San Jacinto River Waste Pits Superfund Site

Community Meeting

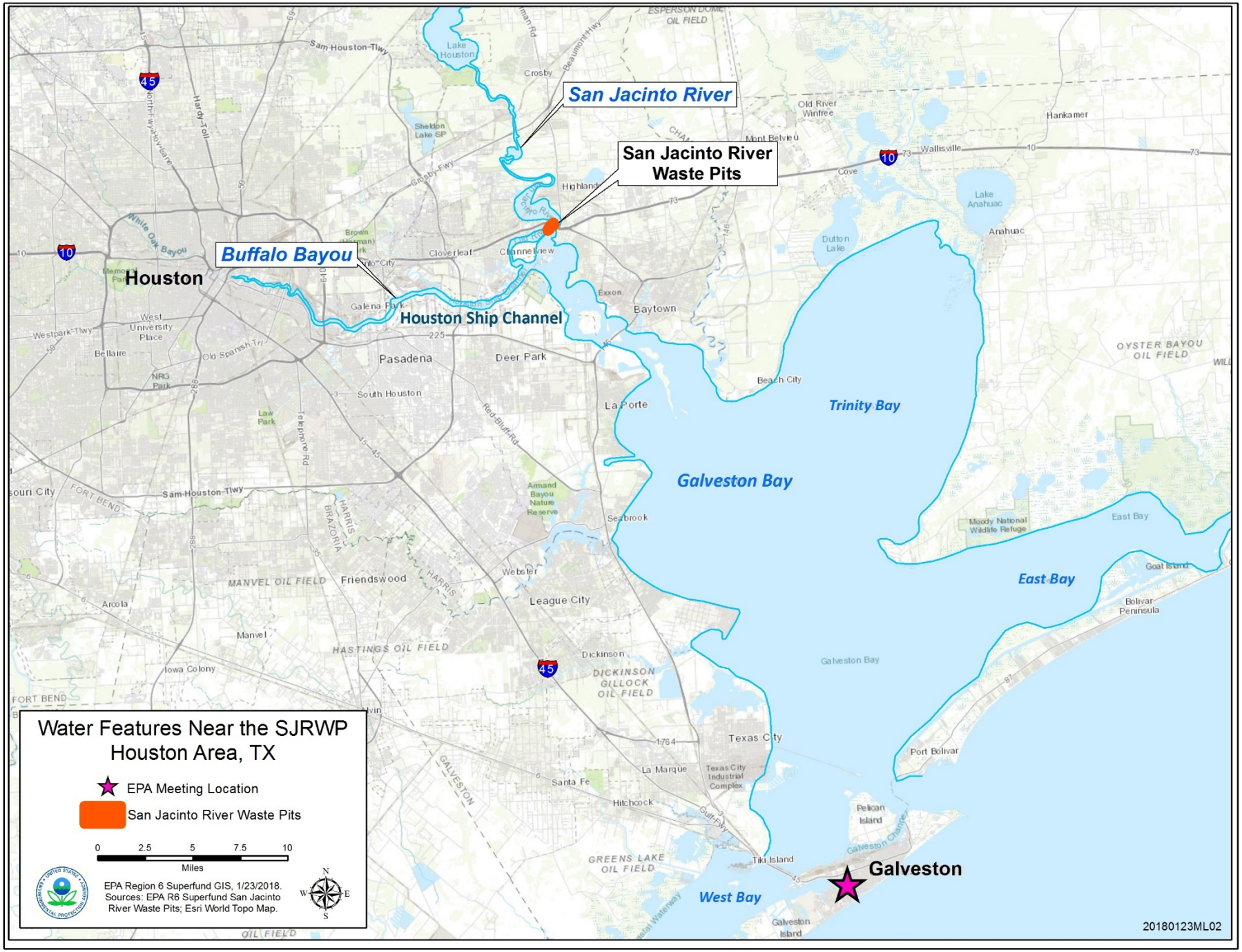
January 30, 2018

9871675

United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

- Site background
- Record of Decision
- Prevention of releases
- Path to clean up


