Allens Creek Engineer

Presented by
David Collinsworth
Central and Lower Basin
Regional Manager
Allens Creek Reservoir

- Montgomery Watson Harza
  - 97 Reservoir Projects in USA
    - Project Manager: Completed 5 Similar Projects in 10 Years
    - Lead Designer: 9 Off-Channel Reservoirs
    - Lead Pump Designer: 40 Years Experience

Meeting Date: April 25, 2016
Allens Creek Reservoir

- SWCA
  - Permit Manager: 50 Permits in Galveston USACE Office in 10 Years
  - Over 65 Staff in Houston Office

- Fugro, Carollo, Arts+Labor, John Chance, Inc., Northwest Hydraulic Consultants, & Percheron

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Embankment Dam

- Soil cement erosion protection layer
- Low permeability compacted clay
- Seepage collection & management
- Grass Covered Slope
- Flood Protection Berm
- Toe Ditch
Pump Station

- Engine
- Wet Well
- Pump
- Discharge Manifold
Reservoir Outlet

Outlet Tower

Embarkment Dam

Outlet Pipeline
Challenges

Numerous Puzzle Pieces
- Reservoir Design & Constructability
- River Pump Station
- Reservoir Release Issues
- Mitigation
- Environmental Impacts

Permitting
Allens Creek Reservoir

Project Phases & Timeline:

• Phase I  Environmental Assessments and 30% Design (2016-2019)

• Phase II  Permit Approval Process, Public Interaction, Archaeological Relocation, Construction Preparation (2019-2021)

• Phase III  Construction (2021-2025)

• Contract  Not-to-Exceed $86,002,318 (MWH)

Meeting Date: April 25, 2016
## Allens Creek Reservoir

### Allens Creek Funding

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Funding Source</th>
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</thead>
<tbody>
<tr>
<td>FY 2016-2017</td>
<td>~$20 mil cash reserves*</td>
</tr>
<tr>
<td>FY 2018-2021</td>
<td>~$46 mil TWDB funding sources*</td>
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<tr>
<td>FY 2022-2025</td>
<td>~$234 mil TWDB funding sources*</td>
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</tbody>
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### TWDB Funding

*Represents total project costs

**Meeting Date:** April 25, 2016
Allens Creek Reservoir

Next:

• Continue Time Sensitive Environmental Work
• Finalize Agreement MWH
• Formalize Amendment with City of Houston
• Execute Both Agreements

Meeting Date: April 25, 2016
“BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute a contract with Montgomery Watson Harza MWH Americas, Inc. for all activities associated with the permitting, engineering, and design of the Allens Creek Reservoir project in an amount not to exceed $86,002,318; and
BE IT FURTHER RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute an amendment to the existing agreements to document the City of Houston’s intent to reimburse the Brazos River Authority for 70% of the project cost associated with the Allens Creek project; and
BE IT FURTHER RESOLVED that work under the Montgomery Watson Harza MWH Americas, Inc. contract, including any payments therefore, shall not commence until such time as the Brazos River Authority and the City of Houston have executed the aforementioned amendment to their existing agreements.”