



**SIERRA  
CLUB**

LONE STAR CHAPTER

Texas General Land Office Community Development and Revitalization  
P.O. Box 12873  
Austin, TX 78711-2873  
[cdr@recovery.texas.gov](mailto:cdr@recovery.texas.gov)

January 10, 2020

**The Lone Star Chapter of the Sierra Club and the Houston Regional Group of the Sierra Club are pleased to offer these comments on the State of Texas Community Development Block Grant (CDBG) Mitigation Action Plan on behalf of our more than 28,000 members -- including some 6,000 in the Houston region -- and 180,000 supporters. We are particularly appreciative of the extension of the deadline from January 6<sup>th</sup> to January 10<sup>th</sup>, which allowed more in-depth consultation and consideration of the draft Mitigation Action Plan.**

The Lone Star Chapter of the Sierra Club is the Texas-based chapter of one of the largest and oldest conservation organizations in the US, and the Houston Regional Group of the Sierra Club represents members in the Gulf Region from Bay City to Huntsville. Both the Houston Regional Group and the Chapter have been advocating in Texas for more than five decades for water conservation, land conservation, clean air, clean water and clean energy among other topics. In particular as a long time partner of the Texas Living Waters Project we have advocated for adequate water supply and sustainable management of water both for human and wildlife needs. Thus, we are supportive of separate, similar comments being submitted by the National Wildlife Federation, one of our project partners.

Much of our work in recent years has been informed by the reality of climate change, and the need to both tackle the causes of human-induced climate change -- the continued use of fossil fuels for transportation, electricity and other uses -- as well as making our cities, lands and water supplies more resilient. The past decade has brought Texas multiple natural disasters and these CDBG mitigation funds are one of several efforts that will help Texas better prepare for a future where climate extremes are only expected to increase in severity and frequency. We would note as other organizations are doing that we hope the GLO will more directly address the role that human-induced climate change is playing in the need to create a more resilient state, and the need to better plan for such extreme climates.

We do reemphasize our believe that the State Action Plan will acknowledge our changing climate by ensuring that mitigation efforts promote resilient nature-based solutions, including green infrastructure, that is proven effective, adds value to the surrounding community, and supports healthy natural resources. We also strongly urge that projects be selected for funding and implemented with an eye towards equity and inclusion, and that we avoid past mistakes where housing and structures that are repeatedly flooded are rebuilt, assuring future taxpayers will foot the bill for future rebuilds. Rebuilding in a more resilient and sustainable way, and acknowledging the reality of our changing climate is key to a successful State Action Plan.

### **Green Infrastructure Must be Emphasized**

The integration of natural and green infrastructure into both mitigation and recovery efforts has been proven effective in weather events as recent as Hurricane Harvey. A recent example as detailed in NWF comments was Exploration Green, a 178-acre reclaimed wetland. The value of the remaining native prairie grasses and habitats in helping to retain floodwaters can not be overstated, and projects that help protect and expand these native prairie habitats are of the utmost importance. In addition, the ecosystem service value of bottomland and upland forests in the Houston-Galveston area is also of great import to help reduce stormwater impacts.

In addition to funding stand-alone green infrastructure approaches, natural features can be incorporated into engineered infrastructure to handle excess runoff in communities, both for flood mitigation and additional community benefits. Incorporating green infrastructure into the built environment, including rainwater catchment systems, green roofs, appropriate landscape design --

including the use of native species --and the reduction of impervious cover are also important features.

As natural disasters continue to become more costly, investments made in pre-disaster mitigation are incredibly cost effective. This includes activities like investing in watershed, bayou and riverine corridors, strategically buying out flood-prone structures in floodplains and converting these areas back to natural spaces.

While Sierra Club appreciates the inclusion of natural and green infrastructure in eligible mitigation efforts, without more specific points or incentives, we are unsure how many such applications will be received. Thus, in Section 4.4, GLO Use of Funds, there does not appear to be any specific language or incentives for implementing green infrastructure beyond the simple suggestion that they are considered eligible projects. In addition, while the State Action Plan includes a Resilient Communities Program and a Resilient Home Program which could be important to rebuilding to a more resilient standard, those programs do not appear to include incentives to include green infrastructure and sustainable landscape design.