Water Features Near the SJRWP
Houston Area, TX
EPA Meeting Location
San Jacinto River Waste Pits
0 2.5 5 7.5 10
Miles
EPA Region 6 Superfund GIS, 1/23/2018.
Sources: EPA R6 Superfund San Jacinto River Waste Pits; Esri World Topo Map.
San Jacinto River
San Jacinto River Waste Pits
Buffalo Bayou
Houston Ship Channel
Houston
Galveston
Trinity Bay
Galveston Bay
East Bay
West Bay
Lake Houston
Crosby
Highland
Cloverleaf
Channelview
Baytown
Galena Park
Pasadena
Deer Park
La Porte
Seabrook
Friendswood
League City
Dickinson
Texas City
Port Bolivar
Bolivar Peninsula
Galveston Island
Tiki Island
Pelican Island
Anahuac
Lake Anahuac
Hankamer
Wallisville
Beach City
Bellaire
West University Place
Sheldon Lake SP
Armand Bayou Nature Reserve
Moody National Wildlife Refuge
Goat Island
MANVEL OIL FIELD
HASTINGS OIL FIELD
DICKINSON GILLOCK OIL FIELD
GREENS LAKE OIL FIELD
OYSTER BAYOU OIL FIELD
ESPERSON DOME OIL FIELD
20180123ML02

Sand Separation Area
Northern Waste Pits
Southern Impoundment
10
San Jacinto River
Harris County,TX
0 250 500 750 1,000
Feet
Oklahoma
Arkansas
Dallas
Louisiana
Texas
Austin
Houston
San Antonio
San Jacinto River Waste Pits
20160927ML01

Background

- Built in the mid-1960s for disposal of paper mill wastes
- Partially submerged northern impoundments cover about 15.7 acres
- Contaminated with dioxins and furans
- San Jacinto River Waste Pits added to the National Priorities List (Superfund) on March 19, 2008

San Jacinto River Waste Pits

South Impoundment 1965

San Jacinto River Waste Pits (2006)

San Jacinto River Waste Pits (2007)

Immediate Actions Taken

- Waste exposed at surface and in the river
- People were being exposed
- Uncontrolled releases to river
- EPA determined that an immediate cap was necessary

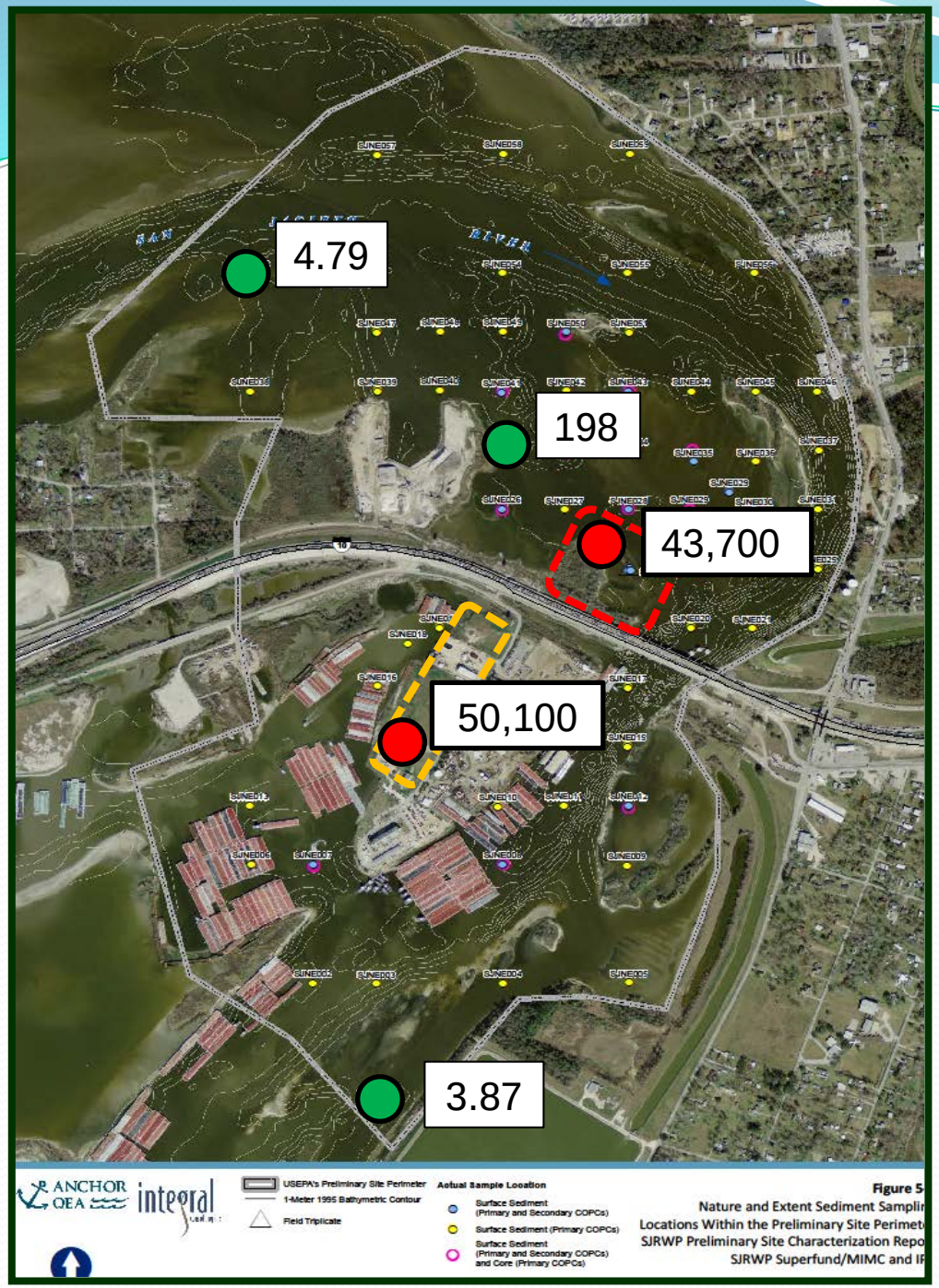
Northern Waste Pits (after cap)

