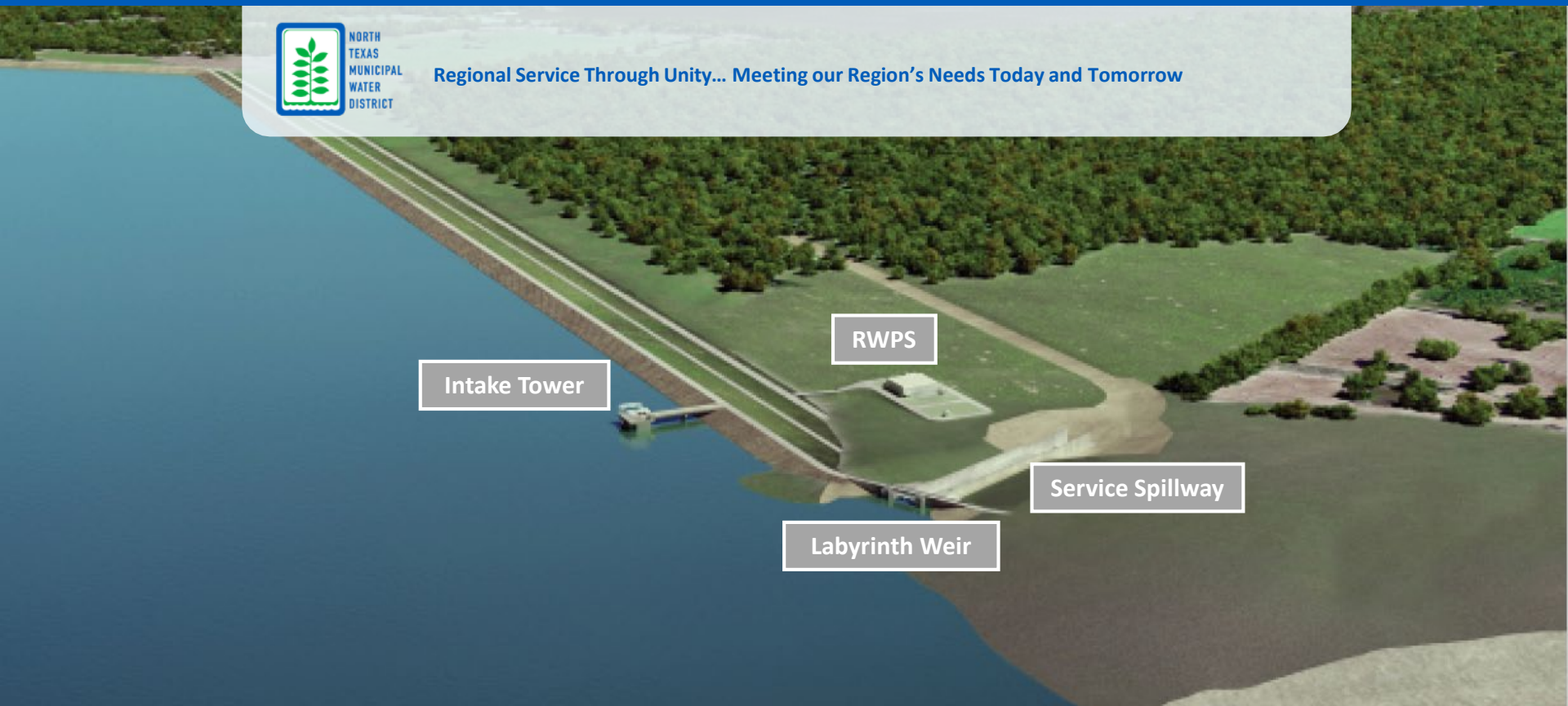




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DISTRICT

Regional Service Through Unity... Meeting our Region's Needs Today and Tomorrow



## BOIS d'ARC LAKE UPDATE

**Fannin County Commissioners Court**

**September 1, 2020**

**Steve Long, P.E.**

**Reservoir Project Manager**



# BOIS D'ARC LAKE UPDATE



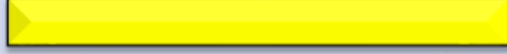





## Agenda




- Pre-impoundment Items Status
- Dam Construction Update
- FM 897 Status
- Lake Operations Center
- Fannin County Roads and Bridges
- Raw Water Pipeline Construction Update



