

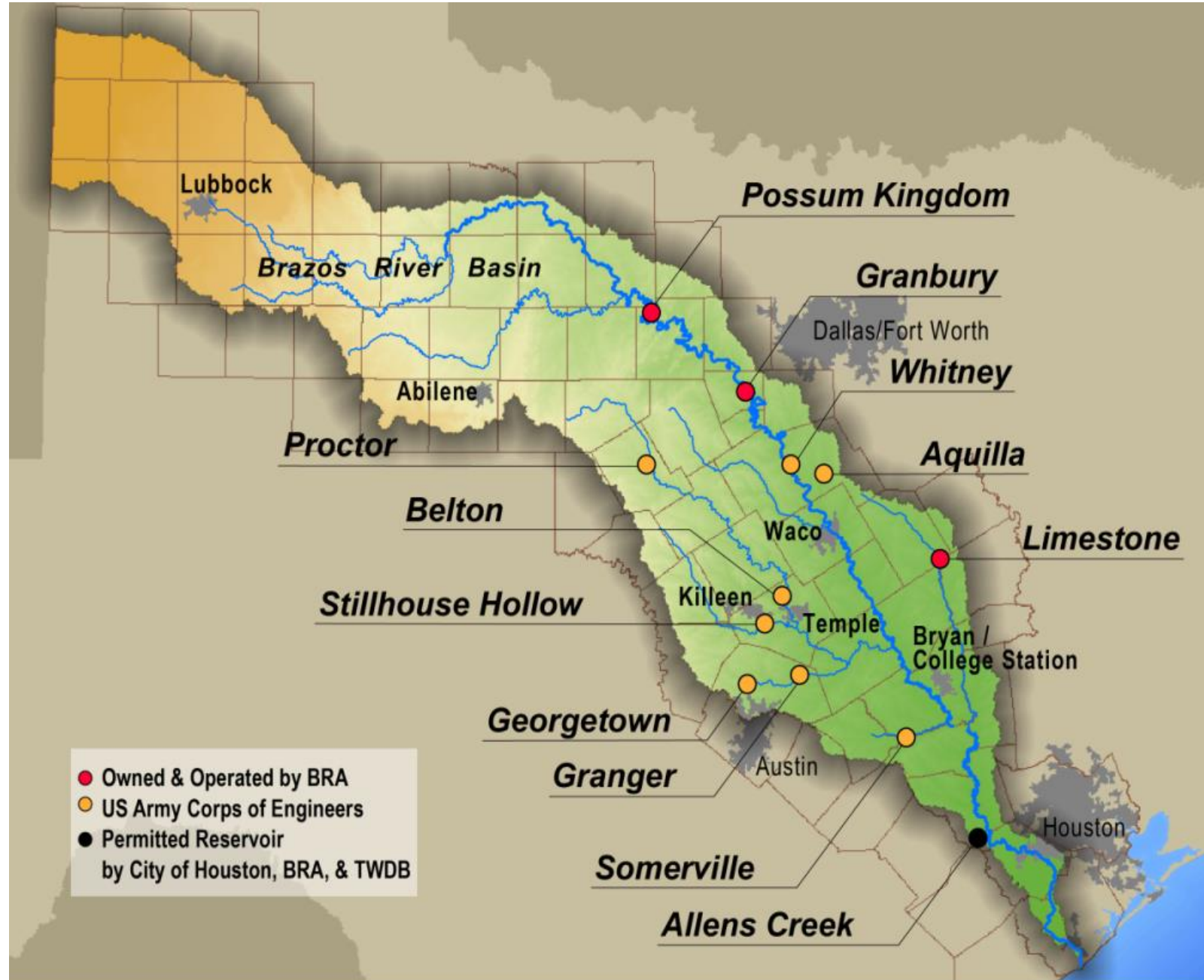


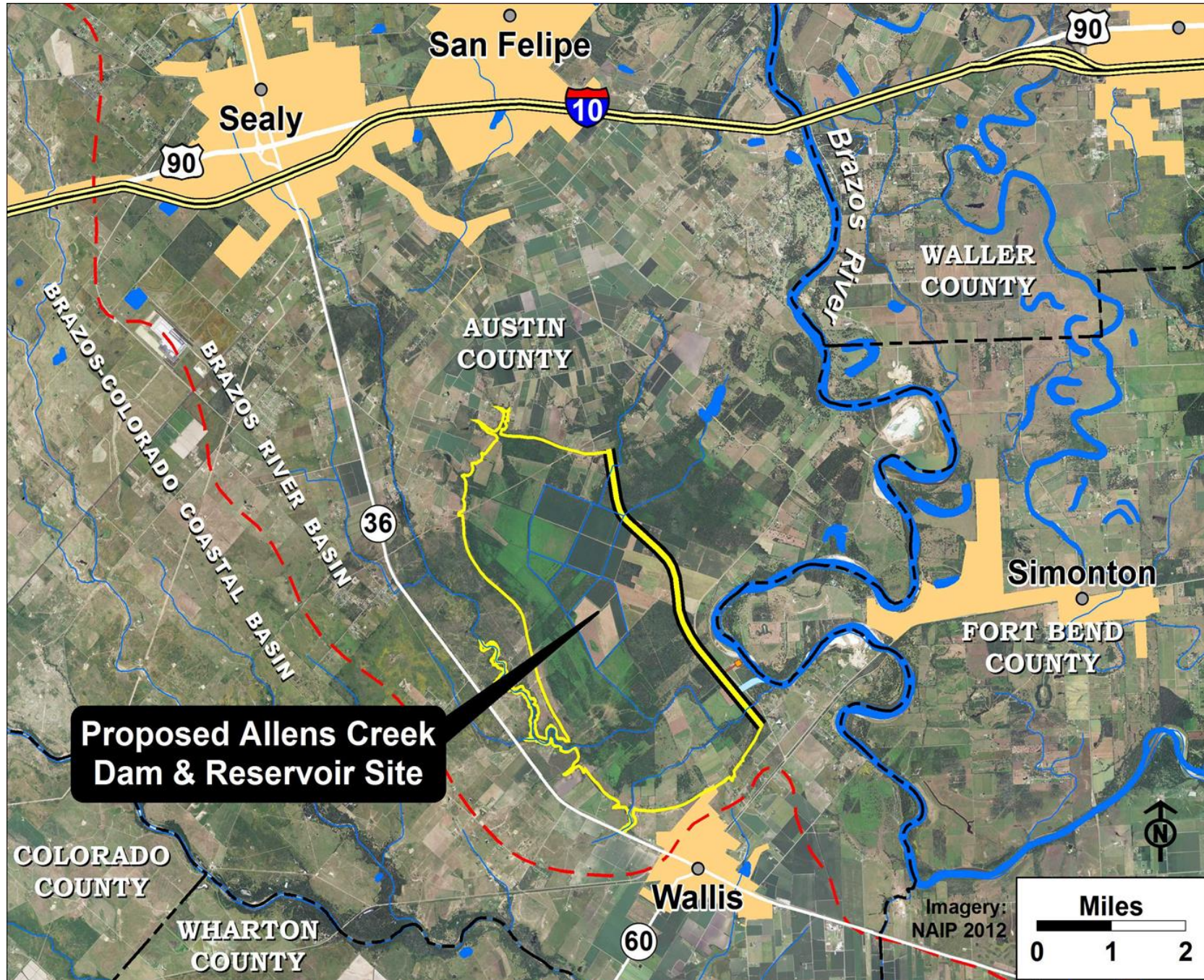
Clean Water Act
404 Permit Process for the
Allens Creek Reservoir Project

