the same.

Knowing the benefits of a healthy watershed and realizing that each landowner can play a significant role in achieving that goal is what motivated The TECHE Project to produce this Bank-line Management Guide. What individuals do can have a positive effect on the corridor. We thank you for your love of the watershed, and we hope you find this guidebook useful in answering some of the questions you may have about the waterway.

---

## Common Questions Landowners Ask About the Bayou:

- **How healthy is the water quality of the Bayou Teche Watershed?**
- **What factors negatively influence water quality within the Bayou Teche Watershed, and what can a landowner do to help improve the situation?**
- **How can a landowner restore the bank-line while still enjoying their living space?**





# How healthy is the water quality of the Bayou Teche Watershed?

*The water quality of Bayou Teche's Watershed is dependent on many factors, including what flows into it from areas outside of the main channel and its immediate bank-line.*

The Louisiana Department of Environmental Quality (LDEQ) provides a report every five years addressing the water quality of each Louisiana waterway. In their 2018 report, they classified Bayou Teche as being impaired for certain uses (i.e., swimming and fish consumption) from its headwaters to the Charenton Canal. The Lower Atchafalaya River has better flow and more rural freshwater tributaries and was not listed as impaired. Bayou Teche's limitations are due to high fecal coliform levels and, to a lesser extent, high nutrient runoff. Fecal coliform issues are associated with inefficient sewage treatment of household waste. Nutrient issues are associated with runoff from high rainfall events that drain excessive nitrates and phosphorus from agricultural fields and residential developments.

Land uses and tributary streams that feed into the Bayou Teche Watershed as far north as Alexandria and Opelousas have an effect on water quality. There are 12 tributaries supplying water to Bayou Teche from Bayou Courtableau in Port Barre to the Verdunville Canal between Franklin and Patterson.

The University of Louisiana at Lafayette's Institute for Coastal Ecology and Engineering did a year-long monitoring study of water quality in the Bayou Teche Watershed in 2013. That study found that Coulee Rouge and Bayou Toulouse, which drain Opelousas and Port Barre, and Bayou Tortue, which drains south Lafayette Parish, are significant contributors of pollutants into Bayou Teche. The study also showed that urban runoff from Port Barre, Opelousas, southern Lafayette and New Iberia significantly contributed to high levels of fecal coliform and nutrients (phosphorus and nitrogen) in the bayou, as well as low levels of

oxygen. In summary, there is more at play when it comes to water quality degradation than what is directly happening on the banks of Bayou Teche.

Several organizations are working to improve water quality in the Bayou Teche Watershed. The Teche-Vermilion Fresh Water District pumps water from the Atchafalaya River into the watershed to ensure adequate freshwater flow and conducts periodic water testing. The Acadiana Native Plant Project (ANPP), Trees Acadiana and Bayou Vermilion Preservation Association have partnered with The TECHE Project to teach bank-line restoration techniques and do demonstration projects at several locations on Bayou Teche.

---

**Water quality in Bayou Teche is better today; however, the watershed still needs improvement with regard to the negative factors listed below:**