# BOIS D'ARC LAKE UPDATE

## Pre-Impoundment Checklist

Program Component	Pre-Impoundment Items Status
Archeology	
Boat Ramps	
Clearing	
Dam	
Program Coordination Items	
Raw Water Pipeline	
Roads	
Utility Coordination	

-  Critical Coordination Required – Little schedule float; Near Impact to Impoundment Date
-  Effort on Schedule
-  Complete – Ready for Impoundment



## BOIS D'ARC LAKE UPDATE

### CMAR 1 – Dam and Intake Structure

- Dam activities
  - **402,000** cubic yards of embankment
  - **1,700** cubic yards of concrete in Spillway and Intake Tower

### CMAR 1 – Construction Status

- Embankment, **4,100,000** cubic yards/**78%** complete
  - **1,050,00** cubic yards remaining to Elev. **538**
- Service Spillway Concrete **18,400** cubic yards/**95%** complete
  - **All Service Spillway Slabs placed**
- Intake Tower **9,280** cubic yards/**88%** complete (95 ft high; elev 549)
- Slurry Trench **546,744** square feet/**100%** complete
- Reservoir Clearing 3,920 acres/**90%** complete – **Contractor mobilizing for final clearing package**
- Soil cement placement – **6,810** cubic yards



# BOIS D'ARC LAKE UPDATE

## CMAR 1 – Construction Status

- Cubic Yards Remaining – 1,050,000
- Production 2019/2020
  - September – 475,000
  - October – 350,000
  - November – 154,000
  - December – 151,000
  - January – 88,000
  - February – 130,000





# BOIS D'ARC LAKE UPDATE

## Service Spillway







## BOIS D'ARC LAKE UPDATE

**Service Spillway Footings (all footings placed)**







## BOIS D'ARC LAKE UPDATE

# Intake Tower, Service Spillway, Raw Water Pump Station







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## BOIS D'ARC LAKE UPDATE

### Dam Embankment – Bois d'Arc Creek Notch







## BOIS D'ARC LAKE UPDATE

### Dam Embankment – Bois d'Arc Creek Notch







## BOIS D'ARC LAKE UPDATE

### Dam Embankment – Bois d'Arc Creek Notch







# BOIS D'ARC LAKE UPDATE

## FM 897 Seal Coat & Striping







# BOIS D'ARC LAKE UPDATE

## FM 897 Bridge







# BOIS D'ARC LAKE UPDATE

## CR 2980 – Yoakum Creek







# BOIS D'ARC LAKE UPDATE

## CR 2900 – Onstott Creek







# BOIS D'ARC LAKE UPDATE

## CR 2900 – Onstott Creek







# BOIS D'ARC LAKE UPDATE

## CR 2750 – Allen's Creek







# BOIS D'ARC LAKE UPDATE

## CR 2750 – Allen's Creek







# BOIS D'ARC LAKE UPDATE

## Lake Operations Center & Warehouse







## BOIS D'ARC LAKE UPDATE

### Mitigation Property

- ~5,000 acres tree plantings
- 95% - 200 or more live trees/acre
- <250 acres complete replanting
  - Areas too wet for some species
  - RES arborist revising planting list
- <250 acres supplemental planting
- Stream restoration/monitoring
  - Very successful
- Habitat restoration
  - Very successful





## BOIS D'ARC LAKE UPDATE

### Comparison to Permit

	Linear Feet	SQUs	Projected
Spring 2020 Monitoring	157,583	107,721	90,145
Final Projected Totals	<b>233,658</b>	<b>161,579</b>	
Permit Requirement	211,950	146,944	
Projected Surplus	21,708	14,635	