May 23, 2022



Allens Creek Reservoir Project

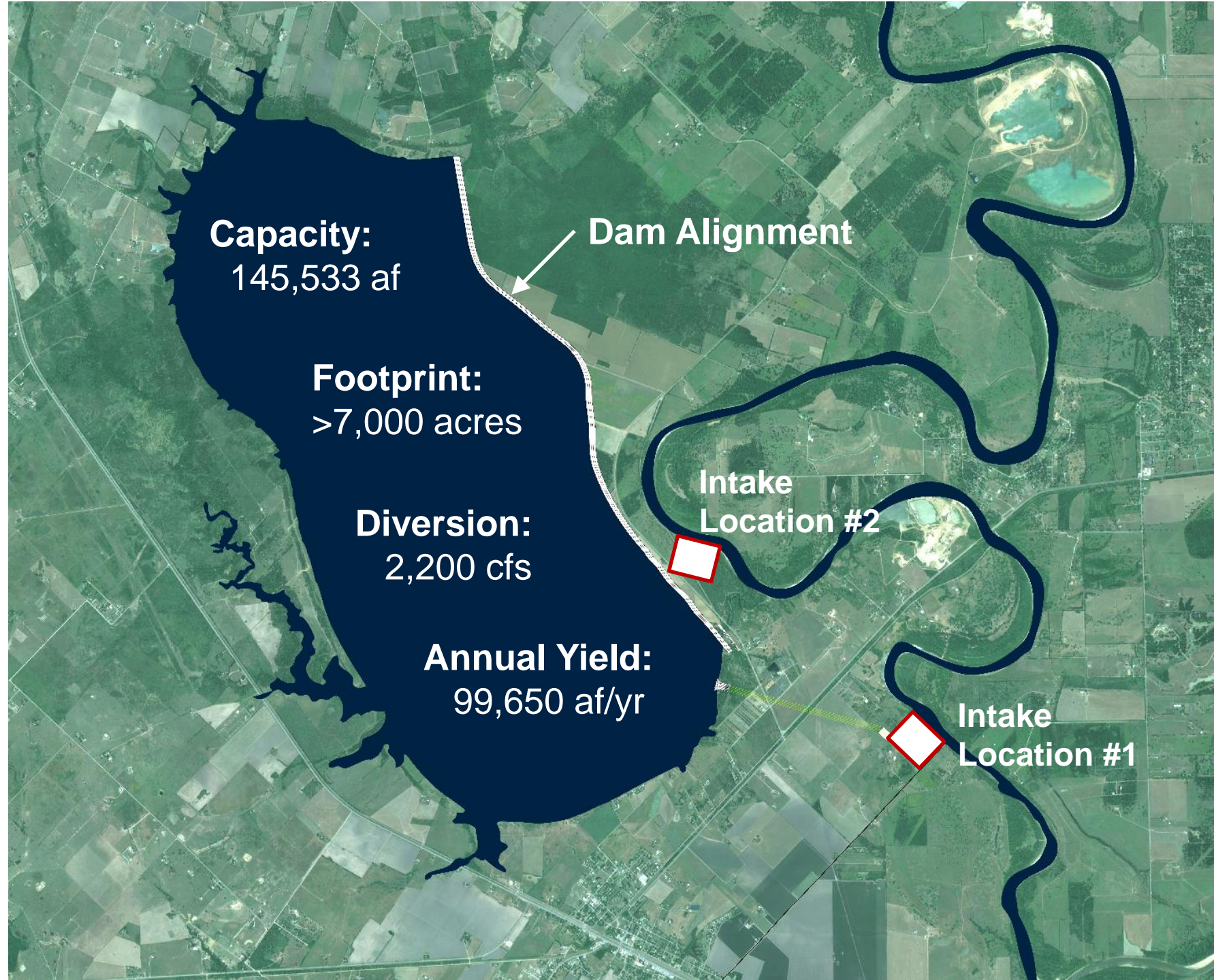






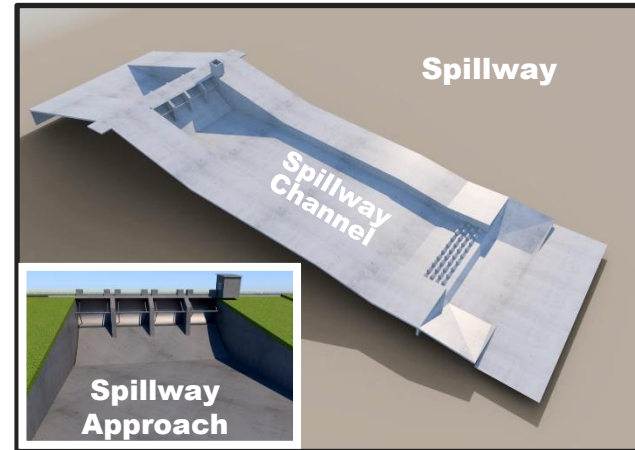
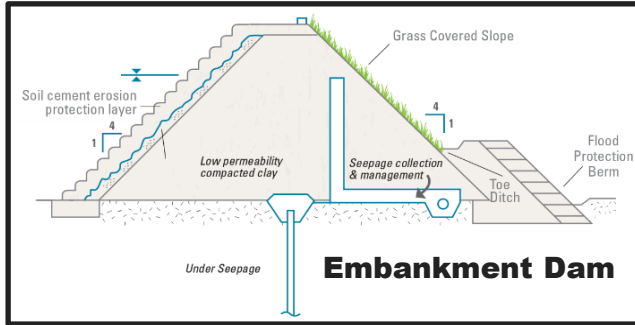
Details Specified in the Allens Creek Reservoir Water Right

- Reservoir capacity
- Water surface elevation
- Diversion locations
- Total diversion rate
- Annual project yield
- Maximum outlet rate

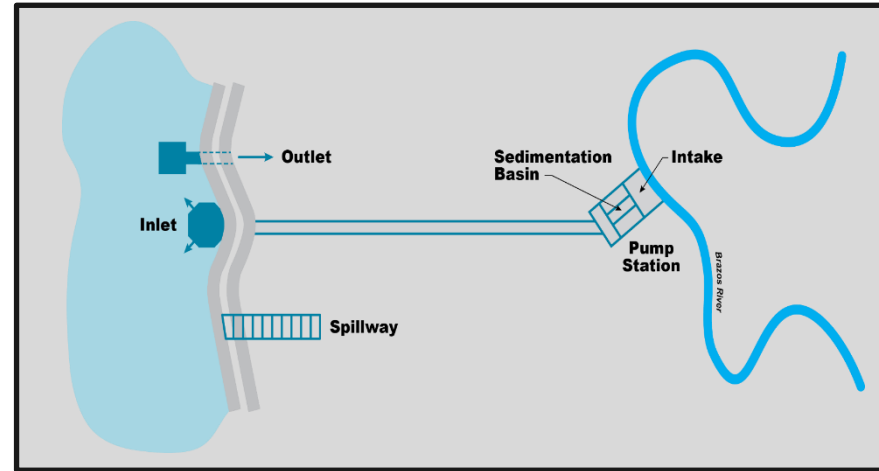




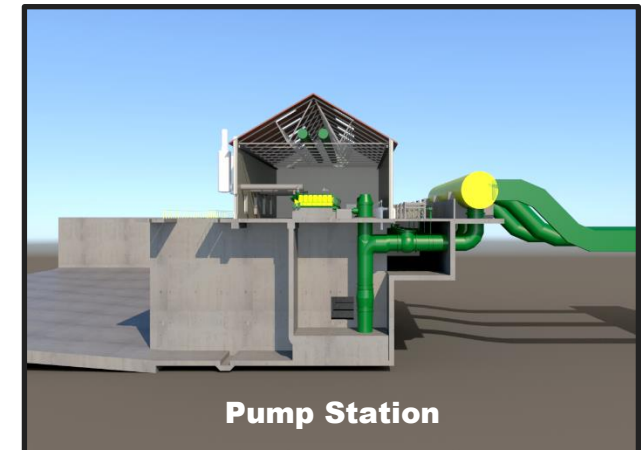
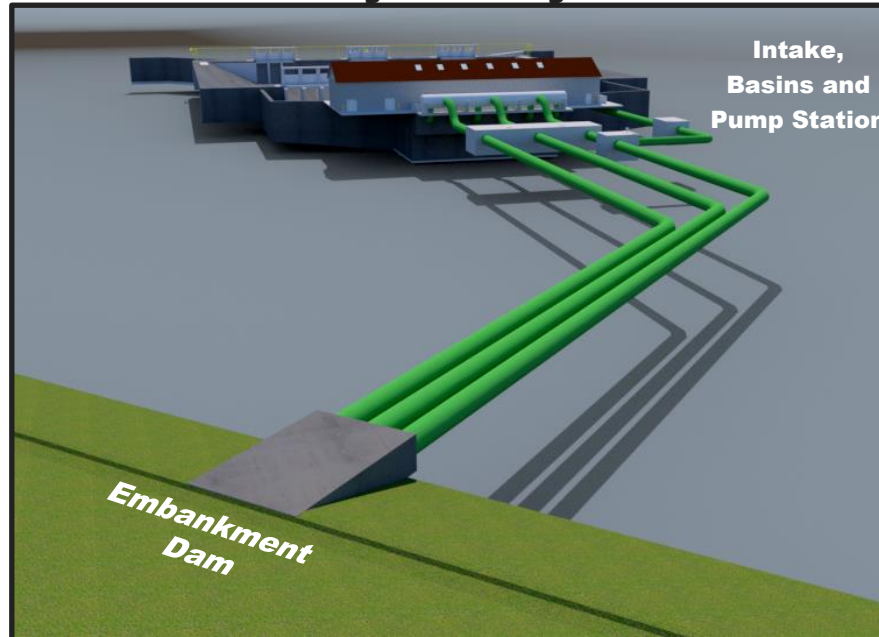
Primary Facilities



Project Features



Conveyance System





What is a 404 Permit and Why is it Needed?

Projects that dredge (excavate) or fill (construct) in wetlands or Waters of the US (WOTUS) require a permit under **Section 404 of the Clean Water Act**

- The US Army Corps of Engineers (USACE) issues 404 permits.
- The USACE Galveston District will permit the Allens Creek Reservoir Project

USACE can only issue a permit for the **Least Environmentally Damaging Practicable Alternative (LEDPA)**

- The application must demonstrate the proposed project is the LEDPA
- The USACE must defend its decision to permit the LEDPA to resource agencies, including the EPA.





