



TEXAS  
LIVING  
WATERS



NATIONAL  
WILDLIFE  
FEDERATION



SIERRA CLUB  
LONE STAR CHAPTER



Texas



hill country alliance



ENVIRONMENTAL POLICY  
INNOVATION  
CENTER

To: Texas Water Development Board of Directors

From: Texas Living Waters - National Wildlife Federation, Sierra Club-Lone Star Chapter, The Nature Conservancy in Texas, Hill Country Alliance, Galveston Bay Foundation

Re: **Potential Policy Recommendations for the 2024 State Flood Plan**

April 11th, 2024

Dear Chair Paup, Director Peyton, and Director Stepney,

The Texas Living Waters is a collaboration of conservation groups working to ensure that Texas has the water it needs for thriving communities and healthy fish and wildlife in the face of climate change, rapid population growth, and economic development. Our organizations - which include the National Wildlife Federation, Lone Star Chapter of the Sierra Club, Galveston Bay Foundation, Hill Country Alliance and The Nature Conservancy in Texas – supported the creation of the Flood Infrastructure Fund and the legislation that created the regional and state flood planning process that emerged in the aftermath of the largest hurricane in Texas’ history. We are pleased to provide these comments on the policy and legislative recommendations that the Board is considering for inclusion in Texas’ first draft state flood plan and to the Texas Legislature.

Texas is facing extremes. Droughts are becoming longer and more frequent. Rainfall is declining and concentrating in more violent, brief storms. Meanwhile on the coast, sea level is rising, storm surge is growing, and land is subsiding.

Texas Living Waters looks forward to working alongside the TWDB and regional flood planning groups to produce a state flood plan that protects all Texans and makes full use of the protective value of nature and ensures equitable outcomes for communities through strategies recommended in the regional flood plans.

As noted in TWDB's document seeking public input, the State Flood Plan must include: "legislative recommendations the board considers necessary to facilitate flood control planning and project construction." The 16 regional planning groups provided the TWDB with a number of legislative and other recommendations, many of which the Texas Living Waters members support. The Texas Water Development Board has divided its proposed potential policy recommendations into three areas:

1. Legislative recommendations made by the TWDB itself;
2. Policy management recommendations for the regional planning groups that do not require legislative action;
3. Legislative proposals from the planning group which are not officially endorsed by the TWDB, but recognized as worthy of consideration.

We generally support all of the recommendations, but we would like to highlight that several of the legislative proposals found in category 3 should be elevated as TWDB recommendations, and we hope the TWDB will consider making them official Board endorsed policy to the legislature.

While we will not address all of the worthy recommendations, we wanted to highlight our support for four sets of recommendations focused on: dedicated funding and technical assistance, policies to enhance nature-based solutions, statewide standards for building codes and design standards, and increased regulatory authority for counties and within extraterritorial jurisdiction (ETJ) zones.

### **Dedicated Funding and Technical Assistance**

Texas Living Waters is in full support of ***Potential Legislative Recommendation 1: Flood funding and financial mechanisms*** and ***Potential Legislative Recommendation 2: Community financial and technical assistance***.

We fully agree that the legislature should allocate dedicated funding for ongoing flood mitigation efforts through the Texas Water Development Board, including flood risk reduction solutions through the Flood Infrastructure Fund, continued funding for regional and state flood planning programs, flood risk modeling and mapping. As part of the flood risk modeling, we hope the recommendation would encompass funding for flood forecasting and modeling that is informed by the latest climate change and flood models.

Similarly, we are in full support of potential legislative recommendation 2. We agree that the Texas Legislature should consider establishing and funding a targeted technical assistance program specifically aimed at small, remote, rural, or otherwise socioeconomically disadvantaged communities to develop and/or perform floodplain management activities to protect Texas' most vulnerable communities against loss of life and property.

We suggest TWDB develop and provide a toolkit with guidance and templates on floodplain ordinances, minimum building standards, flood response plans, and other materials to support those with limited experience and flood management resources as part of this technical assistance. These tools could be especially useful for disadvantaged communities and smaller, rural communities.

In terms of legislative recommendations 3, 4, and 5 (Low water crossings, flood early warning signs and enhanced dam and new levee safety programs), we certainly believe those enhancements would make sense but it is not the focus of our recommendations.

### **Enhancing Nature-based Solutions**

We are in support of Legislative Priorities 1 and 2 and would like to see each of these implemented in a way that robustly supports planning for and implementation of nature-based solutions.