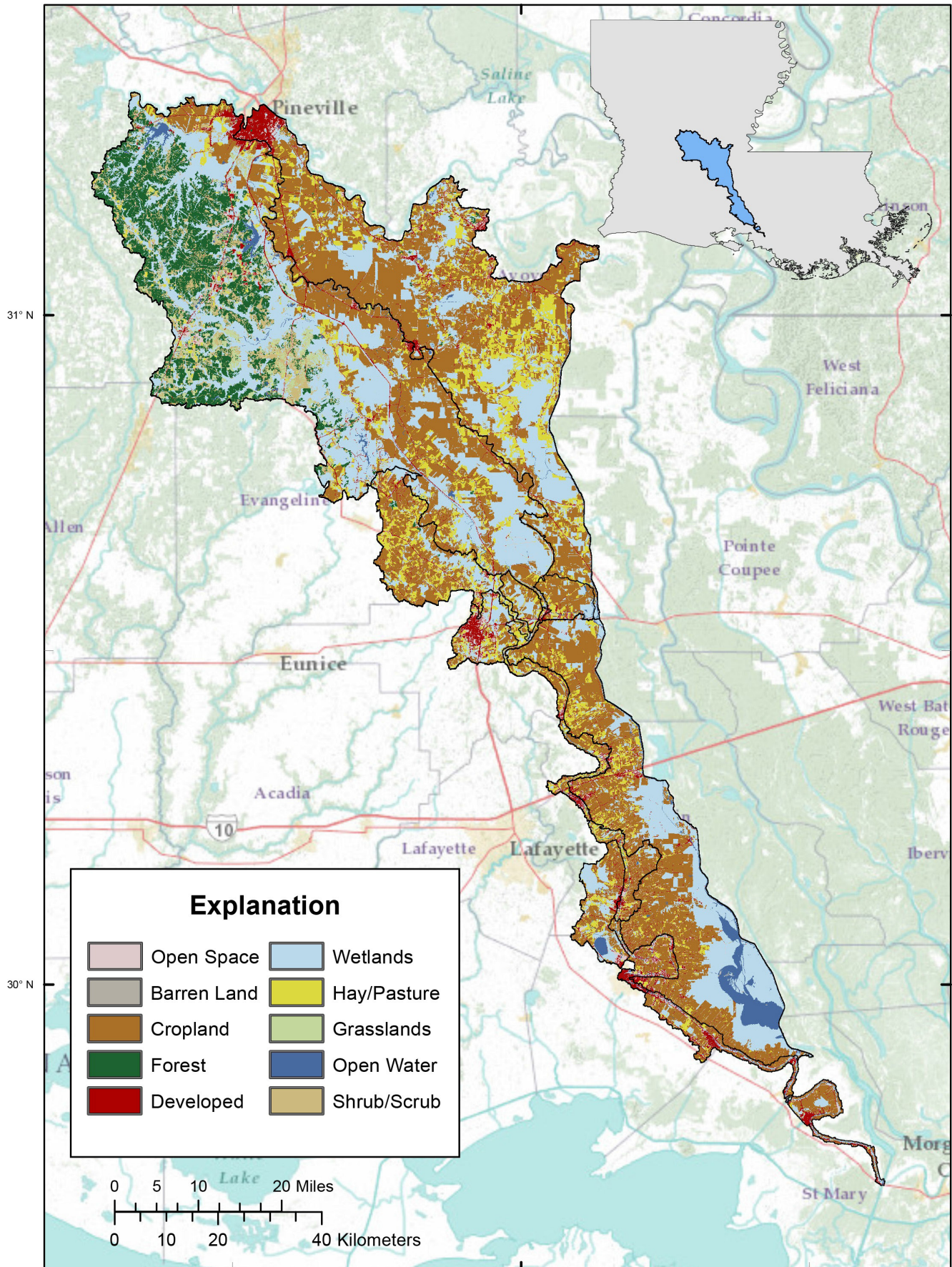
- **Direct dumping of household sewage and wastewater**
- **Bank-line erosion**
- **Nutrient loading**
- **Trash and excessive woody debris**





# Bayou Teche Watershed (58,500 acres)

-92° W



Projection: NAD 83, Albers Conical Equal Area. Basemap: ESRI, National Land Cover Dataset, 2006. Whitney Broussard, University of Louisiana at Lafayette. 2013



# What are the negative factors influencing water quality within the Bayou Teche Watershed, and what can a landowner do to help improve the situation?

## Direct Dumping of Household Sewage & Wastewater

When the Teche Watershed was originally developed, there were no restrictions on the dumping of household sewage and wastewater (grey water from sinks, showers and laundry). Many homes were built with direct piping to the bayou with the thought that dilution was the solution. Over time, as new homes replaced old, functional sewage treatment systems were mandated and the negative effects of household discharges were lessened. However, even today, there are still too many dwellings directly dumping into the bayou and too many newer households that are not properly maintaining their approved sewage treatment systems.



***Solution: A functioning sewage treatment system will improve water quality within the watershed.***

A state-approved wastewater treatment system is preferred; however, these systems do not work forever without maintenance. Home sewage treatment systems rely on an Aerobic Treatment Unit (ATU). The blower in that unit must be

