



Bayou Land Conservancy
10330 Lake Road, Bldg J
Houston, Texas 77070



October 27, 2022

To: San Jacinto Regional Flood Planning Group (via website)

Bayou Land Conservancy's Comment Letter to Region 6 Regional Flood Planning Group Promoting the Protection of Natural Flood Mitigation Features, and Use of Nature Based Flood Mitigation Solutions

Region 6, along with all the other Regional Flood Planning Groups, have had to work under a tight timeline during the initial planning round—and we appreciate the work the Region has put into making a holistic flood plan. Thank you to the appointed voting members, and the consultant team, for months of hard work.

Bayou Land Conservancy (BLC) is a non-profit, accredited land trust, working to preserve land along streams for flood control, clean water, and wildlife. We have conserved over 14,000 acres since 1996, utilizing conservation agreements with willing landowners. Our comments will be narrowly focused to the upper San Jacinto watershed (area of drainage into Lake Houston) because this is our area of conservation focus. In the draft plan these projects are described in Section 5.D.4.c. San Jacinto Master Drainage Plan. Bayou Land Conservancy participated in public input during the development of the San Jacinto Master Drainage Plan and submitted comments to the plan in August of 2020.

We will not address specific comments to each stream with planned projects in the upper watershed as they follow a similar design: upstream detention/downstream channelization. The comments submitted will focus on the impacts of the proposed channelization of Spring Creek.

Impacts to Conserved Lands and Wetlands Mitigation

BLC protects land within the upper San Jacinto watershed primarily through land ownership and conservation easements. Conservation easements are voluntary, perpetual legal agreements with landowners to preserve the land and prevent development. Of greatest importance to BLC is the impact that the proposed projects could have on conserved lands. These lands provide valuable ecosystem services, including but not limited to, maintaining water quality and quantity, and flood protection.

In addition to ecosystem services, many of BLC's conservation easements were initiated to provide wetlands mitigation for Clean Water Act permitting. As mitigation sites, these lands are providing an additional service. If these mitigation lands are impacted with a proposed channelization project, they would require additional federal permitting and mitigation costs.

These conserved lands also provide important community spaces that are safe and open to all at no cost. BLC is extremely concerned about two proposed project locations: Spring I-45 Channelization and Spring Woodlands Channelization. These projects are proposed in areas with conservation easements that serve as both wetlands mitigation sites and public outdoor recreation spaces. Both projects are along Spring Creek where the Spring Creek Greenway is located.

The Spring Creek Greenway is a multi-decade project beginning in 1979 with land purchases for public use that continues today with creation of the largest, continuous forested urban green space in the United States. The Spring Creek Greenway is championed by both Harris and Montgomery counties, of which Spring Creek is the liquid boundary. This greenway connects and protects approximately 7,000 acres of forest along Spring Creek, preserving this ecological gem as a mecca for ecotourism, education, and outdoor recreation just north of Houston. Both Spring Creek Channelization projects appear to threaten this vital community asset.

The Woodlands Channelization project is proposed along both the Spring Creek Greenway and BLC's Spring Creek Nature Trail. The Spring Creek Nature Trail is a 14-mile unpaved, earthen, trail that complements the greenway. It is a keystone project for BLC that highlights our natural ecology and provides quiet solace in one of the largest cities in America. This trail was constructed with the aid of numerous funding sources including federal highway funds through Texas Parks & Wildlife Department, charitable endowments, foundations, grants, corporate and member donations. It's construction and maintenance required partnerships with Harris County, Montgomery County, The Woodlands Township, and the Howard Hughes Corporation. This trail was built for the community, by the community. BLC volunteers contributed over 2,500 hours to the construction of this trail. After its completion, additional volunteers have dedicated their time, energy, and donations to upkeep of the trail. Since trail construction, there have been over 3,000 volunteer hours spent on improvements and maintenance. The community is invested in this natural recreation space.

Impact of Channelization on Erosion

The level of data collection and analysis regarding erosion in the original study appeared to be high-level and lacking detailed analysis. Erosion and downstream sedimentation are known issues in many watersheds throughout the study area. BLC is concerned that projects along Spring Creek and the West Fork of the San Jacinto River, in particular, do not adequately consider erosion. Detention and channelization projects within an area prone to erosion risks destabilization of the entire system.

BLC strongly suggests additional studies of erosion and sedimentation in the study area, with an analysis of the project impacts over the next 50 years.

Cost/Benefits of Green Infrastructure and Nature Based FMPs

Only projects with significant amounts of details are incorporated as FMPs in the Draft Regional Flood Plans. We are concerned that natural infrastructure projects could be downgraded to Flood Management Strategies (FMS) due to lack of data provided to the Region. It is important to note that analyses like the BCR are not always tailored for natural infrastructure projects. For example, while preserving open space within the floodplain (such as the Spring Creek Greenway) helps protect land from development which could negatively impact flooding, a traditional BCR may not adequately account for protection of development that hasn't occurred yet. *We recommend the RFPG to provide discretion to potential FMPs that are largely nature-based. We also encourage the Region to provide an administrative recommendation to the TWDB to provide guidance to the Regions on how to apply potential FMP requirements to nature-based projects.*

According to the RFPG Region 6 draft plan: "Updated construction cost estimates and estimates of project benefits must also be available to define a benefit-cost ratio (BCR) for each recommended Flood

Management Project (FMP). The Texas Water Development Board (TWDB) recommends that proposed projects have a BCR greater than one, but the San Jacinto RFPG may recommend FMPs with a BCR lower than one with proper justification.”

Even though the RFPG was given discretion to propose projects with a BCR below the TWDB recommended floor of “greater than 1”, it’s worth noting that the BCR for the Spring Creek portion of the upper San Jacinto watershed FMPs is 0.76, and the aggregate for all the projects recommended from the San Jacinto Master Drainage study would be between 0.29 and 0.34. This points to an urgent need to acknowledge the benefits of nature-based FMPs that include floodplain protection, and removing structures at highest level of risk, because the justification for spending more than \$3b for projects that will provide, at best, less than \$1b in benefits has not been addressed in the draft plan.

In addition, potential negative impacts to downstream communities were not addressed in the San Jacinto Master Drainage Plan. **Because of this, and the unfavorable BCR for the Master Drainage Plan projects, we recommend that the San Jacinto Master Drainage Plan projects be removed from the Region 6 plan.**

Since the inception of flood planning in Region 6 a number of public meetings and opportunities for public comment have taken place. Overwhelmingly people have asked for flood plain preservation and nature-based infrastructure (NBI) projects because they recognize the multi benefits provided by connected green spaces along our bayous, creeks, and rivers. Bayou Land Conservancy joins with those members of our community in asking the Region 6 Flood Planning Group to consider the opportunities in approaching flood mitigation in ways that work with nature.

Sincerely,

A handwritten signature in black ink that reads "Jill Boullion". The signature is written in a cursive, flowing style.

Jill Boullion
Executive Director