Cap Construction Completed July 12, 2011

Site Field Investigations

- Sediment samples
- Soil samples
- Groundwater samples (shallow & deep)
- Tissue samples (catfish, crab, killifish & clams)

San Jacinto River Waste Pits Site



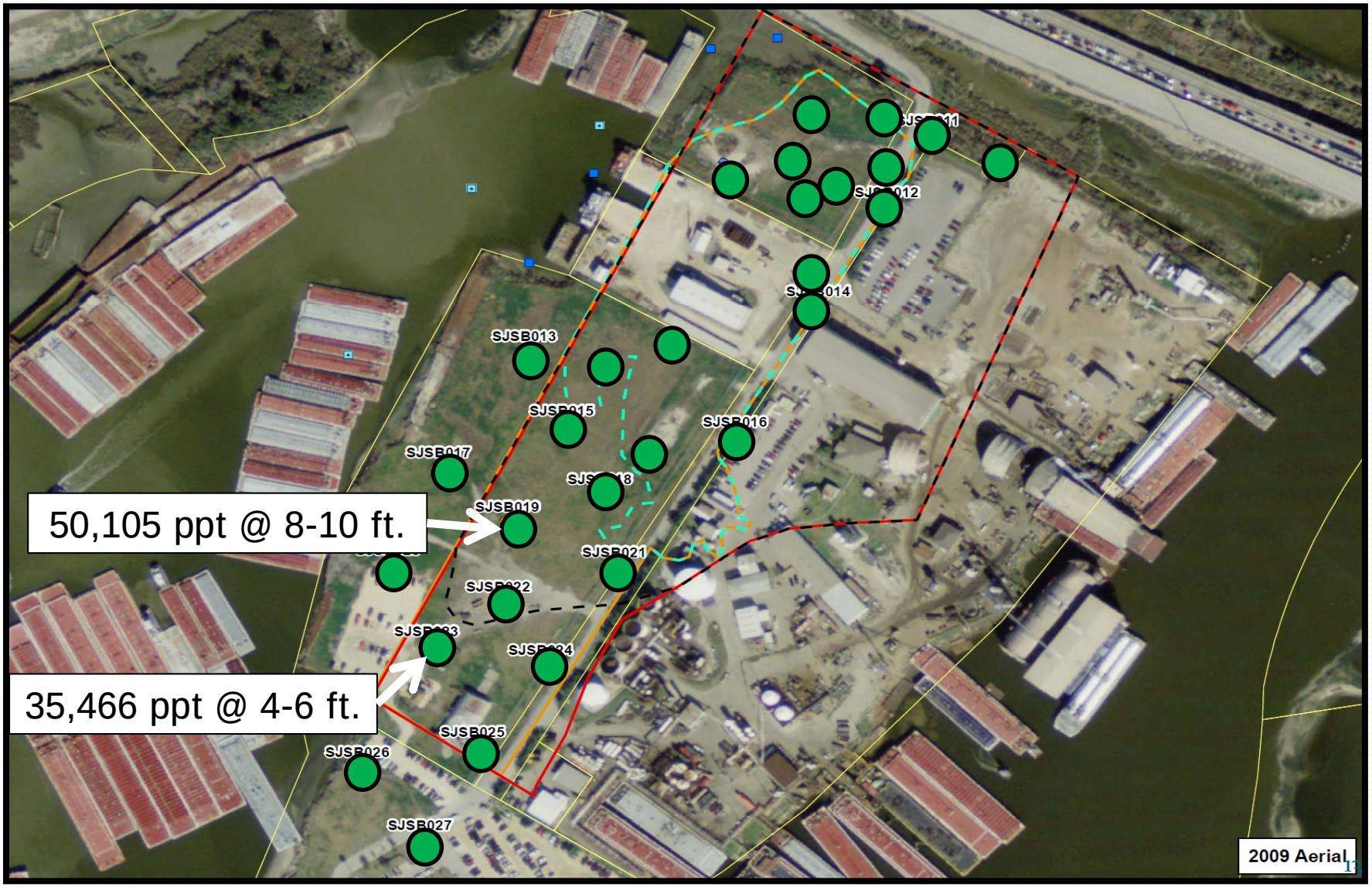
About 300 surface & subsurface sediment samples