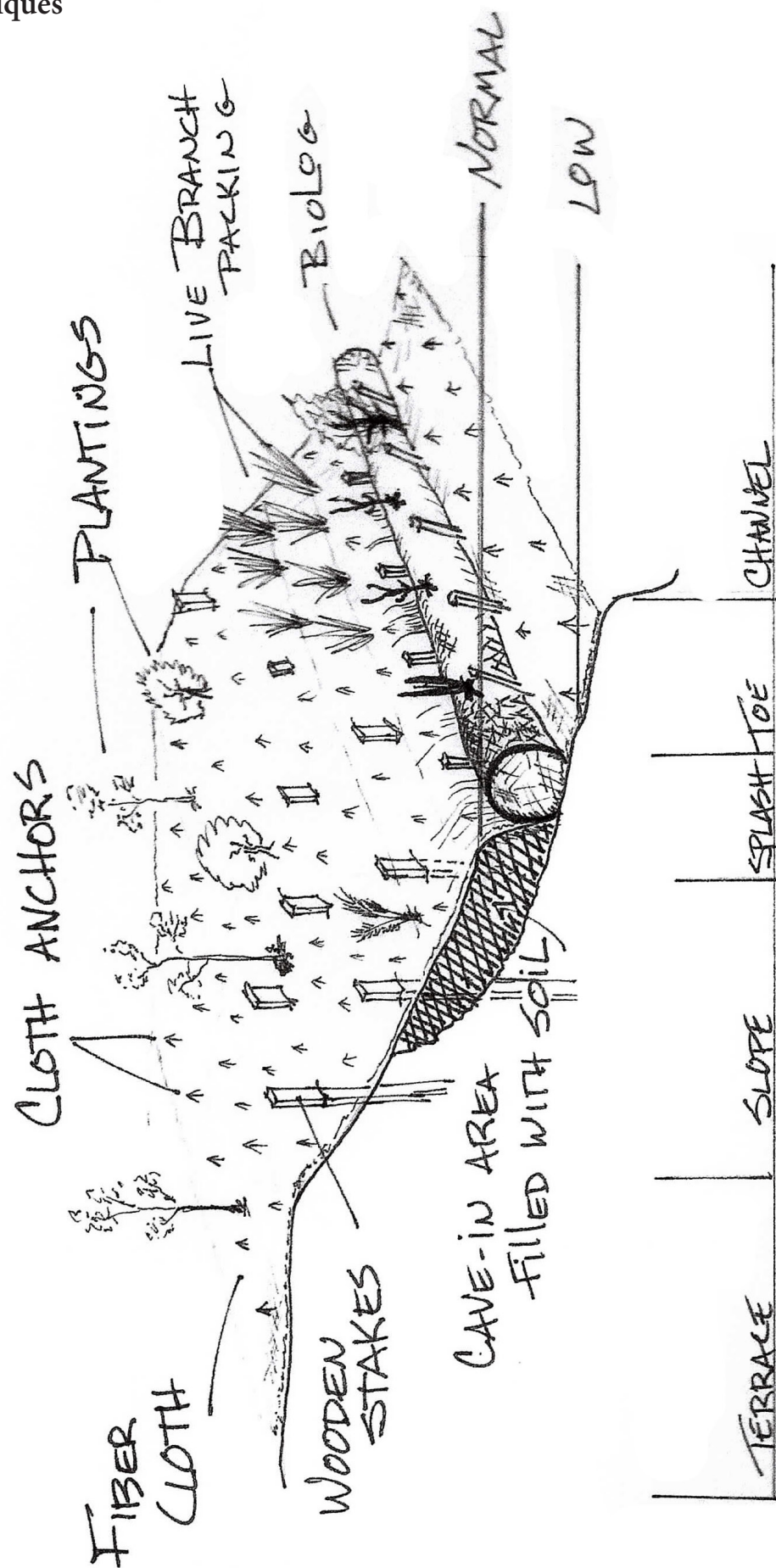
maintained or the ATU will not work properly. Additionally, sludge builds up over time. The system should be pumped out every three to five years to keep the ATU from clogging. The service provider for your treatment system will make inspections for the first two years. After that time period, the landowner can either maintain the unit or opt to renew the service contract. If you are not sure whether your unit is working properly, call your service provider for an inspection.

***We strongly encourage landowners to use a state-approved system and to continually monitor that system to ensure it is working.***

If cost or site logistics prohibit the installation of a state-approved system, then, as a last resort, consider positioning the end of the pipe upslope to discharge above the high waterline and installing a wastewater filtration field. A proper filtration field involves fortifying the bank-line with natural materials and planting special vegetation to absorb and filter discharged household sewage and grey water. Natural vegetation (not grass) is the solution for adequate pollution filtration. Many plants adapted for life on a bayou bank provide a natural filtration function by trapping unwanted elements in your sewage/wastewater runoff. A list of suitable bank-line filtration plants is provided in the Appendix of this publication.

Fortifying the bank with natural materials, such as biologs, coconut cloth and plants provides an effective combination of “bioengineering techniques.” Bioengineering is a fancy term to describe the use of low-cost, natural materials to fortify and restore the functionality of the bank-line. The diagram to the right illustrates some of the bioengineering tools that can be used.





## Bank-line Erosion

*Erosion adds sediment into the bayou, reducing water quality, but more importantly it washes land away, and nobody wants to lose their land.*

The substrate of Bayou Teche consists of clays and silts, suspended as sediment in the water column and making the bayou naturally turbid or brown. When the bank erodes, more sediment is added to the water column, increasing turbidity and decreasing water quality by blocking light for aquatic plants and smothering aquatic organisms.



We know Cajuns love to mow their lawns, but our ancestors may have done a better job of living with nature by letting native vegetation protect their bayou banks. When grass is maintained all the way down the bank, it will not stop wake-induced erosion. Short grass does not have the soil holding ability of native vegetation. Bank erosion can also cause trees to fall into the bayou, resulting in floating debris. As that debris becomes lodged on bridges and other structures, log jams that obstruct stream flow and navigation can occur. Excessive debris can also cut into the bank, causing additional erosion.