***Therefore, for the 2015 and 2016 Floods State Mitigation Competitions, the Hurricane Harvey State Mitigation Competition and the Resilient Communities and Resilient Home Program, Sierra Club respectfully requests that incentive points be added to the Scoring Criteria to prioritize the implementation of green infrastructure projects that provide multiple benefits to a community while reducing hazard risk.*** Existing tools, such as the Green Infrastructure Co-Benefits Valuation Tool<sup>1</sup> and the EPA's forthcoming Community-enabled Lifecycle Analysis of Stormwater Infrastructure Costs<sup>2</sup>, offer guidance for how to value and consider the multi-benefits of green infrastructure.

For the 2015 and 2016 Floods State Mitigation Competition and the Hurricane Harvey State Mitigation Competition, it is unclear what the "Project Impact" Scoring Criterion is based on and how it will be defined. In particular, the Action Plan does not describe how "persons benefiting" will be defined and what constitutes 15 points versus 10 points. The "persons benefiting" criterion may serve as a way to encourage applicants to identify and/or quantify the multi-benefits of natural and green infrastructure projects, where applicable. In

---

<sup>1</sup> Green Infrastructure Leadership Exchange. Green Infrastructure Co-Benefits Valuation Tool. <https://giexchange.org/green-infrastructure-co-benefits-valuation-tool/>

<sup>2</sup> EPA. Community-enabled Lifecycle Analysis of Stormwater Infrastructure Costs (CLASIC). [https://cfpub.epa.gov/ncer\\_abstracts/index.cfm/fuseaction/display.abstractDetail/abstract/10616/report/0](https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.abstractDetail/abstract/10616/report/0)

addition, without a clear definition of what constitutes “impact,” and how that impact is scored, we are concerned that there is potential to disfavor rural and/or smaller jurisdictions in favor of larger more densely populated areas if the aim is to give priority to projects with lower costs per capita. **Therefore, Sierra Club respectfully requests clarification on how the term “Project Impact” will be applied and how this scoring criterion will protect rural or less densely populated areas of the state.**

### **Emphasizing Alternative Energy Solutions**

The list of infrastructure resiliency solutions at Section 2.3, Resiliency Solutions and Mitigation Priorities, includes “Installing backup power generators for critical systems (water, sewer, etc.)” We agree with comments filed by Public Citizen and others that wind, solar and storage power are potential sources of backup power that should be evaluated for the advantages they offer with respect to operation outside of the energy grid and the lack of fuel requirements. We also believe that micro-grids and distributed technologies could also be important resilient community solutions that could be eligible activities in the draft plan.

The GLO should evaluate solar plus storage as an alternative form of backup power and consider factors including cost, lack of fuel requirements, and the benefits of clean energy generation.

### **Air pollution and air quality monitoring.**

We are in agreement with Public Citizen and others that Section 2.6.4.1 Safety and Security, p. 37, should evaluate gaps in air monitoring for dangerous conditions of air pollution near industrial facilities. The lack of air monitoring resources is a safety risk that has led to serious injuries in past events. The lack of air monitoring capacity is a gap that creates additional safety risk for first responders. Although the TCEQ recently received additional funding for mobile air monitoring resources -- resources which the agency asserts will be used for disaster response -- the agency’s policy of not having first responders limits when protections are available from the potentially dangerous hazard of air pollution. See <https://www.tceq.texas.gov/news/releases/tceq-to-deploy-new-air-monitoring-equipment>.

### **Hazardous Material (Management) Section 2.6.4.6**

Again, we are in agreement with other that the “Impacts” subsection does not discuss the systemic failure of floating roof tanks during Hurricane Harvey.

Eleven petrochemical facilities experienced one or more tank failures, resulting in air pollution releases in excess of three million pounds. In many cases the tank failures were due to the high volume of rain overwhelming the roof tank. A number of solutions to this problem have been suggested, including requiring geodesic dome roofs for all vulnerable tanks, increasing the size of roof drains, or simply directing the TCEQ to develop best practices or performance standards for tank performance during heavy rain events.