Waste Pits

Southern Impoundment

Sediment - ng/kg TEQ_{DF} Dioxin

Southern Impoundment Soil Samples



Summary of Site Risks

- Human health potential risks to:
  - Recreational fisher (child)
  - Recreational visitors
  - Construction workers
- Ecological potential risk to clams

Summary of Remedy

- Remove 212,000 cubic yards of waste for offsite disposal
- Cleanup level 30 ng/kg for north waste pits & 240 ng/kg for southern impoundment
- Prevent releases during construction
- Cost: $115 million
- Construction time 27 months

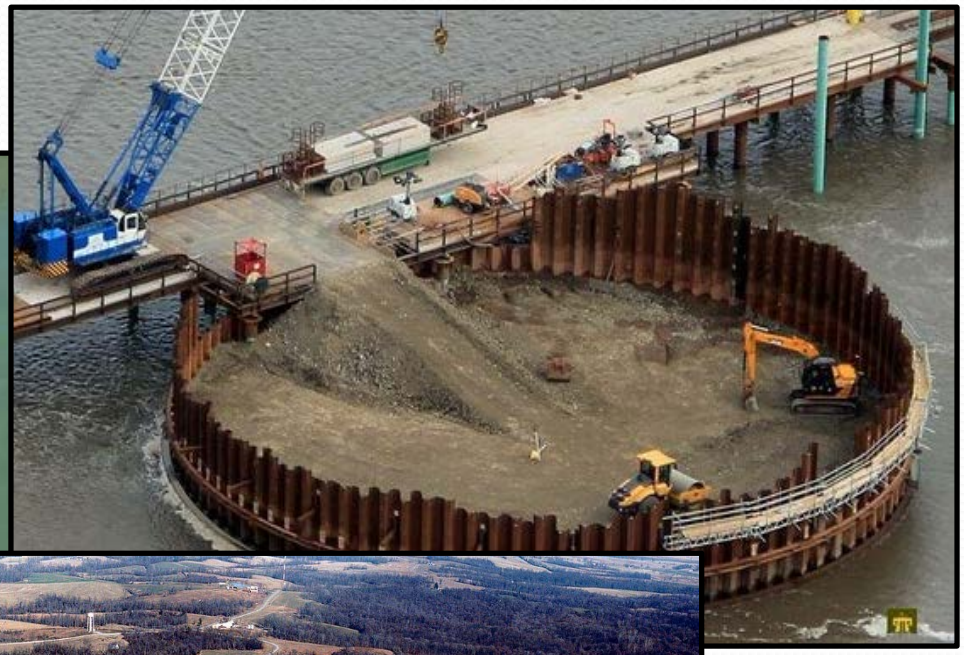
Record of Decision

October 11, 2017 – Administrator Signature

- Over 7,000 comments received on Proposed Plan
- EPA conducted additional studies in response to comments:
  - Construction methods (Corps of Engineers)
  - Storm modeling (Corps of Engineers)
  - How river channel changes over time (USGS)
- Adopted changes to clean up in response to public comments

Best Management Practices (BMP)

Examples:



Rationale for Selected Remedy

- Projected dioxin waste is highly toxic and persistent (100s of years).
- High threat of repeated storms and constant river flow against man-made features.
- History of armor cap maintenance.
- Avoids catastrophic release in un-controlled situation [USACE - significant loss over 80% cap area].

Path to Cleanup

- EPA beginning Remedial Design discussions with Potentially Responsible Parties
- Request for Good Faith Offer for the entire clean up will follow
- Expect 6 - 12 months for negotiations

Questions ?

Meeting Etiquette

- **Stick to the Agenda**
- **Informational Meeting - Not a Public Comment Period**
- **Selected Remedy**
  - Focus on the San Jacinto Waste Pits Site
  - Hold Jot down notes and questions for Q&A
- **Share Q&A time - take turns speaking**
  - Minimize interruptions and side discussions
- **Express views and concerns cordially and respectfully**
  - Speak to issues and plans, not about people