***Solution: The simple answer to fixing bank erosion is vegetation.***

Any natural vegetation that holds the bank is good, but it is better to use plants that are adapted to water-level fluctuations.

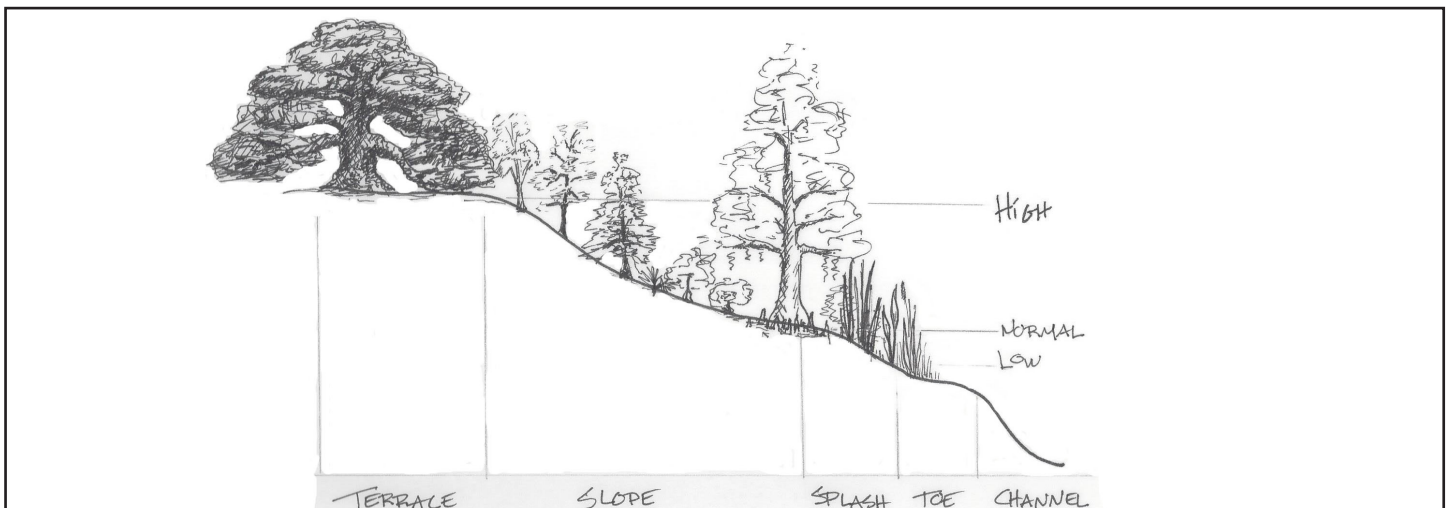
**The bank-line is composed of four zones:**

**The Toe Zone** (below low waterline) is only exposed during drought periods or when cold fronts push water downstream. This area is seldom vegetated and when exposed looks like a mud flat.

**The Splash Zone** (low waterline to normal waterline) is where water fluctuates on a normal basis and is where erosion most often takes place. Non-woody plants within this zone hold the soil in place, filter pollutants and reduce the height and duration of downstream flooding by slowing down water flow.

**The Slope Zone** (normal waterline to high waterline) floods occasionally and is very important in filtering pollutants from yards. Stabilizing this zone also slows erosion.

**The Terrace Zone** (high flood waterline to top of bank) seldom floods and is the best place to plant grass and put lawn furniture. Appropriate plantings in this zone will slow the flow of rainwater to reduce erosion, help rain soak into the water table and filter household pollutants.





***Solution: Restore banks with native plants.***

A landowner could simply choose to let their bank grow wild, but doing that could result in invasive plants like Chinese tallowtree taking over. Therefore, it is best to plant desirable native plants. Plants native to the area improve habitat for wildlife by providing shelter and food (non-native plants have little food value); they also improve fisheries habitat by providing food, cover and shade to keep water temperatures cooler. Another added benefit is that native plants like the Louisiana iris provide a pretty view for all who pass by.

The vegetation table in the Appendix of this publication provides a listing of plants and their characteristics and tells you where on the bank they would be best placed. This table also includes plants that can handle high-flow situations where outfall drains occur. The key is to plant with native vegetation and to position your plantings within the appropriate bank-line zone as shown on page 8.

***Solution: Fortify to secure high-erosion areas.***

Plants definitely help to hold the soil on your bank; however, sometimes the degree of stream flow and the bank slope require more fortification. Utilizing a combination of the bioengineering techniques mentioned previously will help alleviate erosion when you need more fortification than vegetation alone. In areas where there is high slope and high water energy (i.e., locations with outfall pipes), manmade substances like concrete may be needed to fortify the bank. For household needs, it is

best to use bags of unmixed concrete laid directly on the contour of the natural bank. In time, the bags will allow natural vegetation to grow between them and hide the concrete.