Issuing a 404 permit is a Federal action

The USACE must comply with the National Environmental Policy Act (NEPA)

- NEPA is designed to protect public interest resources.
- NEPA includes agency, tribal and public participation.

NEPA documents can be prepared at varying levels of detail, depending on project complexity and effects

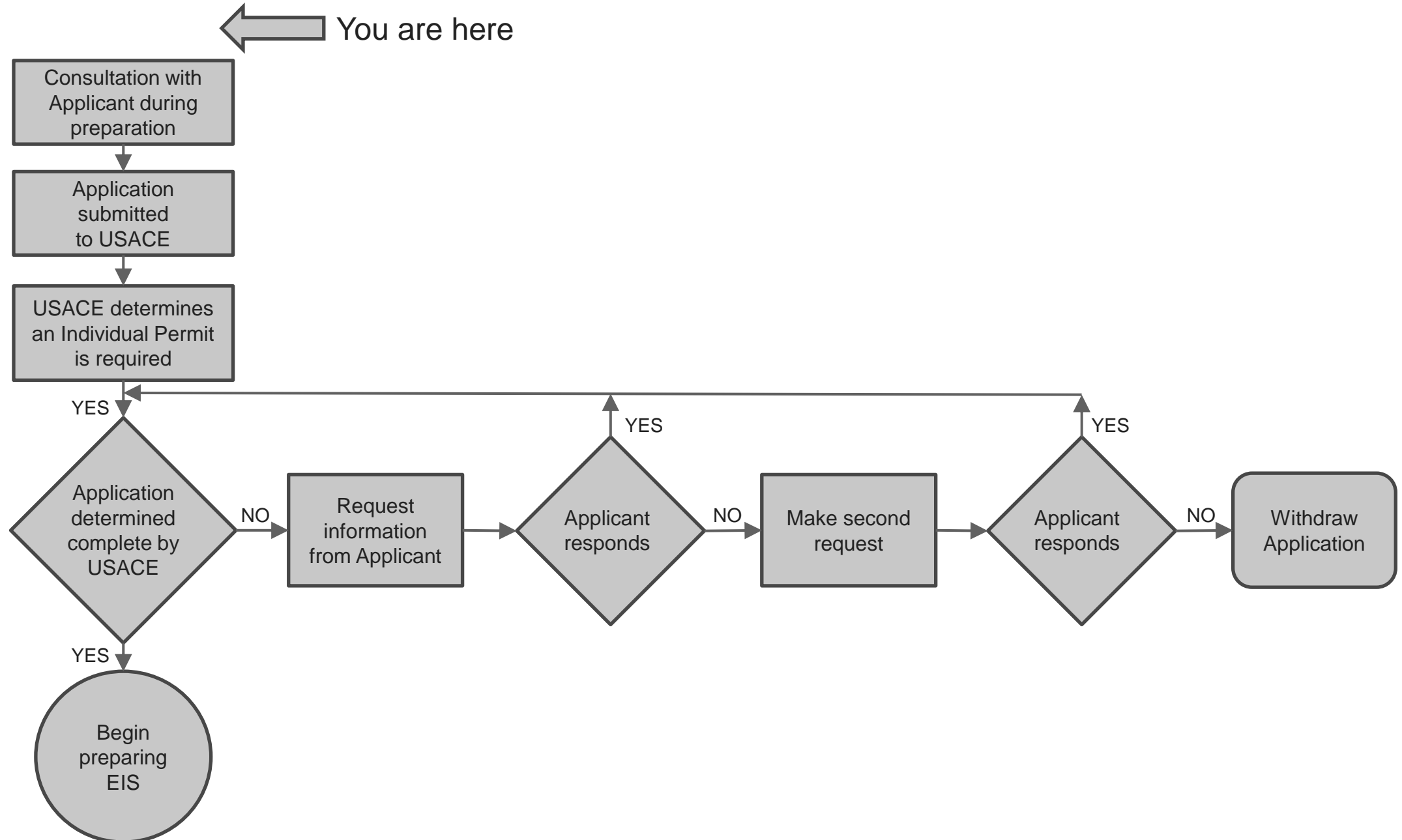
- An Environmental Impact Statement (EIS) – the most comprehensive NEPA document – will be required.

The US EPA reviews USACE NEPA documents for 404 permit approvals.