### **The Application Process**

During recent public hearings, a number of public officials, organizations and individuals expressed concern about the provision in the proposed State Plan that would limit the total number of applications allowed under each State Mitigation Competition, which penalizes regional collaboration. Thus, the 2015 and 2016 Floods State Mitigation Competitions allow an applicant to submit a total of two applications, which includes individual and joint applications. Similarly, the Hurricane Harvey State Competition limits each applicant to a total of three applications, whether these are individual or joint applications. Because disaster mitigation projects are often regional in nature, having "collaborative" regional projects count against the maximum number of projects that any individual political subdivision can apply to could be a disincentive to regional, collaborative projects. **Thus, Sierra Club would request that the GLO count individual and joint applications under these State Mitigation Competitions separately, so that a joint application does not count against individual applications.**

The Harvey Hurricane disaster is reported to be the second most expensive natural disaster in US history at \$125 billion, and while there was significant damage along the Gulf Coast, especially in areas like Rockport and Port Arthur, reports indicate that the majority of this damage did occur in the City of Houston and Harris County. Yet the current requirements in the draft plan effectively mean that regions like Harris County and the City of Houston would only be able to access a relatively small part of the funding, even though they bore the brunt of the property and life damage from the storm. Allowing more flexibility in regional projects would allow Harris County and the City of Houston could lead to a more equitable distribution of the moneys.

Moreover, we are opposed to a minimum project amount and believe the minimum funding amount be removed from the Plan. The minimum project amount of between \$3 and \$5 million each could serve as an unnecessary impediment for applicants, particularly related to green infrastructure projects that

tend to cost less than traditional engineered projects, as well as for rural or smaller communities where small-scale flood mitigation projects may still be highly effective at reducing risk to flooding or other disasters. As an example, many smaller communities have used constructed wetlands for either stormwater management or as a tertiary wastewater treatment, yet these projects are relatively low in engineering and construction costs since they make use of natural landscapes. Therefore, we strongly urge the GLO to remove this minimum requirement, as it does not serve the communities applying for these funds.

Furthermore, within Sections 4.4.1 - 4.4.3, the Action Plan states that “no applicant will be awarded for their subsequent application until all successful eligible applicants have been awarded funding at least once.” Sierra Club agrees with previously voiced concerns that this could result in unnecessary and potentially dangerous delays for communities needing to implement disaster mitigation projects to reduce risk to life and property. **The GLO should reconsider this requirement and allow an entity to submit more than one application at a time and enable those projects to be funded immediately, regardless of whether all eligible applicants have been awarded funding.**

### **Equity Concerns**

The draft State Action Plan states that identified covered projects will be required to conduct a benefit-cost analysis (BCA), while BCAs for natural and green infrastructure projects will be encouraged. Sierra Club is concerned about the use of the existing BCA used by FEMA since it contains known inherent inequalities. As is well-documented, the BCA has historically favored the distribution of FEMA funding toward higher income areas, largely because it is based on property values and population density. This then leads to a burden on lower-income families and persons of color, who are more likely to be displaced for long periods of time, lose their jobs, and not have the financial resources to repair their homes or relocate and buy a new home.

Utilizing BCAs without further scrutiny may overlook underlying community vulnerabilities and needs. Thus we would suggest that the GLO give greater weight to the low and moderate income national objective selection criterion, rather than the BCA, particularly for the Hazard Mitigation Grant Program Supplemental, Section 4.4.5.

One means to ensure a more equitable distribution of funding would be for GLO to either reserve a part of these funds, or another funding source authorized by the Texas legislature to provide technical assistance to communities which lack

the knowledge or resources to apply for CDBG funds. When considering buyouts and elevations, the state should target the most vulnerable neighborhoods and severe-repetitive-loss and repetitive-loss structures. Buyouts need to give homeowners enough money to enable them to relocate to safer areas and to successfully re-establish themselves. Buyouts should also be coordinated with increased access to affordable housing and relocation strategies should be part of any projects.

### **State and Local Planning**

We are supportive of the GLO's efforts to develop an Enhanced State Hazard Mitigation Plan (SHMP) for Texas, as well as the development of local hazard mitigation plans. However, we would notes that the SMHP must better pain for the impacts of climate change, including more extreme and frequent storms, droughts, wildfires and sea level rise. The state's current Hazard Mitigation Plan is one of only four in the country that does not consider climate change or its impacts,<sup>3</sup> and an enhanced SHMP should resolve this oversight. Moreover, the GLO should incorporate natural and green stormwater infrastructure into the Enhanced SHMP to acknowledge and encourage these approaches where they are appropriate.