***Solution: Rainwater is best managed by letting it soak into the ground where it falls.***

Slowing runoff from developed areas by using pavement that allows rain to soak directly into the ground (i.e., pervious pavement) will reduce the velocity of water flow and erosion. That practice also helps to recharge the water table as rainfall is allowed to soak into the ground instead of running off into the bayou.

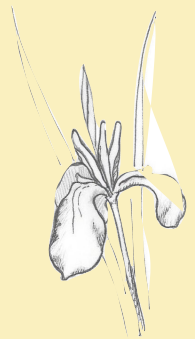
***Solution: Just say no to bulkheads.***

Bulkheads installed at the low waterline do nothing for water quality filtration and can actually increase erosion on neighboring properties. We strongly discourage the use of bulkheads for erosion control. A naturalized bank-line will allow water to flow unimpeded. If a bulkhead is put in place, the natural water flow is disrupted and will result in increased erosion both up and downstream of the bulkhead. Bulkheads, if necessary, should be placed upslope from the normal waterline, and the area below the bulkhead should be vegetated.

**Get a Wetland Starter Kit From Acadiana Native Plant Project**

Kits for bayou bank plantings are tailored for bank-line restoration needs and are usually available in the spring at Acadiana Native Plant Project's greenhouse in Arnaudville. Contact [mail@greauxnative.org](mailto:mail@greauxnative.org) to inquire about availability and pricing.

Local nurseries may also stock native plants suitable for bank-line stabilization.



## Nutrient Loading

*Agricultural/household pesticides, herbicides and fertilizers also negatively affect water quality.*



Pesticides, herbicides and fertilizers contain nitrogen and phosphorus, and too much of these elements results in a process called nutrient loading. When there is too much nitrogen and phosphorus in the water, algae grows faster than the ecosystem can handle and oxygen levels drop. There are regulations in the farming industry designed to minimize this effect. Federal aid to farmers is contingent on the use of Best Management Practices, which require stream buffers to reduce erosion and nutrient loading. However, there are no restrictions for the use of herbicides and pesticides on private residences and businesses adjacent to the bayou. Pollution filtration on private land is strictly voluntary.

***Solution: Avoid or reduce the use of harmful chemicals.***

As a landowner concerned about water quality, you can take measures to ensure that your actions minimize harmful discharges. You can avoid or reduce the use of herbicides or pesticides, especially their use in areas subject to flooding. You can plant natural vegetation along the slope of your bank that will filter harmful nutrients before they enter the bayou. You can also make sure the debris being cast from your mower does not go

directly into the waterway to decompose. Oxygen within the water is used to decompose rotting vegetation, and when the oxygen is used for this purpose, there is less oxygen in the water for fish to use.

## Trash & Excessive Woody Debris

***The TECHE Project's volunteer efforts have removed more than 50 tons of trash from the Bayou Teche Corridor.***

With regard to trash, the bayou is much better today, but unfortunately, dumping still occurs—often times by accident and sometimes on purpose. When a landowner piles trash and woody debris near the shore to burn later, and water levels rise unexpectedly, that debris pile floats into the system, clogs drainage and decomposes in the water, thereby reducing oxygen and overall water quality. High water and wind can also relocate belongings into the bayou unexpectedly. It's not uncommon to see yard furniture and children's toys in the waterway after a storm event.

***Solution: Secure loose items and place burn piles above the high waterline.***

Debris piles high on the bank will not float away, and loose items stored properly will not accidentally blow into the bayou when the wind picks up from a summertime squall. One option is to bolt lawn furniture down. Show your love for the bayou and treat each day like it could have hurricane conditions.





# How can a landowner restore the bank-line and still enjoy their living space?

*A naturalized bank-line is optimal for watershed health; however, most bayou landowners want to be able to enjoy the beauty of the bayou and have some waterfront access.*

There are many ways to provide waterfront access and leisure areas while still maximizing the benefits of vegetative plantings for erosion control and pollutant filtration purposes. A multi-use plan may work for you. If your bank-line is steep and you wish to have a gentle slope, you can level your property through terracing. A terrace (small bulkhead) located between the normal and high waterline gives you the flat land you desire while minimizing the negative effects of bulkheads. Below the bulkhead should be vegetated.