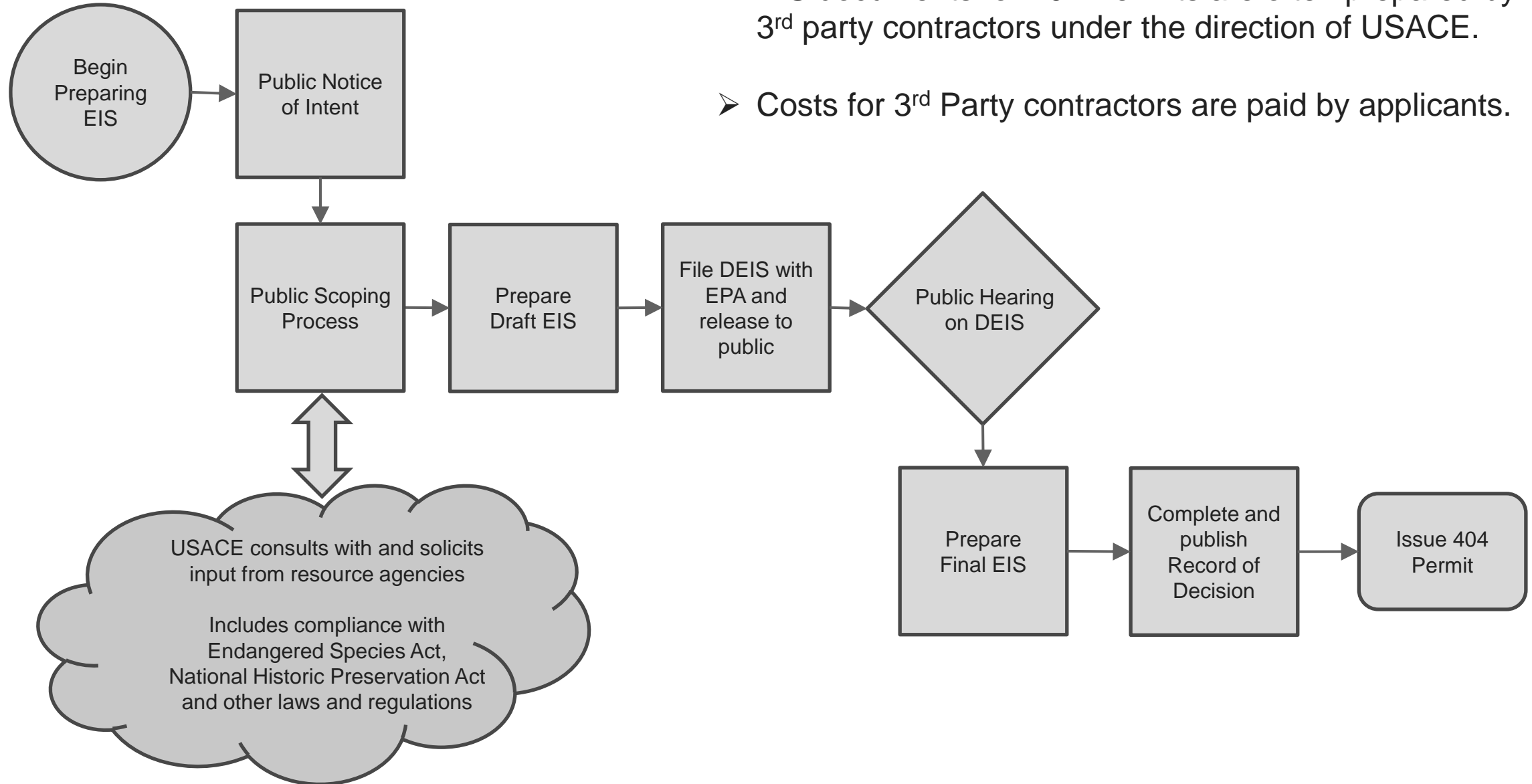
Steps for USACE to Issue a 404 Permit – INITIATION





Steps for USACE to Issue a 404 Permit – REVIEW & APPROVAL

- EIS documents for 404 Permits are often prepared by 3rd party contractors under the direction of USACE.
- Costs for 3rd Party contractors are paid by applicants.





Roles of Federal and State Agencies

US Army Corps of Engineers (USACE)

- Review applications and issues 404 permits
- Prepare NEPA documents for 404 permits

US Fish and Wildlife Service (USFWS)

- Recommend actions to minimize impacts on fish and wildlife
- Section 7 of the Endangered Species Act

US National Marine Fisheries Service (NMFS)

- Similar to USFWS, but for estuarine and marine waters

US Environmental Protection Agency (EPA)

- Review proposed federal actions that affect air quality
- Determine geographic jurisdiction and exemptions to 404
- Approve tribal and state assumptions of the 404 program
- Enforces provisions of 404

Other Federal Agencies

- Natural Resources Conservation Service - farmland
- FEMA - flood hazard zones

Texas Commission on Environmental Quality (TCEQ)

- Certify that state water quality is not degraded or adversely impacted

Texas Parks and Wildlife (TPW)

- Ensure state fish and wildlife resources are not adversely affected

Texas Historical Commission

- Compliance with Section 106 of the National Historic Preservation Act

Texas General Land Office (GLO)

- Compliance with Texas Coastal Zone Management Program





Information Needed for USACE to Review a 404 Permit Application



Project Description

- Project purpose, need, and intended use.
- Narrative and exhibits of all physical features and operations.
- Location, type(s) and amount of proposed fill material.
- Area of wetlands or other waters to be filled.

Aquatic resources inventory

- Wetlands and open waters, including description of each type of wetlands for the entire project site.
- Location of any shellfish beds in close proximity to the area of impact.

Anticipated environmental impacts to Public Interest Resources

- Temporary, permanent, and indirect impacts
- Includes impacts from methods of construction.

Explanations and supporting analysis

- Measures to avoid impacts on aquatic resources
- Measures to avoid and/or minimize discharge into wetlands or WOTUS
- Measures to compensate for impacts to wetlands or WOTUS.



The 404 Permit Application Answers Key Questions

Question	How Addressed in 404 Application
Is a new water supply needed?	Purpose and need
What are the key environmental, social, physical, chemical, and socioeconomic issues raised by the proposed project?	Project description and impacts analyses
Are there other ways a reliable water supply can be secured with less environmental impact?	Alternatives analysis

USACE roles and responsibilities

- *The USACE is neither a proponent nor an opponent of a project.*
- *Their role is to ensure compliance with the law, statutes, and regulations, through fair and reasonable permit decisions.*



Why do 404 Permit Applications Fail?

- Need for the Project is unclear or not supported by evidence
- Another alternative is the LEDPA
- Incomplete assessment of resources
- Mitigation not adequately considered