In addition, we are in strong support of Floodplain Management Recommendation C: Nature-based Solutions. Nature-based practices such as land protection and restoration in the floodplain, including wetland and riparian restoration, is critical for enhancing flood mitigation benefits to Texas communities and providing other valuable ecosystem services such as water quality enhancement and supporting increased biodiversity. According to the state climatologist, Texas cities are expected to experience 50% more flooding by 2036. As the state's population continues to grow and impervious cover increases, the state should incentivize the incorporation of nature, recognize its significant economic, ecological, and human health value, and reduce the use of impervious cover to mitigate the impacts of flooding.

One of the most cost-effective flood management strategies is to incorporate nature-based solutions into flood management. Research has shown that comprehensively integrating nature-based solutions, particularly in the form of green stormwater infrastructure, throughout problem watersheds can provide substantial, cost-effective flood management. In fact, nature-based solutions were found to reduce modeled stormwater overflows by up to 31%, and to be 77% less costly than upgrading gray infrastructure alone, and that maximum benefits are achieved by regularly nature-based solutions into infrastructure projects where appropriate. The TWDB should seek ways to provide favorable funding and incentives for incorporating nature-based solutions, such as open space and floodplain preservation or reduced use of impervious cover approaches for development or drainage projects.

The TWDB should recommend that local governments promulgate rules or regulations to make funds available to support nature based practices through land conservation, restoration programs, and participation in landowner incentive programs. This would encourage voluntary land stewardship practices that manage floodwaters by slowing runoff and dissipating flood energy to include riparian, wetland, forest, upland, and other habitat protection programs. Measures that could be advanced by these actions include:

- Promoting land coverage studies to effectively identify riparian corridors to protect for floodplain mitigation and erosion reduction.
- Additional low interest programs to support voluntary city and county buy-back of lands for county parks and flood mitigation should also be included.

Finally, we urge the TWDB to encourage National Flood Insurance Program (NFIP) participation and adoption of minimum floodplain management practices for all Texas communities in rules and regulations - including ensuring development is in line with current flood risk assessments to encourage greater uniformity across the state.

### **Statewide Standards and Building codes**

As organizations we are in strong support of Potential Legislative Recommendation II and Legislative Recommendation III.

However, we believe that the adoption of consistent statewide building codes and design standards should be broader than only flood risk, as codes and standards can also be helpful in addressing a variety of issues, from high winds and hurricanes, to wildfires to extreme heat and cold, as well as generally leading to better practices with water and energy conservation.

In addition, we believe that more discussion and specificity should be considered as part of these recommendations. As an example, it would be wrong to assume that Texas has no state codes. Texas is a home rule state, and home rule cities have authority to adopt, implement and enforce building codes, including energy codes, plumbing codes, mechanical codes and the overall commercial and residential building codes. Counties have far less authority under state law. In addition, through statutory action and regulatory action, several state agencies have been involved in supporting more advanced building codes, including specific codes like the energy codes and plumbing codes, while other agencies like the Texas Department of Insurance and the Texas Department of Housing and Community Affairs play a role in which areas might get access to insurance or federal tax incentives.

In 2021, under Chapter 212 of the Local Government Code, the Texas Legislature did update the state municipal code. Statutorily, all municipalities in Texas should at least be on the 2012 International Building Code and the 2012 International Residential Code (or a later code). In reality, the vast majority of municipalities have adopted building codes that go beyond the 2012 IRC and 2012 IBC. In addition, in 2009, the Texas legislature passed legislation that amended Chapter 233 of the Local Government Code that encourages counties to adopt a minimum state

building code for residential construction based on the 2009 IRC through an opt-in process. However, statutorily, counties can not charge permit fees or directly inspect buildings though they can require the builder to get third-party inspections for certain types of inspections. And these provisions only applied to residential construction.

Bills filed in the 88th Legislative Session - HB 2409 and HB 2408 - would have raised the minimum code in both cities and unincorporated counties - and would have allowed counties additional powers to inspect and enforce both residential and commercial building codes - but those bills did not advance past the hearing stage of the legislative process.

Beginning on September 1, 2020, the Texas Department of Insurance adopted the 2018 IRC and IBC as the state code in the 14 coastal counties for wind-storm insurance purposes, though it is ultimately up to cities and counties in the area whether to adopt the code, or not. In other words, a new building must be certified by TDI as having been built to these standards to be eligible for benefits under the Texas Windstorm Insurance Association, but it is often the builder who will build to this standard to be covered, even if the local jurisdiction has not adopted that standard.