# BOIS D'ARC LAKE UPDATE

## Mitigation Property







## BOIS D'ARC LAKE UPDATE

### Mitigation Property – Willow Branch







## BOIS D'ARC LAKE UPDATE

### Mitigation Property – Willow Branch







## BOIS D'ARC LAKE UPDATE

### Mitigation Property



**Shumard Oak**



**American Elm**





# BOIS D'ARC LAKE UPDATE

## Mitigation Property

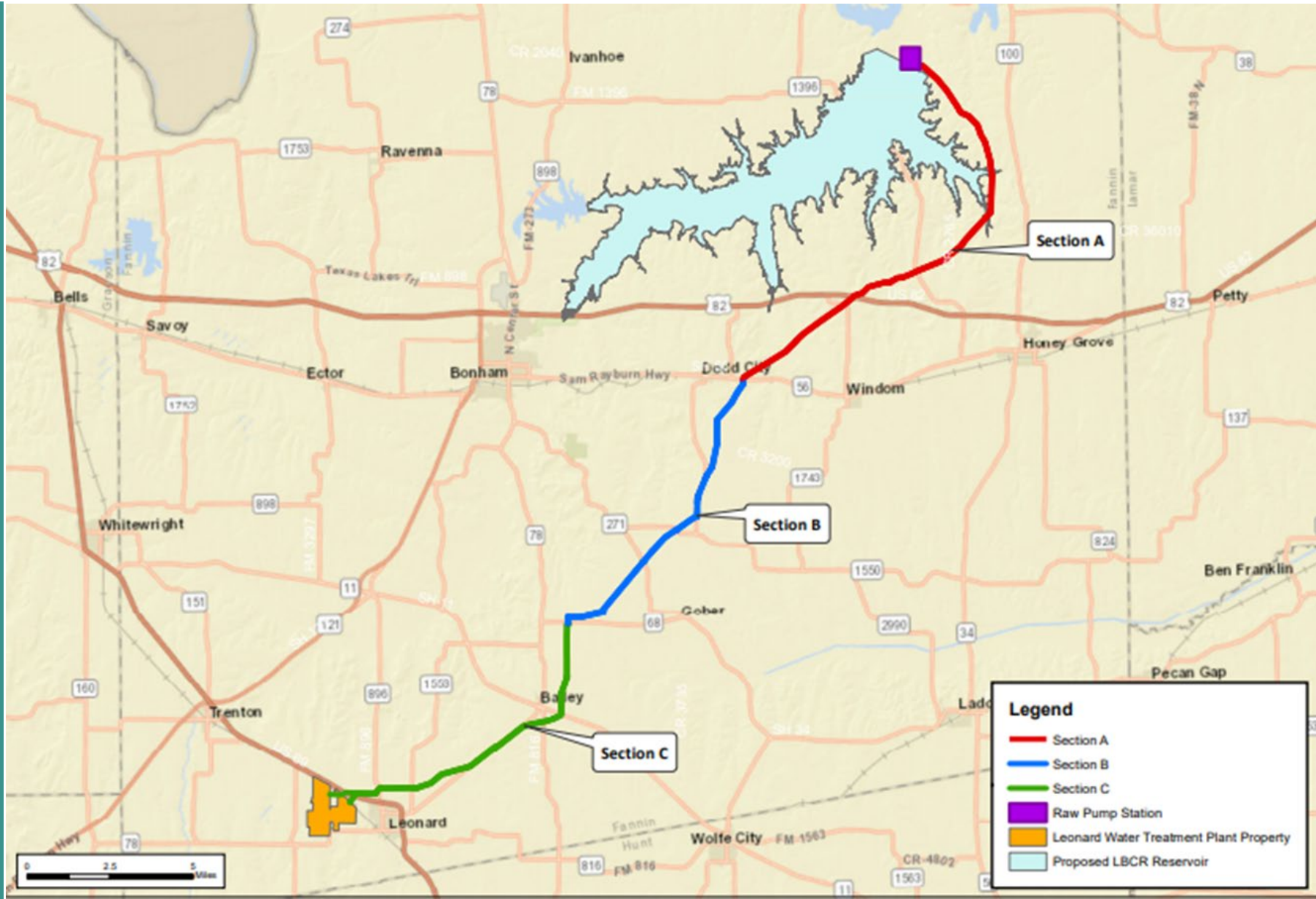
Tall  
Sycamores