The Purpose & Need and Alternatives Analysis Are Crucial for a 404 Permit

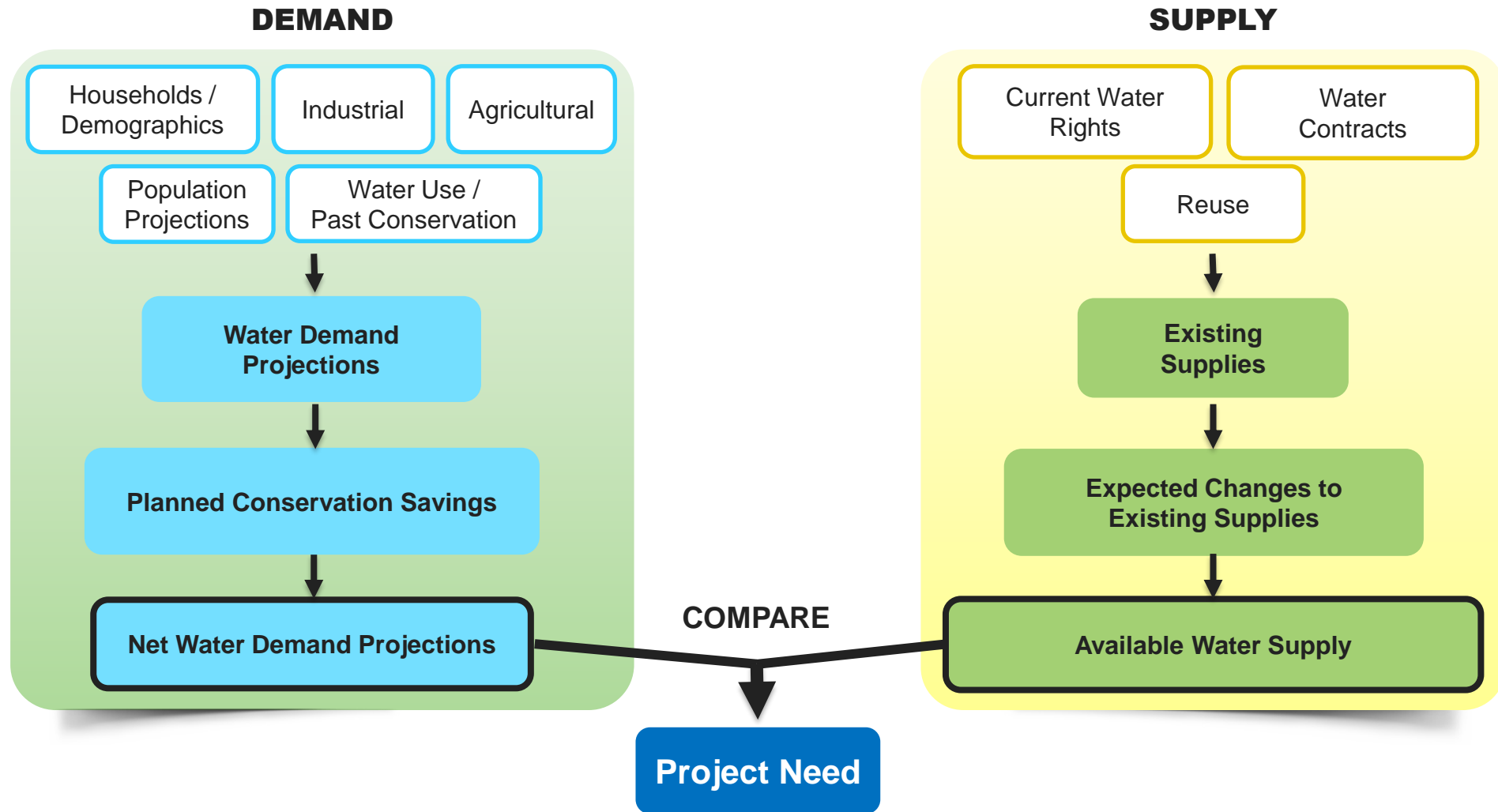
**Establish the
Need for
Water Supply**

**Determine that A
Reservoir Fulfills
the Need**

**Demonstrate that
Allens Creek
Reservoir is the
LEDPA**



Establish the Need for Water Supply



USACE seeks evidence of water needs from end customers



Alternatives Analysis

Water Supply Projects are not Necessarily Water Dependent

- Water dependency is determined by the USACE based on the project description and plans.
- Projects that require siting in WOTUS to achieve their purpose must address the “rebuttable presumption” that:
... an upland alternative exists which will involve less wetland impacts.
- The purpose of the alternatives analysis is to identify the **Least Environmentally Damaging Practicable Alternative.**



Alternatives Analysis

The Alternatives Analysis must satisfy both NEPA and Clean Water Act requirements

Reasonable (NEPA)

An alternative must be:

- Capable of achieving the basic project goal
- Feasible from a technical and economic standpoint and using common sense

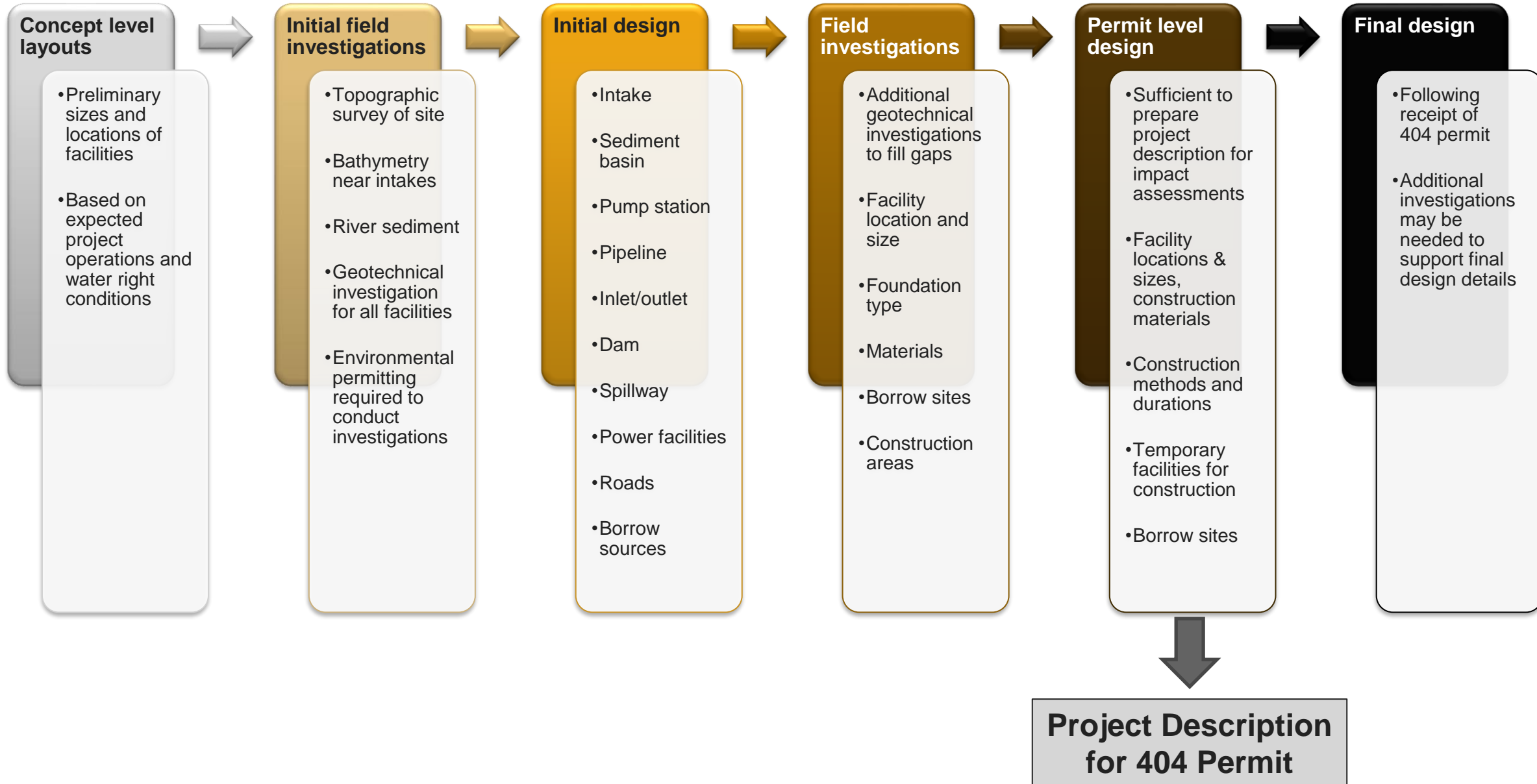
Practicable (404)

