

PURPOSE

The purpose of this document is to provide guidance to identify and prioritize new and existing areas within Harris County where voluntary buyout is the preferred flood damage reduction strategy for the Harris County Flood Control District (District).

Voluntary buyout is used by the District to reduce flood damages in areas several feet ("hopelessly") deep in the floodplain where projects to reduce flooding are not cost effective and/or beneficial.

IDENTIFICATION OF NEW BUYOUT AREAS

To qualify a *new* buyout area (area with no previous District-owned properties) a property should:

- A. ¹ Be clustered with a minimum of 10 total properties or five (5) combined acres.
- B. ² Meet at least two (2) of the following depth metrics:
 - 1) In the floodway.
 - 2) In the 10-year (10%) floodplain.
 - 3) Over 2 feet deep in the 100-year (1%) floodplain.
- C. Be cost effective. This means the cost to appraise, purchase, demolish and relocate families to higher ground must be less than the expected benefits (avoided flood damages).

Once an area meets the criteria above adjacent properties may be added if it meets one of the following:

- 1) FEMA repetitive loss properties adjacent to current or proposed areas of interest or existing District right of way having total paid claims greater than 50% of the HCAD total market value.
- 2) Property needed to remove infrastructure (i.e. roads) for few remaining residents.
- 3) Properties greater than 3 feet deep in the 100-year floodplain can override lack of other criteria.
- 4) Property needed for future flood reduction project(s) or floodplain preservation.

PRIORITIZATION OF QUALIFIED BUYOUT AREAS

¹ Properties that meet B. and C. above, but not A. may be considered when there is a life safety issue and maintenance of the property is not a concern. See the 2017 "Parcel Exemption" memorandum for more information. Additionally, variances may be accepted for other needs (i.e. maintenance access, overflow swales, small drainage improvements, etc.), or when partnerships exist for financial and/or maintenance responsibilities.

² Where available data representing future conditions are used in determining the depth metrics to ensure flooding will not be alleviated using structural methods (i.e. channel improvements).



Qualified buyout areas are ranked according to the following 5 metrics. This priority ranking is used to determine areas on which to focus buyouts when dealing with a limited amount of funds.

1) Flood Depth and Life Safety

The deeper a structure is in the 1% annual exceedance probability (100-year) floodplain the less likely any future structural flood reduction project will remove floodplain from that structure and the greater the risk. Structures very deep in the floodplain create life safety issues for those who reside on those properties, as well as those who must perform rescues. Therefore, any areas found to have structures with an extreme depth (five feet or greater) in the 1% annual exceedance probability (100-year) floodplain are ranked as a top priority. All areas found to be a life safety risk are ranked among each other using the rest of the following criteria.

2) Future Land Use

Buyout properties can usually be aggregated to provide more flood risk reduction versus a single buyout property. A large area may provide opportunities to create stormwater detention (if certain conditions are met) which helps reduce flood risks in the area and provides additional benefits to remaining neighbors. Priority is given to areas suitable for this type of additional flood reduction. If detention is not a viable option for a particular buyout area, the land may be used for floodplain preservation, which is to restore the land to a natural floodplain. This land can go on to serve other functions such as a neighborhood park with a willing local community partner.

3) Percent Publicly-Owned

The greater the percentage of public ownership of a buyout area the higher the priority. An area that already has a high number of publicly-owned properties will benefit from increased buyout activity in several ways:

- A. "Checkerboard" maintenance issues can be removed when the remaining properties are purchased to create a contiguous publicly-owned property.
- B. Health and safety issues can be created with isolated buyouts, such as increases in illegal dumping and crime. Buyouts of the remaining properties and eventual road closures can eliminate these neighborhood nuisances.
- C. Buyout properties reach their full utility to the District and the community once an area has reached full public ownership.

4) Owner/Community Interest



Community (neighborhood) support for buyout is an important consideration. High levels of interest are evidenced by the number of already publically-owned properties and where remaining owners are on waiting lists for buyout. Newly added areas and/or areas where there is no indication of buyout interest warrant a lower priority. Included in this consideration is input from the local municipality, i.e. municipal utility district or city, which provides public services to the neighborhood.

5) Property Maintenance

Maintenance is required for properties purchased through the buyout program. Reducing maintenance costs is a priority. The requirements and cost associated with maintaining these properties varies with many factors; however, maintenance costs are usually highest in non-contiguous buyout areas with deed restrictions. Different maintenance categories include:

- 1. Return to Nature Area: A return to nature area would not be regularly maintained by the District. Instead, after the structures are demolished, the naturally occurring forest would be allowed to reestablish in the area including the area along the bayous and tributaries, which could aid in stormwater quality, provide bio-retention benefits and ecological benefits to the local area. This category would be appropriate when the District's voluntary buyout property is located along a bayou or tributary and not adjacent to an occupied structure, as well as when the objective is to protect critical habitat. While return to nature areas are not maintained on a regular basis buyout lots in these areas are monitored for invasive species and under brushed as needed to maintain a healthy forest of mixed, native tree and shrub species.
- 2. Minimal Maintenance Area: A minimal maintenance area would be mowed periodically by the District. After demolition the lot will be mowed as needed to maintain access and provide visual clearance for the safety of residents that continue to live in the area. If there are no maintenance agreements for lots within a neighborhood, these lots should receive minimal maintenance, given their proximity to occupied structures. Minimal maintenance may include mowing up to three times per year and underbrush removal to control invasive species. Some minimal maintenance areas may have portions of lots that are mowed, primarily the front of the lots, for safety and aesthetic purposes. This category would be appropriate in more rural areas that do not have strict deed restrictions regarding property aesthetics or areas with lots adjacent to District maintained channels.



- 3. Routine Maintenance Area: A routine maintenance area would be used in subdivisions with deed restrictions and minimum maintenance requirements on properties where the District does not have maintenance agreements with others. These areas would be maintained by the District in a manner that exceeds the Minimal Maintenance Areas and will include monthly mowing during the growing season, debris removal as needed, and an annual pruning of any trees or shrubs growing on the lot. This category would be appropriate in urban areas or areas that have strict deed restrictions regarding property aesthetics.
- 4. Agreements with Adjacent Property Owners or Other Third Parties: Neighboring property owners can enter into maintenance agreements for District owned buyout properties. Neighboring property owners would be responsible for maintaining the property, including mowing, but they would not be allowed to construct structures on the buyout lot. This category would be appropriate for subdivisions where the District's ownership of lots is few and not contiguous, like a checkerboard, to help reduce the need for routine maintenance by the District within these subdivisions.

For the mowing status of buyout properties please see "Interactive Mowing Status Map" on the District's website.