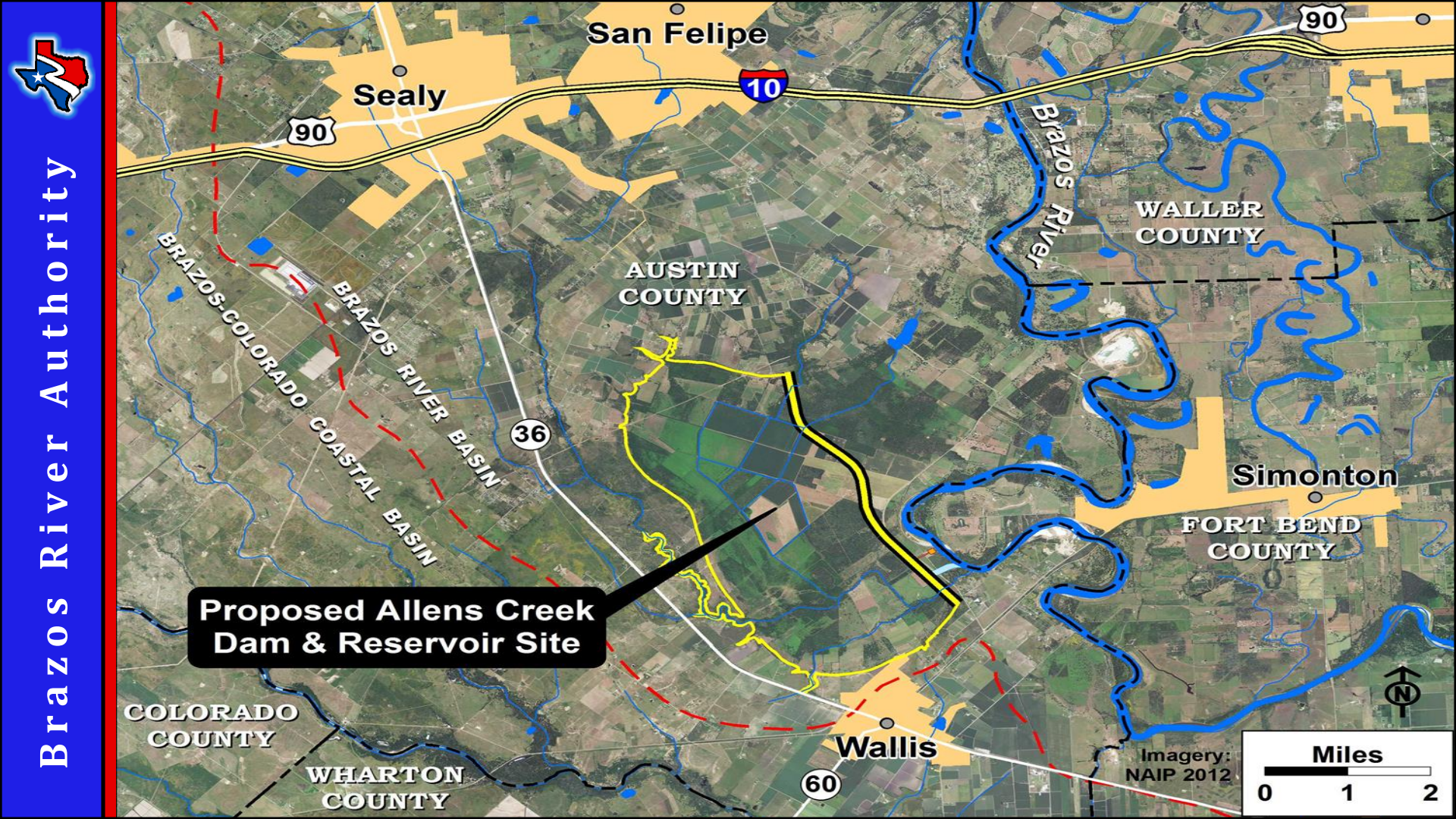