An alternative must be available, and capable of being done considering:

- Cost
- Existing technology
- Logistics

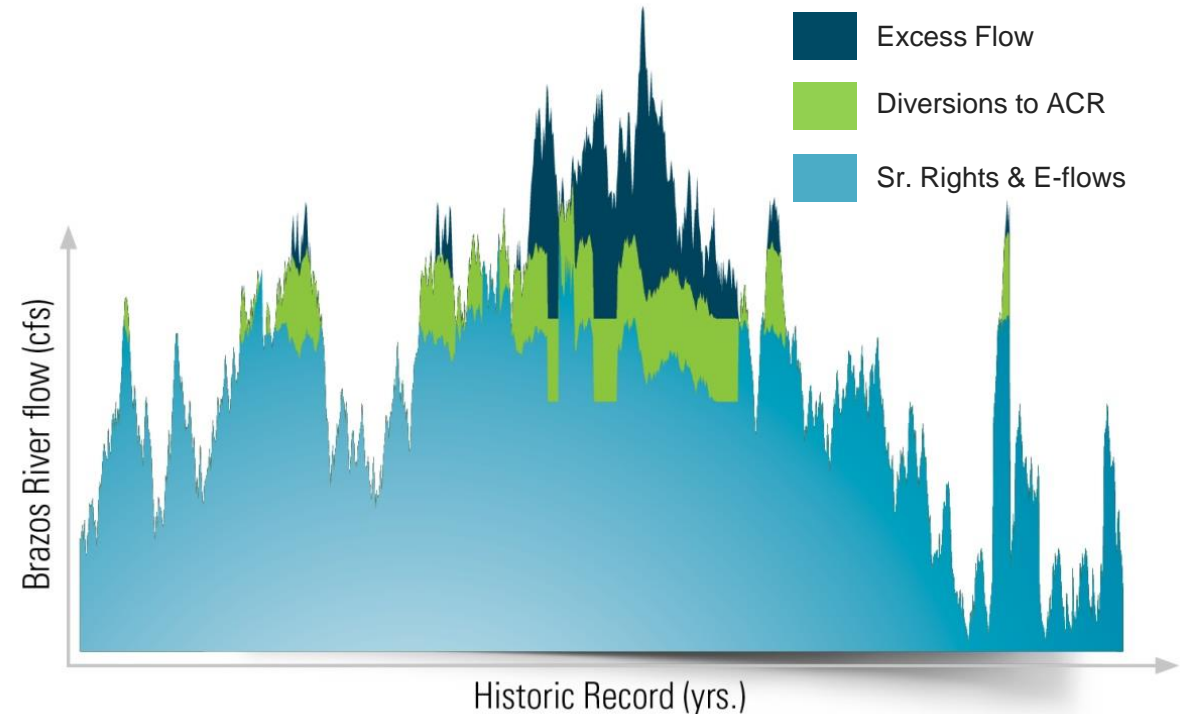
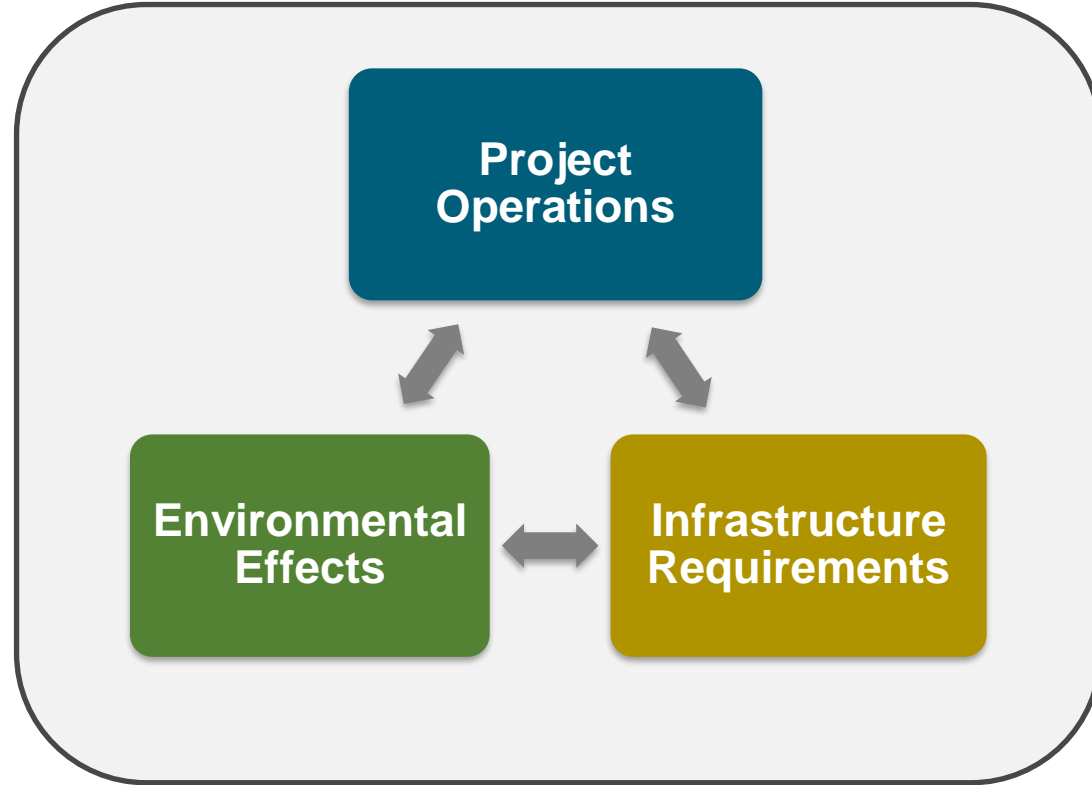