In addition to overall building codes, the State Energy Conservation Office (SECO) - which is a division within the Texas Comptroller of Public Accounts - has authority to adopt energy codes statewide for state-funded buildings and for commercial and residential buildings. These codes are required in so-called "Affected" counties with air quality challenges due to ground-level ozone. However, SECO last adopted the 2015 IECC and 2015 IRC energy chapter of the codes in 2016 and have not updated them since, in part because more recent legislative action has created a conflict between two statutes. A bill to give SECO more latitude to continue to update the state energy code - SB 2453 - passed the House and Senate in 2023 but was vetoed by the Governor, though his rationale was related to putting pressure on the Senate for property tax relief. Our groups do believe that this legislation is still needed to ensure state action on modern codes.

Our top recommendation is that the Board should recommend that the legislature consider adopting consistent statewide residential and commercial building codes to mitigate flood risk and hurricane risk, creating more resilient, safer buildings that are also cheaper to operate. We believe that the Texas Legislature should support adoption of the 2021 versions of International Building Code and International Residential Code as State Building Standards for both commercial and residential construction in cities and counties, with a process to update those standards every three to six years. This would improve Texas' eligibility for funding under the Building Resilient Infrastructure and Communities (BRIC) program, and make Texas eligible for funding under various programs of the Inflation Reduction Act. This code should be adopted statewide with a flexible implementation period for local jurisdictions to properly train and adopt the standard. Counties should be given expanded specific permitting and enforcement authority for building codes, although an opt-in provision could allow counties to decide whether to take advantage of this expanded authority.

The 2021 International Building Code documents provide an excerpt of flood related provisions which ensures proper floodplain management practices are integrated with the building permit process. A key measure of the International Building Code is the requirement for freeboards for new buildings. A full list of provisions in the 2021 codes related to flood protections, including the 2021 IBC and IRC, has been compiled by FEMA and can be found here - [https://www.fema.gov/sites/default/files/documents/fema\\_flood-provisions-2021-i-codes.pdf](https://www.fema.gov/sites/default/files/documents/fema_flood-provisions-2021-i-codes.pdf).

In addition to state energy and overall codes, the Board should recommend that the legislature consider developing and adopting statewide minimum design standards for infrastructure and buildings to reduce loss of life and property from flooding. All statewide design standards must be simple and flexible enough to accommodate the broad range of development needs and flood risk conditions across Texas. In other words, because such standards can be different depending on the area, we would suggest flexibility and not a “one-size-fits all” approach.

### **County Authority to Protect Communities from Flooding**

Land development codes and the location of infrastructure can play a major role in exacerbating or mitigating flooding. The Texas Water Code gives counties the power to mitigate stormwater runoff and protect their constituents from flooding, but it is not clear how widely that authority can be applied. With the rapid development of unincorporated areas of the state, it is increasingly important to clarify and expand county tools to regulate land use for the purpose of flood hazard mitigation. TWBD should recommend that the legislature clarify the regulatory authority of counties regarding land use and floodplain management.

Of particular need is expanded authority to protect natural Aquifer Storage and Recovery (ASR) features, like karst recharge zones and sinkholes, which mitigate flooding by transferring potential floodwaters into aquifers, while also recharging our groundwater supplies. Both setbacks and impervious cover limits can be effective strategies to this end. Similarly, floodplain managers should be equipped and empowered to manage floodplains as a nature-based solution for flood mitigation since a well-functioning floodplain slows and sinks floodwater.

Counties should also be given expanded authority to implement, charge fees and enforce new building codes and minimum design standards for infrastructure and buildings. These could include opt-in provisions for counties that wish to avail themselves of this expanded authority.

Finally, the Legislature should clarify provisions that provide counties with legislative authority to establish drainage utilities and assess drainage fees similar to those authorized for municipalities under LGC Title 13, Subtitle A, Chapter 552, and also provide clarity on county and municipal roles and responsibilities within ETJ areas related to floodplain management activities under Chapter 212 and other provisions of the Local Government Code.

Thank you for your consideration of these comments. We acknowledge and appreciate the work of TWDB staff and regional flood planning groups for all the work over the last several years to achieve this milestone of producing Texas' first State Flood Plan.

Sincerely,

Jennifer Walker  
Director, Texas Coast and Water Program  
National Wildlife Federation  
[walkerj@nwf.org](mailto:walkerj@nwf.org)

Cyrus Reed, [cyrus.reed@sierraclub.org](mailto:cyrus.reed@sierraclub.org)  
Legislative and Conservation Director  
Lone Star Chapter, Sierra Club

Marisa Bruno  
Water Program Manager  
Hill Country Alliance

Bob Stokes  
President  
Galveston Bay Foundation  
[bstokes@galvbay.org](mailto:bstokes@galvbay.org)

Hillary Lilly  
Director of External Affairs  
The Nature Conservancy, Texas Chapter