The Sierra Club is supportive of utilizing part of the State Action Plan to implement Tier 1 projects in the 2019 Coastal Resiliency Plan. **We would encourage the GLO to give preference to living shorelines for shoreline stabilization and wetland enhancement, land acquisitions, and habitat creation and restoration.** These particular projects should be cost-effective and lead to multiple benefits that will further protect humans and wildlife from future storms.

### **Resilient Communities and Resilient Homes Programs**

We are very supportive of the inclusion of specific programs to encourage local jurisdictions to rebuild communities and single-family homes to more resilient construction standards. We are particularly pleased that such funds can be used for the implementation and enforcement of advanced building codes, which can help lower water and energy use while also providing more storm-resistant buildings.

---

<sup>3</sup> Adler, D. P. and E. Gosliner. 2019. Columbia Law School. State Hazard Mitigation Plans & Climate Change: Rating the States 2019 Update. <http://columbiaclimatelaw.com/files/2019/09/Adler-Gosliner-SHMP-Report-Sept-10-2019.pdf>.

However, we believe that the minimum standards discussed are too modest. As an example, in the Resilient Homes program, it states that “Requirements will be based on GLO resiliency standards to be promulgated through a competitive procurement process” for the rebuilt homes, but then does not identify what those standards nor indicate if GLO would give priority to those homes built to an even stronger standard.

Instead, GLO should consider adding some specific resiliency standards within the State Action Plan itself, including some attention to green infrastructure, and storm hardening. A minimum standard should also be set such as the 2015 or 2018 International Residential Code, which includes specific requirements to resist wind storm damage in coastal communities.

As an example, in its programs, TDHCA actually references the 2015 IRC and 2015 IECC for its single-family home programs and uses compliance forms to assure that builders follow these MINIMUM standards:

- For New Construction or Reconstruction within the jurisdiction of a municipality, the requirements of **Texas Health and Safety Code, Chapter 388** must be met.
- For New Construction or Reconstruction in Unincorporated Areas, with a Start of Construction date on or after September 1, 2016: use the **Texas Building Energy Code Compliance Form For Residential Buildings in Unincorporated Areas – 2015 IRC**

Other standards that the TDHCA and SECO sometimes requires for rebuilding buildings utilizing any state funding include Energy Star ([energystar.gov](http://energystar.gov)) and WaterSense ([epa.gov](http://epa.gov)). Thus, GLO could require not only 2015 IRC as a minimum standard but also emphasize WaterSense and Energy Star to encourage meeting greater standards.

We agree with the additional concerns raised by the HOME and CEER coalition about this program. First, beneficiaries will be selected from existing waitlists. There was a great deal of confusion in December about what constituted a completed application sufficient to qualify for the waitlist. Many applicants were unaware the application period was ending at all. There should be a clear appeal process for applicants who were not placed on the waitlist that contractors are required to communicate to all applicants, and GLO should review contractor performance to ensure that applicants were not terminated from the program through no fault of their own.



Second, this program again excludes homeowners in Houston and Harris County from participation in this program. Houston is the fourth largest building market in the United States. The impact of disseminating these resilient construction standards into the mainstream would be severely curtailed by excluding the largest building market in the Harvey-affected areas of the state.

Similarly, we are supportive of the inclusion of the **Resilient Communities Program**, which talks about the establishment of model community-wide code adoption. However, we believe the minimum codes discussed are not sufficient. As an example as an eligible activity, the standards in 4.4.10.5 (i) state that “development, adoption, and implementation of a Building Codes that meet or exceed the standards set forth in the International Residential Code 2012” while also stating the same under 4.4.10.7. Program Requirements.

However, in 2015, as an energy code, the State of Texas adopted Chapter 11 of the 2015 IRC, and has also adopted the 2015 IECC for commercial buildings (through a rulemaking at SECO). Similarly, last year, the TDI promulgated a rule proposal to adopt the 2018 IRC for the 15 coastal counties if a building wanted to have access to TWIA benefits. Indeed, most communities along the coast have already adopted the 2015 IRC, in large part because of the energy code requirement, which is state law. Thus, referencing the 2012 IRC is actually not in keeping with state law, and we would encourage the GLO to make the 2015 IRC the MINIMUM and also encourage entities to look at the 2018 IRC, 2018 IECC, and even the 2021 International Green Construction Code. Indeed, the 2021 IRC and IECC have recently been approved for publication and should be out this summer. They make major improvements in energy efficiency, water conservation and the incorporation of new technologies like solar, demand response and electric vehicles, all of which could be important in terms of more resilient communities.