6 ft. Sycamore



# BOIS D'ARK LAKE - RAW WATER PIPELINE







# BOIS D'ARC LAKE UPDATE

**Bois d'Arc  
Lake Raw  
Water  
Pipeline  
Section A**



Section A Hwy 56 to Hwy 82





# BOIS D'ARC LAKE UPDATE

## Bois d'Arc Lake Raw Water Pipeline Section A

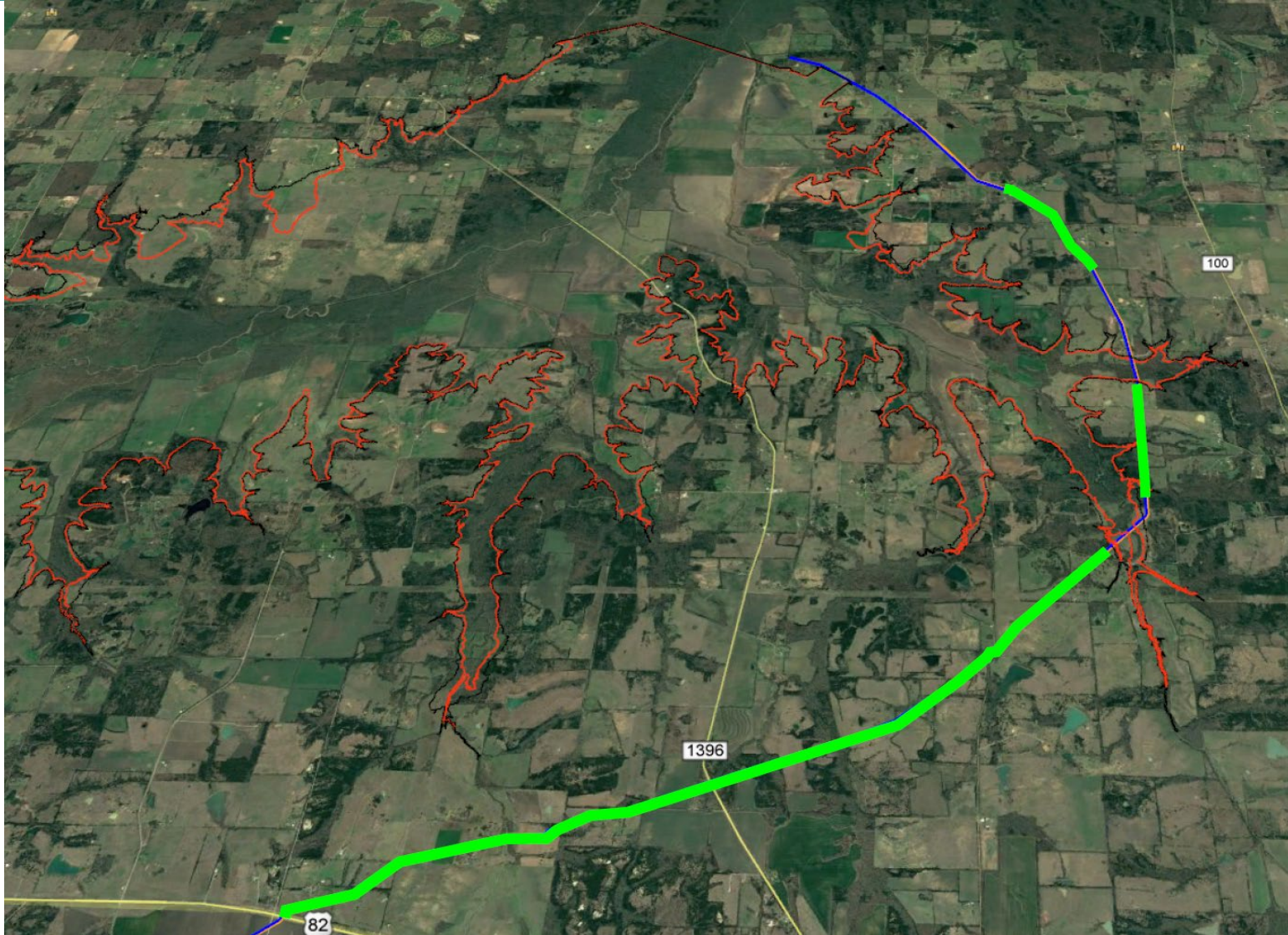






# BOIS D'ARC LAKE UPDATE

**Bois d'Arc  
Lake Raw  
Water  
Pipeline  
Section A**