Progressive Design Development to Define Project Details





Water Resources Assessments Will Provide Important Information





The ACR Project Could Affect Public Interest Resources

Water-Based Resources



Surface Water Hydrology

- Changes in streamflow, reservoir storage
- Changes in water use (industrial, municipal, ag)
- Evaluate with changes in future hydrology



Water Quality

- Changes in river and reservoir water quality
- Changes in drinking water quality



Aquatic Species Habitat

- Threatened & endangered species



Groundwater

- Changes in surface/ground water interactions
- Changes in groundwater use



Wetlands, riparian communities, floodplains

- Changes to wetland and stream channel
- Changes to floodplains
- Potential spread of invasive species



Water-Based Recreation

- Changes in existing recreation opportunities
- Effects of project recreation facilities and use



The ACR Project Could Affect Public Interest Resources

Land-Based Resources



**Terrestrial Plants, Animals and Habitat
(including Threatened & Endangered Species)**



Cultural Resources



Socioeconomics

- Customer Rates
- Environmental Justice
- Effects of Improved Domestic Water Supply



Construction

- Effects of temporary facilities
- Air quality emissions
- Traffic impacts



Private Property



NEPA Related Issues

- Reasonably Foreseeable Actions/
Cumulative Effects
- Compliance with Executive Orders,
Federal, State, and Local Statutes



Evaluation of Biological Resources

Wetlands



Endangered Species



- Some species surveys require specific hydrologic and weather conditions
- Some also require multiple-year surveys



Cultural Resources Inventory and Mapping

Cultural Resources

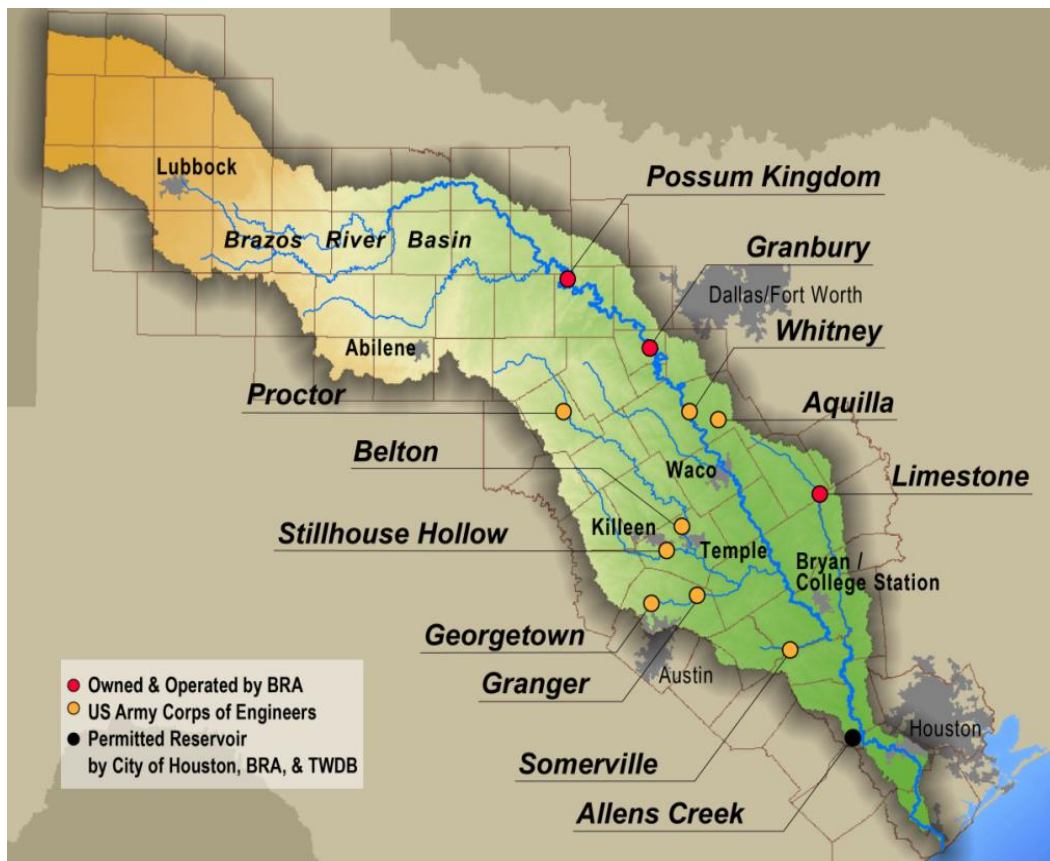
- Pre-historic
- Historic
- Native American
- Cemeteries





Next Steps

- Finalize contract
- Prepare detailed schedule
- Public outreach
- Initiate communications with USACE
- Conceptual project layout
- Define field studies for engineering, species and habitat



DISCUSSION