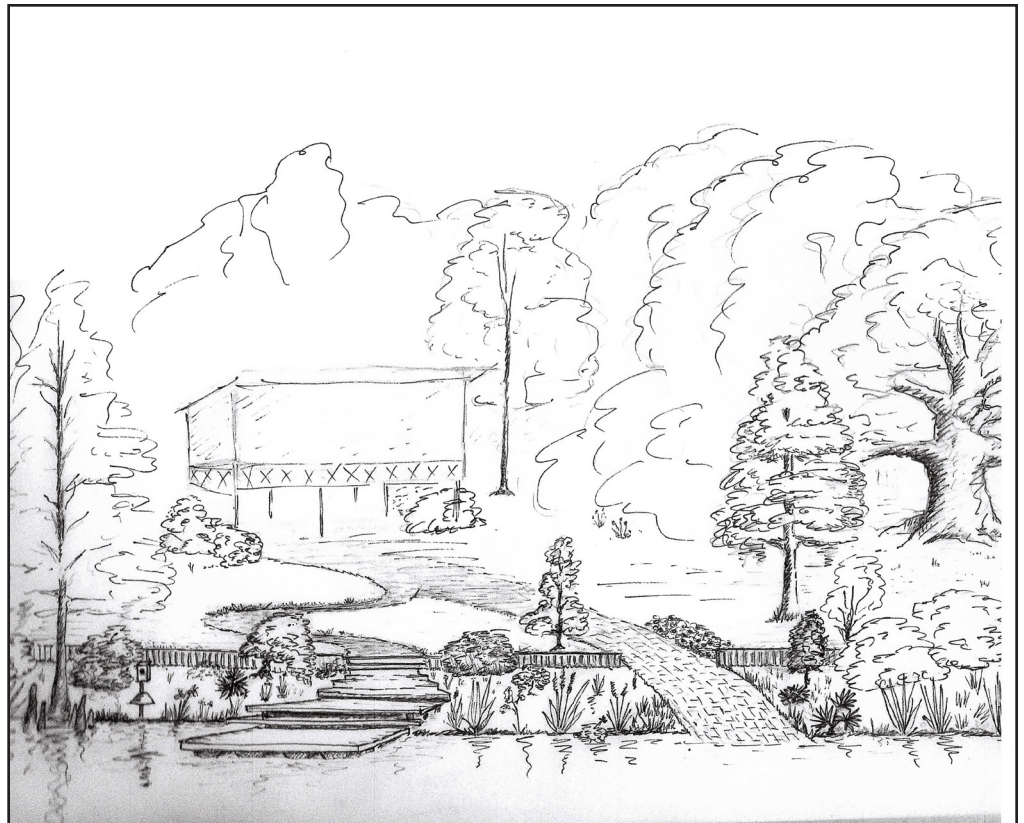
*One of the added benefits of a naturalized bank-line is an increase in wildlife habitat, but not everyone appreciates wildlife at the same level.*

Yes, there may be snakes, turtles and alligators, as these species are native to Bayou Teche's bank-line areas. These animals could be present regardless of what is growing on your bank. Do keep in mind that abundant wildlife is an indicator of a healthy watershed, and you and your children will benefit from an enriched ecosystem that supports more insects, birds, mammals, amphibians and reptiles!

The biggest problem with a naturalized bank-line and wildlife encounters will be nutria and beavers eating

newly planted trees (they love cypress). For the first few years until the tree trunks become 3 inches in diameter, they should be protected with wire fencing (hardware cloth fencing will work). You can trap and relocate furbearers and (if appropriate for your location) you can shoot nutria as they are non-native, but in most cases protecting your trees should suffice.

You may see an increase in reptiles and amphibians (snakes, lizards, turtles and frogs), but these species are more afraid of you and will likely retreat if disturbed. If you're worried about your pets and small children running loose in habitat that supports wildlife, a sturdy fence barrier (located above the high waterline) can be installed to ensure that your loved ones do not venture into areas where wildlife is not readily visible. We suggest using heavy grade hogwire framed in cypress as a sturdy barrier that allows visibility and looks attractive.



Multi-use Development

*How the bank-line is managed will determine the long-term health of the Bayou Teche Watershed.*

The TECHE Project believes that with minimal effort, landowners can reduce erosion and pollution. If we all do our part, together, we can improve water quality while adding to the natural beauty of Bayou Teche and the Lower Atchafalaya River. By implementing any of the beneficial practices listed on this page, you will be making a positive difference on Louisiana's most famous bayou!