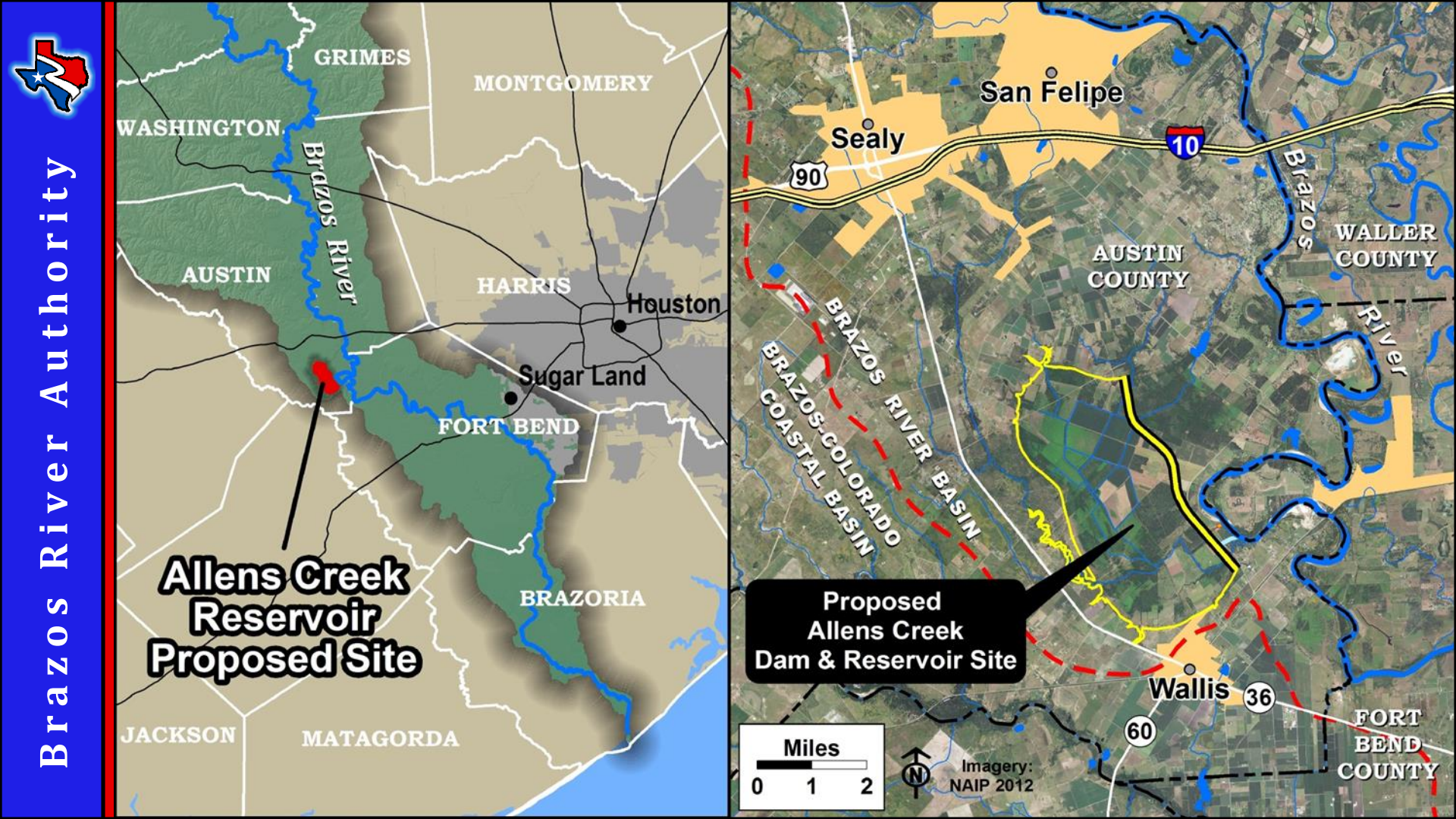
Brazos River Authority

