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Brays Bayou Watershed

- Approximately 128 square miles
- Population of more than 700,000
- 31 miles long – from mouth of ship channel to Highway 6

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History of Project Brays

- Significant floods have occurred along Brays Bayou as far back as 1843 and as recently as 2015
- 1968—Federal project completed; flooding continued
- 1990—Corps of Engineers completed study, Brays Bayou Project began
- 1996—HCFCD took the lead on Project Brays
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Project Brays

• $480 million project

• HCFCD’s largest flood damage reduction initiative ever

• Federal/local sponsorship agreement with the USACE (211f)

• Designed to reduce the risk of flood damage and benefit thousands of residents and businesses along Brays Bayou

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Flood Damage Reduction

Methods used in Project Brays to reduce the risk of flood damage:

- **Stormwater Detention Basins**
  - Eldridge (337 Acres)
  - Old Westheimer (47 Acres)
  - Arthur Storey (211 Acres)
  - Willow Waterhole (292 Acres)

- **Channel Modifications**
  - 21 miles of channel widening

- **Bridge Modifications/Replacements**
  - 32 bridge replacements, extensions or modifications
Brays Bayou
Typical Sections

Grass-Lined Channel

Concrete-Lined Channel

Channel With Walls

Typical Cross Section
Bridge Elevation

Basic Features by HCFCD

Options by the Community

PROJECT BRAYS

[Logos and details]
Bridge Bent Columns

Basic Features by HCFCD

Options by the Community

Option 1

Basic Features by HCFCD

Options by the Community

Option 2
## Overall Project Status

<table>
<thead>
<tr>
<th>Project</th>
<th>Segment Complete</th>
<th>Total % Complete</th>
<th>Detention Excavation Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eldridge Road Basin</td>
<td>9 (of 9)</td>
<td>100%</td>
<td>10,747,153 cy</td>
</tr>
<tr>
<td>Old Westheimer Basin</td>
<td>3 (of 3)</td>
<td>100%</td>
<td>642,306 cy</td>
</tr>
<tr>
<td>Arthur Storey Park Basin</td>
<td>12 (of 12)</td>
<td>100%</td>
<td>6,753,880 cy</td>
</tr>
<tr>
<td>Willow Waterhole Basin</td>
<td>6 (of 7)</td>
<td>70%</td>
<td>5,220,879 cy</td>
</tr>
<tr>
<td>Channel Modifications</td>
<td>8 (of 12)</td>
<td>62%</td>
<td>n/a</td>
</tr>
<tr>
<td>Bridges</td>
<td>10 (of 32)</td>
<td>31%</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>23,364,218 cy</strong></td>
</tr>
<tr>
<td><strong>Total Spent to Date</strong></td>
<td></td>
<td></td>
<td><strong>$304,000,000</strong></td>
</tr>
</tbody>
</table>
Bridges

- 32 bridge replacements, extensions or modifications

- Bridge Modifications/Replacements Completed:
  1. Old Spanish Trail
  2. Wheeler/Lidstone
  3. SH 288
  4. S. MacGregor
  5. Holcombe Pedestrian (48” force)
  6. West Holcombe Blvd
  7. S. Braeswood Blvd
  8. Fannin
  9. Bob White (by TxDOT)
  10. Atwell (by TxDOT)
## Current Construction

<table>
<thead>
<tr>
<th>Project</th>
<th>Segment</th>
<th>Start*</th>
<th>Finish*</th>
<th>Construction Cost (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Waterhole Detention Basin, Compartments 1 &amp; 6</td>
<td>6 (of 7)</td>
<td>3rd Quarter 2015</td>
<td>2nd Quarter 2016</td>
<td>$3,100,000</td>
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<tr>
<td>Channel Section Lidstone to Calhoun Bridge</td>
<td>9 (of 12)</td>
<td>1st Quarter 2015</td>
<td>3rd Quarter 2016</td>
<td>$11,500,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$14,600,000</strong></td>
</tr>
</tbody>
</table>

*Note: construction schedule is anticipated and subject to change.*
## Scheduled Construction

<table>
<thead>
<tr>
<th>Project</th>
<th>Segment</th>
<th>Start*</th>
<th>Finish*</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Structures</td>
<td>DS 19</td>
<td>2\textsuperscript{nd} Quarter 2016</td>
<td>3\textsuperscript{rd} Quarter 2017</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>Galveston RR Bridge (UP)</td>
<td>11 (of 32)</td>
<td>4\textsuperscript{th} Quarter 2016</td>
<td>1\textsuperscript{st} Quarter 2017</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Channel Modifications, Bertner to Buffalo Speedway</td>
<td>10 (of 12)</td>
<td>3\textsuperscript{rd} Quarter 2016</td>
<td>3\textsuperscript{rd} Quarter 2017</td>
<td>$13,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$21,500,000</strong></td>
</tr>
</tbody>
</table>

*Note: construction schedule is anticipated and subject to change.*
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Freshwater Tidal Marsh, Mason Park, DS 101

5/15/14

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Lawndale to OST, DS 102

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Lidstone Bridge

9/9/14

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Ardmore to Holcombe, DS 105

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MacGregor St Bridge

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Ardmore to Holcombe, DS 105

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Holcombe to S. Braeswood, DS 106

www.projectbrays.org
Bertner to 2,200 Feet Upstream of Buffalo Speedway

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Arthur Storey Park Stormwater Detention Basin

5-15-14

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Arthur Storey Park

CivilTech Engineering, Inc.

Arthur Storey Park
Brass Bayou Control Structure

July 2014

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Eldridge Road Stormwater Detention Basin

5/15/14

www.projectbrays.org
Eldridge looking east
Willow Waterhole Detention
Willow Waterhole Stormwater Detention Basin

5/15/14

www.projectbrays.org
Brays Project Detention Basins  5-26

WWH looking east
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Recreational & Aesthetic Opportunities

- Hike and bike trails
- Picnic areas and playgrounds
- Open greenspace, more trees

Recreational Partnerships

- Harris County
- City of Houston
  - Parks and Recreation Department
  - Public Works Department
- Seeking additional partners, such as:
  - civic associations
  - municipalities
  - corporations
  - special-purpose districts

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Tree Plantings To Date

- Eldridge: 4,531
- Old Westheimer: 4,274
- Arthur Storey: 7,443
- Willow Waterhole: 7,848
- Fresh Water Marsh: 2,517
- Channel: 10,233

36,846 Tree Plantings
Wildlife of Project Brays

06-2008
Community Outreach

- Public Meetings and Open Houses
- Presentations to Community Organizations and Homeowners Associations
- Project Brays Web site: www.projectbrays.org
- Project Brays Information Hotline: 713-316-4820
- E-mail Newsletters/Direct Mail

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Project Partners

- City of Houston
- City of Houston Parks and Recreation Department
- Greater East End Management District
- Harris County
- Hermann Park Conservancy
- Houston Parks Board
- Texas Department of Transportation
- Texas Medical Center
- Texas Parks & Wildlife
- University of Texas M.D. Anderson
- Willow Waterhole Greenspace Conservancy

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