*“The story of the Teche in the twentieth century was one of designing the bayou to human advantage. Its story so far this century has been one of conservation in the face of mounting environmental threats ...”*

*- Shane Bernard, Teche*

*Literature Cited:*

Broussard III WP. 2013. *Water Quality Monitoring in the Bayou Teche Watershed. Final Report Section 319(h) Program, Louisiana Department of Environmental Quality. Baton Rouge, LA. 2019.*

2018 *Final Louisiana Water Quality Inventory: Water Quality Integrated Report 305(b)/303(d). Louisiana Department of Environmental Quality, Baton Rouge, LA.*

- Maintain your wastewater treatment system.
- Replace your inefficient wastewater system with a state-approved system or take measures to filter your pollutant runoff.
- Minimize the use of pesticides, herbicides and fertilizers on your property.
- Plant appropriate vegetation along the bank-line to filter pollutants and decrease erosion.
- Keep debris piles above the flood zone.
- Secure items that can be blown into the bayou accidentally.
- Avoid casting mowed material into the waterway.
- Routinely clean debris that floats onto your property.
- Use pavements that allow water to percolate into the ground.
- Place a conservation easement on your naturalized property.
- Join The TECHE Project at our biannual volunteer bayou cleanup events.
- Join The TECHE Project and our conservation partners at bank-line restoration demonstration workshops.
- Attend The TECHE Project's Bank-line and Wood Duck Management Workshops (free for members!).
- Support The TECHE Project's efforts to enrich Bayou Teche by becoming a member or donating to our organization (see [techeproject.org](http://techeproject.org)).




















## Appendix: Plants Suitable For Planting The Splash And Slope Zones Of Bayou Teche






\* Good For Pollution Filtration

\* Potentially Available through the Acadiana Native Plant Project

Species	Picture	Splash	Slope	Sun	Shade	Stream Flow	Mature Plant Size/Comments	Available for Purchase	Easy to Obtain in the Wild
<b>Shrubs and Trees</b> (Plant in winter and avoid planting woody vegetation in high slope and cut bank areas)									
<b>Bald Cypress *</b> <i>Taxodium distichum</i>		X	X	X		low to medium	large tree cypress knees hold bank better than most trees	X	
<b>Black Willow</b> <i>Salix nigra</i>		X		X		low to medium	large tree can sprout from cuttings	X	X
<b>Tupelogram</b> <i>Nyssa aquatica</i>		X		X	X	low to medium	large swamp tree	X	
<b>Red Maple</b> <i>Acer rubrum</i>			X	X		low to medium	mid-sized tree fall color	X	
<b>River Birch *</b> <i>Betula nigra</i>			X	X		low	large tree on upper slope	X	
<b>Green Ash *</b> <i>Fraxinus pennsylvanica</i>			X	X		low	large tree on upper slope	X	
<b>Water Elm</b> <i>Planera aquatica</i>		X		X		low to medium	small tree	X	X
<b>Water Locust</b> <i>Gleditsia aquatica</i>		X	X	X		low to medium	small tree	X	
<b>Buttonbush *</b> <i>Cephalanthus occidentalis</i>		X	X	X		low to medium	large shrub (8-ft.-tall x 6-ft.-wide)	X	
<b>Eastern Swamp Privet</b> <i>Forestiera acuminata</i>		X		X		low to medium	large shrub (8-ft.-tall x 6-ft.-wide)		X
<b>Virgiana Sweetpire *</b> <i>Itea virginica</i>			X	X		low	medium shrub (6- ft.-tall x 4-ft.-wide)	X	
<b>Swamp Titi</b> <i>Cyrilla racemiflora</i>			X	X	X	low to medium	large shrub (8-ft.-tall x 6-ft.-wide)	X	
<b>Possumhaw Holly *</b> <i>Ilex decidua</i>			X	X	X	low	shrub (6- ft.-tall x 4-ft.-wide)	X	
<b>Palmetto *</b> <i>Sabal minor</i>			X	X	X	low	shrub (3-ft.-tall x 4-ft.-wide)	X	