Furthermore we would ask that some language providing and incentive to the use of green infrastructure as part of the Land Use and Comprehensive Plans be included in the descriptions within the program requirements (4.4.10.7). Encouraging communities that want access to these grant funds to build better buildings, and plan communities that are storm-resilient through the use of green infrastructure would provide an example for other communities to follow.

We also believe GLO should consider adding some language to allow resilient communities to also include electricity systems that lead to more resiliency, such as battery storage back-up power or microgrids that can lead to neighborhoods coming back on-line quicker and more able to withstand a storm.

## **Residential Buyout Programs**

We are supportive of comments being submitted by the HOME coalition and CEER that emphasize the need to assure that residential buyout programs must be equitable, avoid displacement and gentrification and also emphasize communities facing threats from both flooding and toxic pollution.

1. Residential buyout programs must be equitable and ensure that LMI families have sufficient resources to move to safer areas.

Low and moderate income households must be provided with enough funds that the choice to move is a realistic one (or to ensure that they can actually move to a safer area in the case of mandatory buyouts). Using the pre-storm value of a home to determine disaster recovery program benefits often has a discriminatory impact on the basis of race or ethnicity as well.

Another barrier to relocation for LMI homeowners, particularly African-Americans, may be inability to show clear title because of heirs' property ownership. The state must ensure that buyout programs include legal assistance to clear title, as well as incorporate other best practices for mobility programs of any type, including mobility counseling and real estate assistance to ensure that families have the knowledge they need to make an informed decision about what is best for them and to make successful moves to safer areas. The worst case scenario is that families who accept buyout are unable to find housing in safer areas and move back into their original or less safe neighborhoods.

2. Residential buyout programs should focus on community planning and methods to prevent gentrification and displacement.

It is critically important that program guidelines for this buyout program be developed in a transparent process with extensive community input. Regardless of whether these planned buyouts are voluntary or mandatory, relocating away from an existing community or a home that has been in a family for generations can be difficult and even traumatic.<sup>[17]</sup> Without planning and community buy-in, a voluntary individual buyout program can result in a patchwork of empty and occupied homes, creating a blighted neighborhood. One of the critical issues in ensuring a successful buyout program is equity and ensuring that program rules and processes do not have a disparate impact on particular groups of homeowners.

3. Residential buyout programs should prioritize communities with exposure to environmental and industrial hazards that make them more vulnerable to the consequences of hurricanes and flooding.

Texas must consider how flooding and drought events intersect with environmental pollution and hazards in prioritizing buyouts. Proximity to environmental hazards and industrial land uses increases the impact of disasters and compounds the issues faced by environmental justice communities on a daily basis. Needs based disaster recovery means taking that into consideration with data, maps and scoring criteria. Hazard mitigation with an equity focus means prioritizing those people and places because they are ground zero of negative impacts of climate change

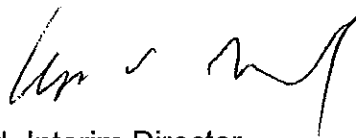
### **Public Engagement and Transparency**

With respect to public and stakeholder participation, we agree with comments submitted by NWF that the State Action Plan needs to provide more details for how the GLO plans to establish and engage with Citizen Advisory Committees. Thus, we would suggest that the GLO consider establishing more than one, and ideally several, Citizen Advisory Committees to enable greater participation across diverse geographic regions. It is extremely important that the GLO make sure that these Citizen Advisory Committees include representatives from underserved and underrepresented communities to make sure that the concerns and input from all Texans are heard.

The Lone Star Chapter of the Sierra Club and the Houston Regional Group of the Sierra Club appreciate the opportunity to comment on the proposed State Action Plan. We believe that the plan could be improved by better incorporating improved building code standards, green infrastructure, public participation and equity considerations into the plan.

We thank the GLO for this opportunity to comment.

Sincerely,



Cyrus Reed, Interim Director  
Lone Star Chapter, Sierra Club



Brandt Mannchen, Chair, Houston Regional Group