Allens Creek Engineer

Presented by
David Collinsworth
Central and Lower Basin
Regional Manager

Meeting Date: April 25, 2016


Brazos River Authority
San Felipe
Sealy
90
10
90
Brazos River
WALLER COUNTY
AUSTIN COUNTY
BRAZOS-COLORADO COASTAL BASIN
BRAZOS RIVER BASIN
36
Simonton
FORT BEND COUNTY
Proposed Allens Creek Dam & Reservoir Site
COLORADO COUNTY
WHARTON COUNTY
Wallis
60
N
Imagery: NAIP 2012
Miles
0
1
2


Brazos River Authority
GRIMES
MONTGOMERY
WASHINGTON
Brazos River
AUSTIN
HARRIS
Houston
Sugar Land
FORT BEND
Allens Creek
Reservoir
Proposed Site
BRAZORIA
JACKSON
MATAGORDA
San Felipe
Sealy
90
10
Brazos River
WALLER COUNTY
AUSTIN COUNTY
BRAZOS RIVER BASIN
BRAZOS-COLORADO COASTAL BASIN
Proposed
Allens Creek
Dam & Reservoir Site
Wallis
36
60
FORT BEND COUNTY
Miles
0 1 2
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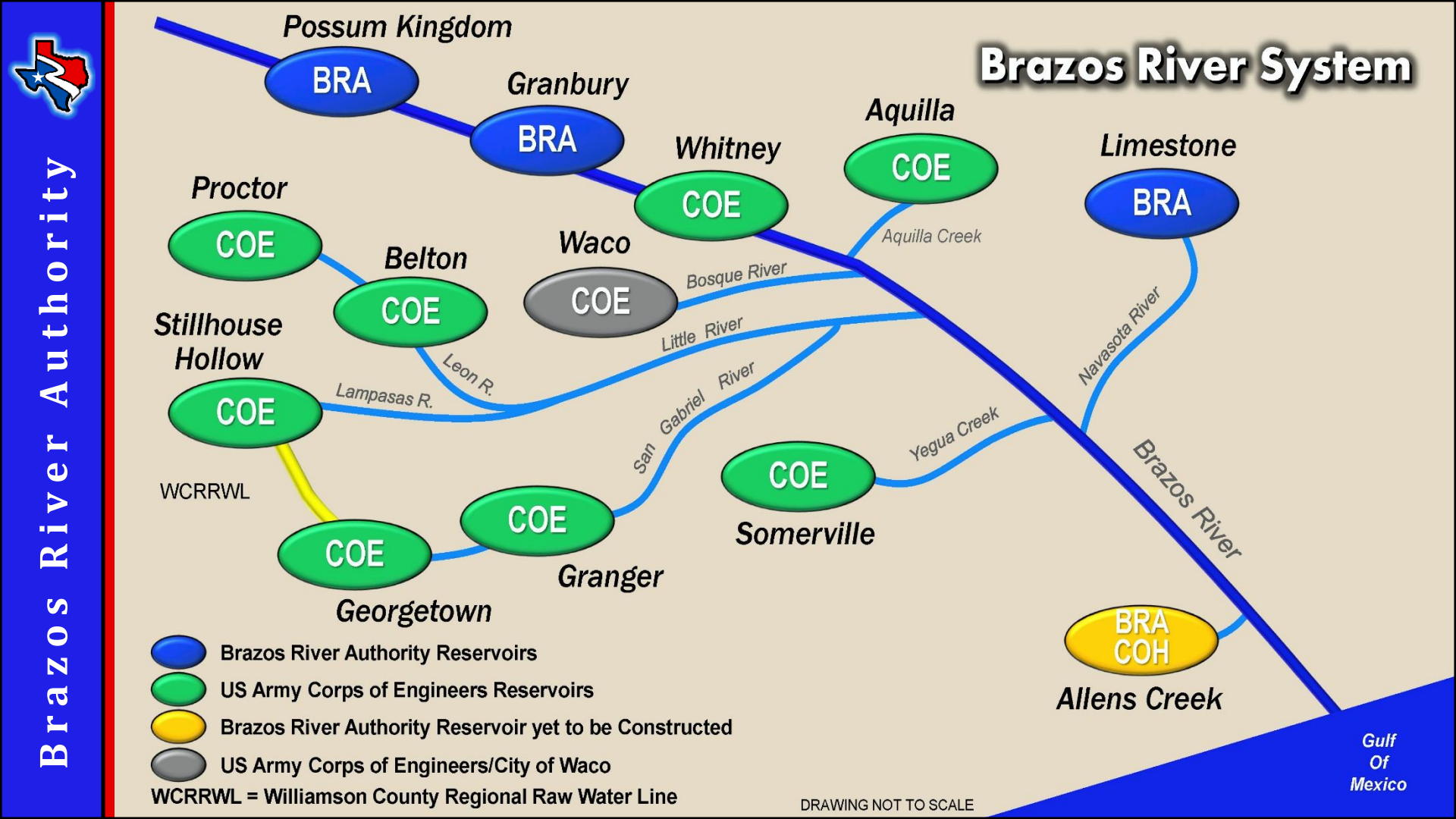
Imagery:
NAIP 2012