## BOIS D'ARC LAKE UPDATE

# Bois d'Arc Lake Raw Water Pipeline Section A

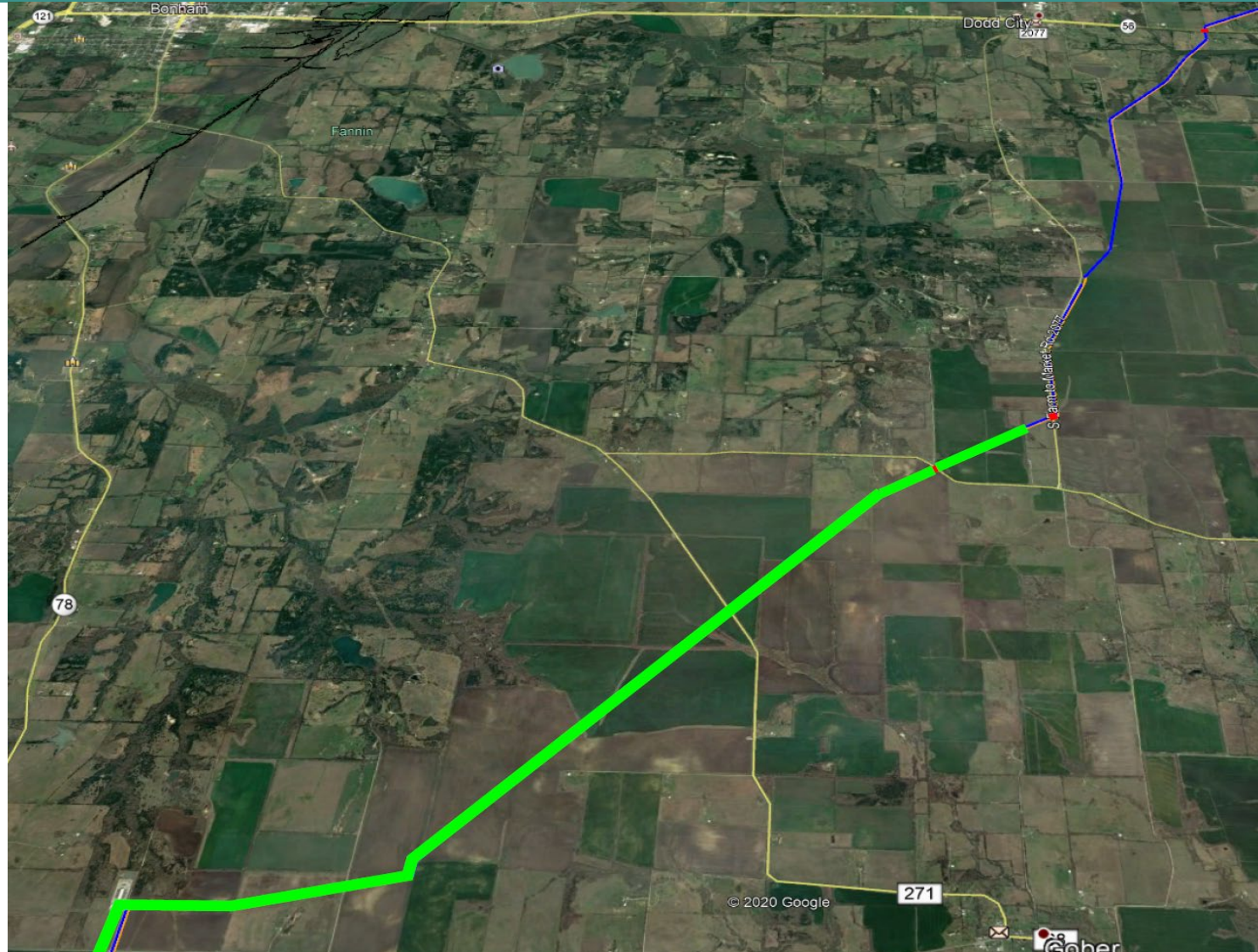






# BOIS D'ARC LAKE UPDATE

## Bois d'Arc Lake Raw Water Pipeline Section B







## BOIS D'ARC LAKE UPDATE

# Bois d'Arc Lake Raw Water Pipeline Section B







# BOIS D'ARC LAKE UPDATE

## Bois d'Arc Lake Raw Water Pipeline Section C







## BOIS D'ARC LAKE UPDATE

# Bois d'Arc Lake Raw Water Pipeline Section C