Herbaceous Plants (Plant in spring and water often until plants are established)									
Species	Picture	Splash	Slope	Sun	Shade	Stream Energy	Mature Plant Size/Comments	Available for Purchase	Easy to Obtain in the Wild
<b>Giant Blue Iris</b> * *		X	X	X	X	low to medium	2-ft.-tall, spreading	X	X
<i>Iris giganticaerulea</i>									
<b>Copper Iris</b> *		X	X	X		low to medium	2-ft.-tall, spreading	X	X
<i>Iris fulva</i>									
<b>Pickereel Weed</b> * *		X		X		low to medium	2-ft. tall, spreading	X	X
<i>Pontederia cordata</i>									
<b>Lizard's Tail</b> *		X	X	X		low to medium	2-ft. tall, spreading	X	X
<i>Saururus cernuus</i>									
<b>Soft Rush</b> * *		X		X		low to medium	3-ft.-tall x 3-ft.-wide, clump	X	X
<i>Juncus effusus</i>									
<b>Indian Woodoats</b> * *			X	X	X	low to medium	2-ft.-tall x 2-ft.-wide	X	
<i>Chasmanthium latifolium</i>									
<b>Spikerush</b> * *		X	X	X		low to medium	1-ft.-tall x 1-ft.-wide	X	X
<i>Eleocharis spp.</i>									
<b>Umbrella Sedges</b> *		X		X		low to high	2-ft.-tall x 2-ft.-wide	X	X
<i>Cyperus spp.</i>									
<b>Nut Sedges</b>		X		X		low to high	2-ft.-tall x 2-ft.-wide	X	X
<i>Carex spp.</i>									
<b>Rose Mallow</b> *		X	X	X		low	3-ft.-tall x 3-ft.-wide blooms in spring and summer	X	X
<i>Hibiscus spp.</i>									
<b>Spider Lily</b> *		X		X		low to medium	2-ft.-tall x 2-ft.-wide blooms all growing season	X	X
<i>Hymenocallis caroliniana</i>									
<b>Swamp Lily</b> * *		X		X		low to medium	2-ft.-tall x 2-ft.-wide blooms all growing season	X	X
<i>Crinum americanum</i>									
<b>Cut Grass</b> *		X		X		low to high	8 to 10-ft.-tall great for erosion but can take over		X
<i>Zizaniopsis miliacea</i>									
<b>Switchgrass</b> * *			X	X		low to medium	6-ft.-tall x 6-ft.- wide, clump		X
<i>Panicum virgatum</i>									
<b>American Lotus</b> *		X		X		low to high	2-ft.-tall, spreading floating aquatic	X	X
<i>Nelumbo lutea</i>									
<b>Arrow-arum</b> *		X		X		low to medium	2-ft.-tall x 2-ft.-wide	X	X
<i>Peltandra virginica</i>									
<b>Zig-Zag Iris</b> * *			X	X		low	2-ft.-tall, spreading late spring bloom	X	
<i>Iris brevicaulis</i>									



Species	Picture	Splash	Slope	Sun	Shade	Stream Flow	Mature Plant Size/ Comments	Available for Purchase	Easy to Obtain in the Wild
<b>Arrowhead</b> * * <i>Sagittaria latifolia</i>		X		X		low to medium	2-ft.-tall, spreading	X	X
<b>Bulltongue</b> * <i>Sagittaria falcata</i>		X		X		low to high	2-ft.-tall, spreading	X	X
<b>Cattail</b> * <i>Typha spp.</i>		X		X		low to high	8 to 10-ft.-tall great for erosion but can take over	X	X
<b>Smartgrasses</b> * * <i>Persicaria spp.</i>		X		X		low to medium	2-ft.-tall, spreading	X	X
<b>False Loosestrife</b> * <i>Ludwigia leptocarpa</i>		X		X		low to medium	2-ft.-tall, spreading		X
<b>Water Primrose</b> * <i>Ludwigia peploides</i>		X		X		low to medium	2-ft.-tall x 3-ft.-wide floating aquatic blooms summer and fall		X
<b>Alligator Weed</b> * <i>Alternanthera philoxeroides</i>		X		X		low to medium	1-ft.-tall, spreading floating aquatic		X
<b>Wetland Milkweed</b> * * <i>Asclepias spp.</i>			X	X		low	2-ft.-tall x 2-ft.-wide great pollinator	X	X
<b>Yellow Star Grass</b> * * <i>Hypoxis hirsuta</i>			X	X		low	2-ft.-tall x 2-ft.-wide	X	
<b>Southern Shield Fern</b> * * <i>Thelypteris kunthii</i>			X		X	low	2-ft.-tall, spreading upper slope	X	X
<b>Sensitive Fern</b> * <i>Onoclea sensibilis</i>			X		X	low	2-ft.-tall, spreading upper slope		X
<b>Salt Marsh Mallow</b> * <i>Kosteletzkya virginica</i>		X	X	X		low	4-ft.-tall x 4-ft.-wide blooms all summer	X	
<b>Swamp Sunflower</b> * * <i>Helianthus angustifolius</i>			X	X		low	4-ft.-tall x 4-ft.-wide blooms in fall	X	X
<b>Spiderwort</b> * * <i>Tradescantia spp.</i>		X	X	X	X	low	3-ft.-tall, spreading blooms all summer	X	X
<b>Great Blue Lobelia</b> * <i>Lobelia siphilitica</i>			X	X	X	low	2-ft.-tall x 2-ft.-wide blooms spring and summer	X	X
<b>Cardinal Flower</b> * * <i>Lobelia cardinalis</i>			X	X	X	low	2-ft.-tall x 2-ft.-wide blooms spring and summer great pollinator	X	X



The TECHE Project  
P.O. Box 165  
Arnaudville, LA 70512  
[techeproject.org](http://techeproject.org)  
[techeproject@gmail.com](mailto:techeproject@gmail.com)