Brazos River Authority
Brazos River System
Possum Kingdom
BRA
Granbury
BRA
Whitney
COE
Aquilla
COE
Aquilla Creek
Limestone
BRA
Proctor
COE
Belton
COE
Waco
COE
Bosque River
Little River
Leon R.
Lampasas R.
Stillhouse Hollow
COE
WCRRWL
COE
Georgetown
COE
Granger
San Gabriel River
COE
Somerville
Yegua Creek
Navasota River
Brazos River
BRA
COH
Allens Creek
Gulf Of Mexico
Brazos River Authority Reservoirs
US Army Corps of Engineers Reservoirs
Brazos River Authority Reservoir yet to be Constructed
US Army Corps of Engineers/City of Waco
WCRRWL = Williamson County Regional Raw Water Line
DRAWING NOT TO SCALE

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

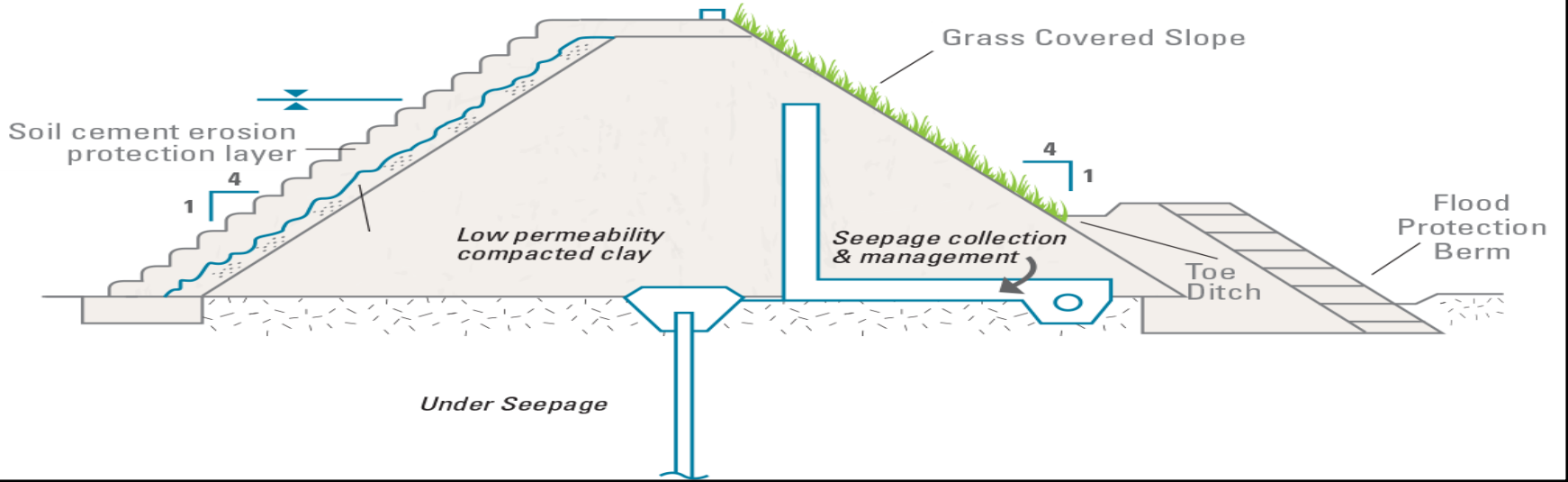
Allens Creek Reservoir

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

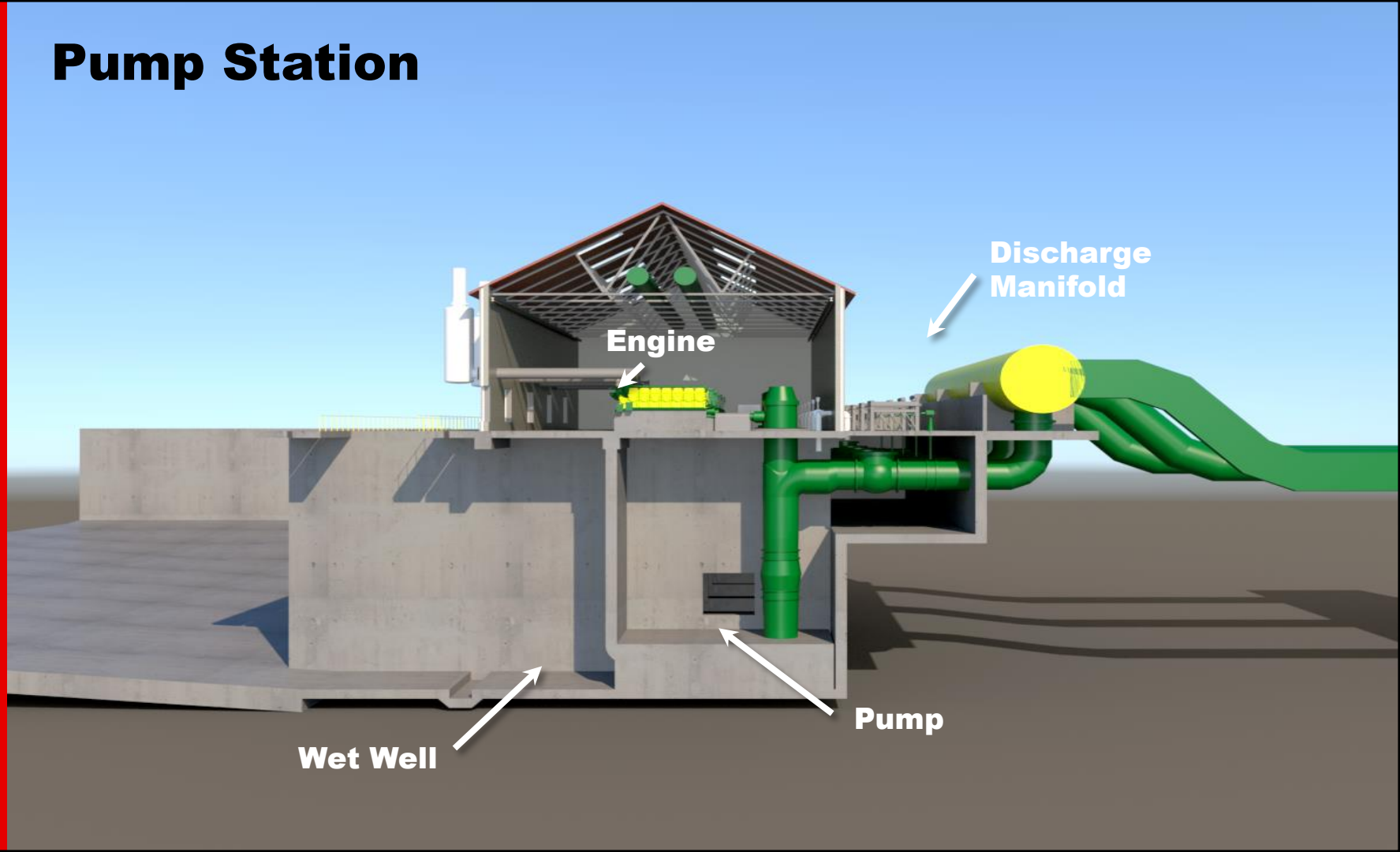
- **Fugro, Carollo, Arts+Labor, John Chance, Inc., Northwest Hydraulic Consultants, & Percheron**

Brazos River Authority

Embankment Dam



Pump Station



Brazos River Authority

Brazos River Authority

Reservoir Outlet

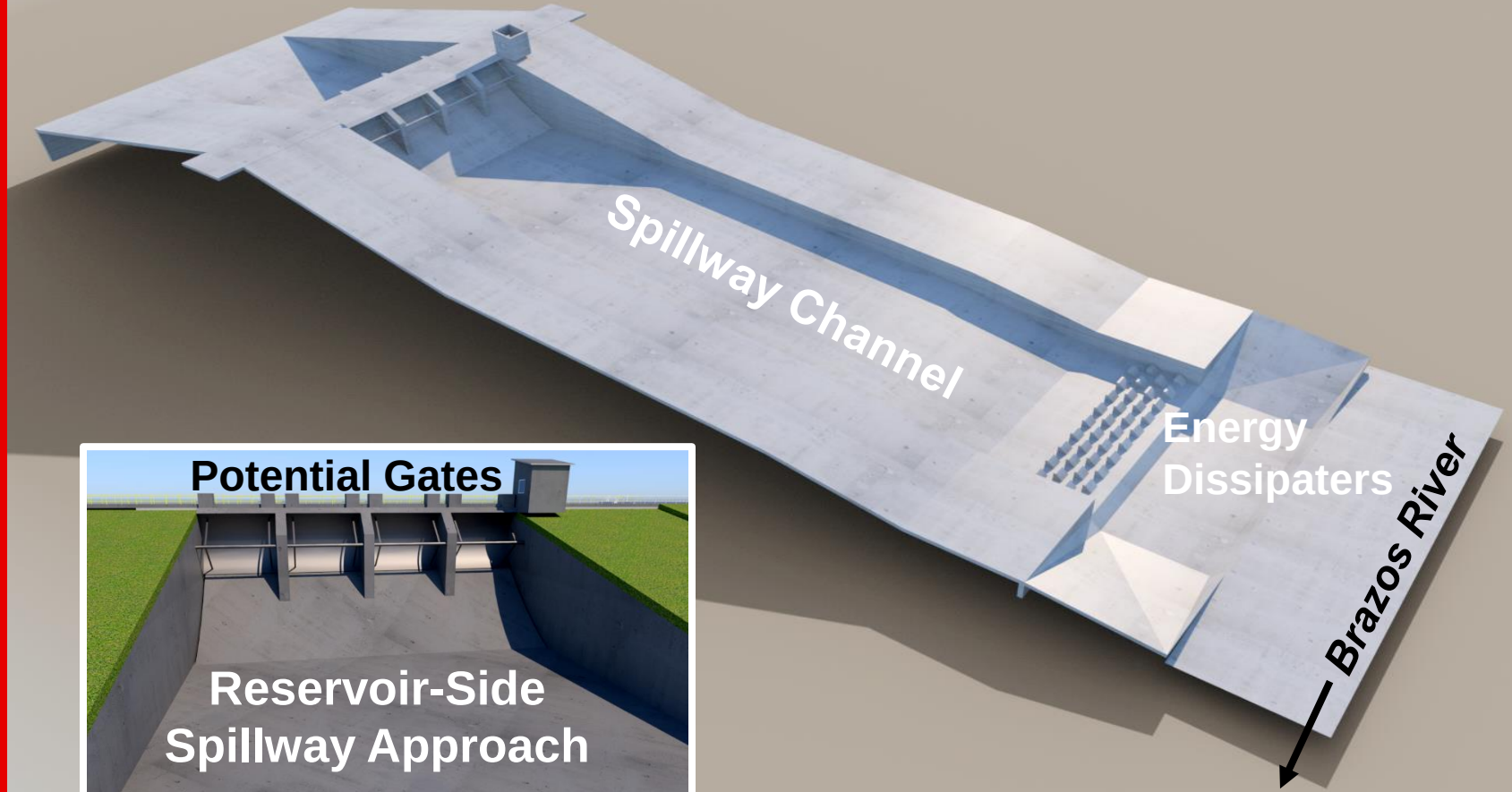
Outlet Tower

Embankment Dam

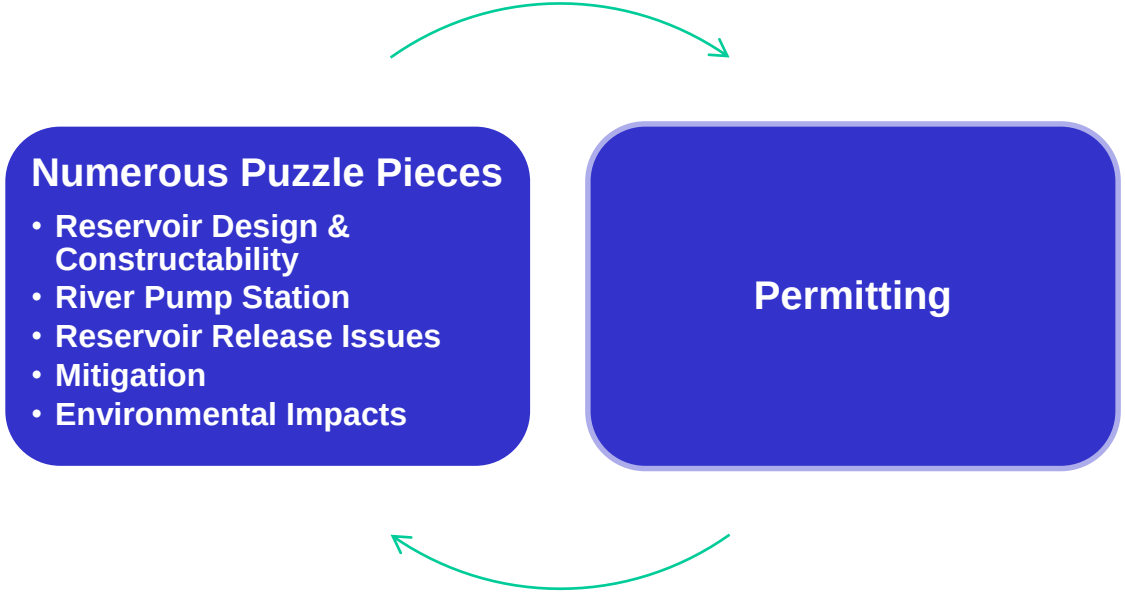
Outlet Pipeline

Brazos River Authority

Spillway



Challenges


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

Brazos River Authority

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)

Allens Creek Reservoir

Allens Creek Funding

FY 2016-2017	~$20 mil cash reserves*
FY 2018-2021	~$46 mil TWDB funding sources*
FY 2022-2025	~$234 mil TWDB funding sources*

TWDB Funding

*Represents total project costs

Allens Creek Reservoir

Next:

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

Brazos River Authority

"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

Brazos River Authority

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."

Brazos River Authority

Brazos River Authority