



Joint Cordova and Vineyard
Community Planning Advisory Council Workshops
Workshop #3 – Sewer, Water Supply, Drainage

Department of Water Resources, Sacramento
Regional County Sanitation District, Sacramento
Area Sewer District, and Environmental
Management Department

April 26, 2016

Four Workshops on Master Plan Topics

Workshop #1: March 30, 2016 - Planning and Environmental Review

Workshop #2: April 13, 2016 - Transportation Planning

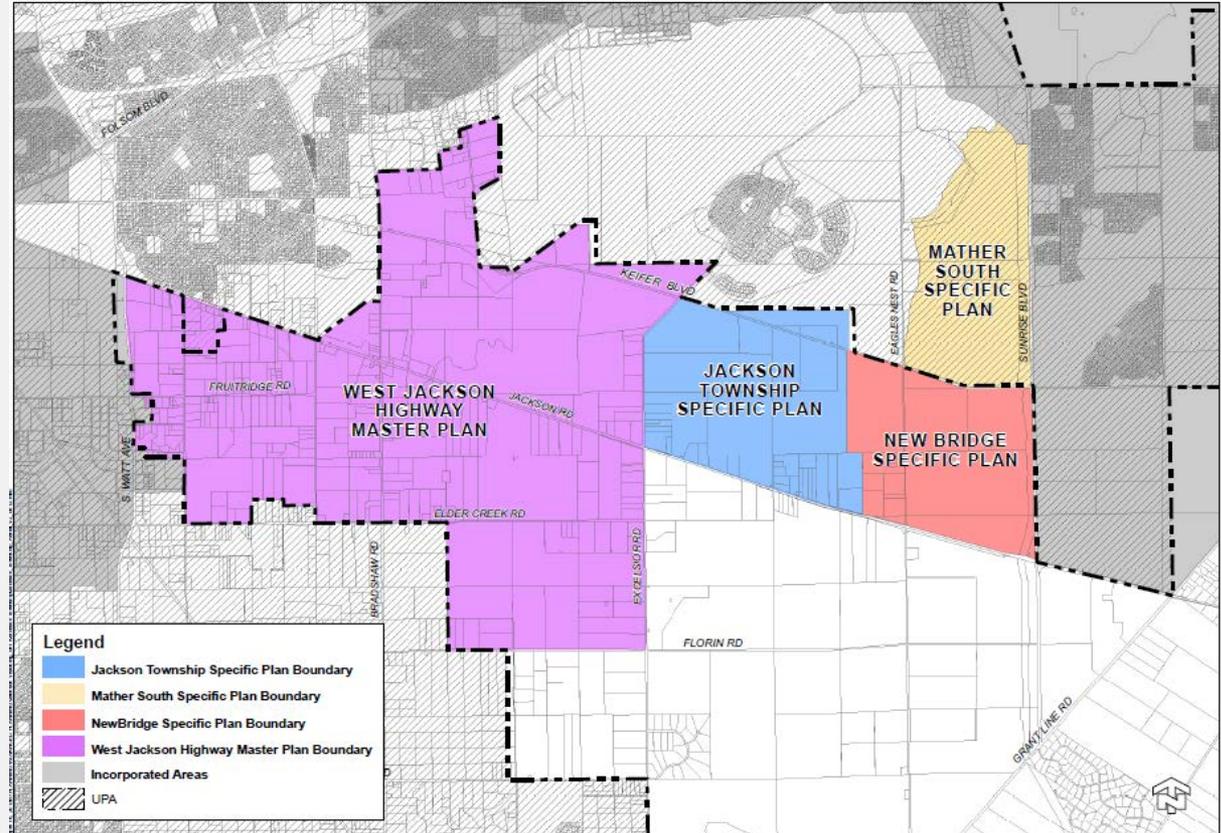
Workshop #3: April 26, 2016 - Sewer, Water Supply and Drainage

Workshop #4: May 11, 2016 - Infrastructure and Municipal Services Planning and Financing

Overview

Growth area master plan applications

- ✓ Separate EIR's for each project
- ✓ Each has their own timeline
- ✓ Each project will ultimately be acted upon by each CPAC



Agenda

Introductions – (10 minutes)

Presentations

Sewer - (15 minutes)

Question and Comment Session - (15 minutes)

Water Supply - (15 minutes)

Question and Comment Session - (15 minutes)

Drainage - (15 minutes)

Question and Comment Session - (15 minutes)

Wrap Up – (10 minutes)

Wastewater (Sewer)

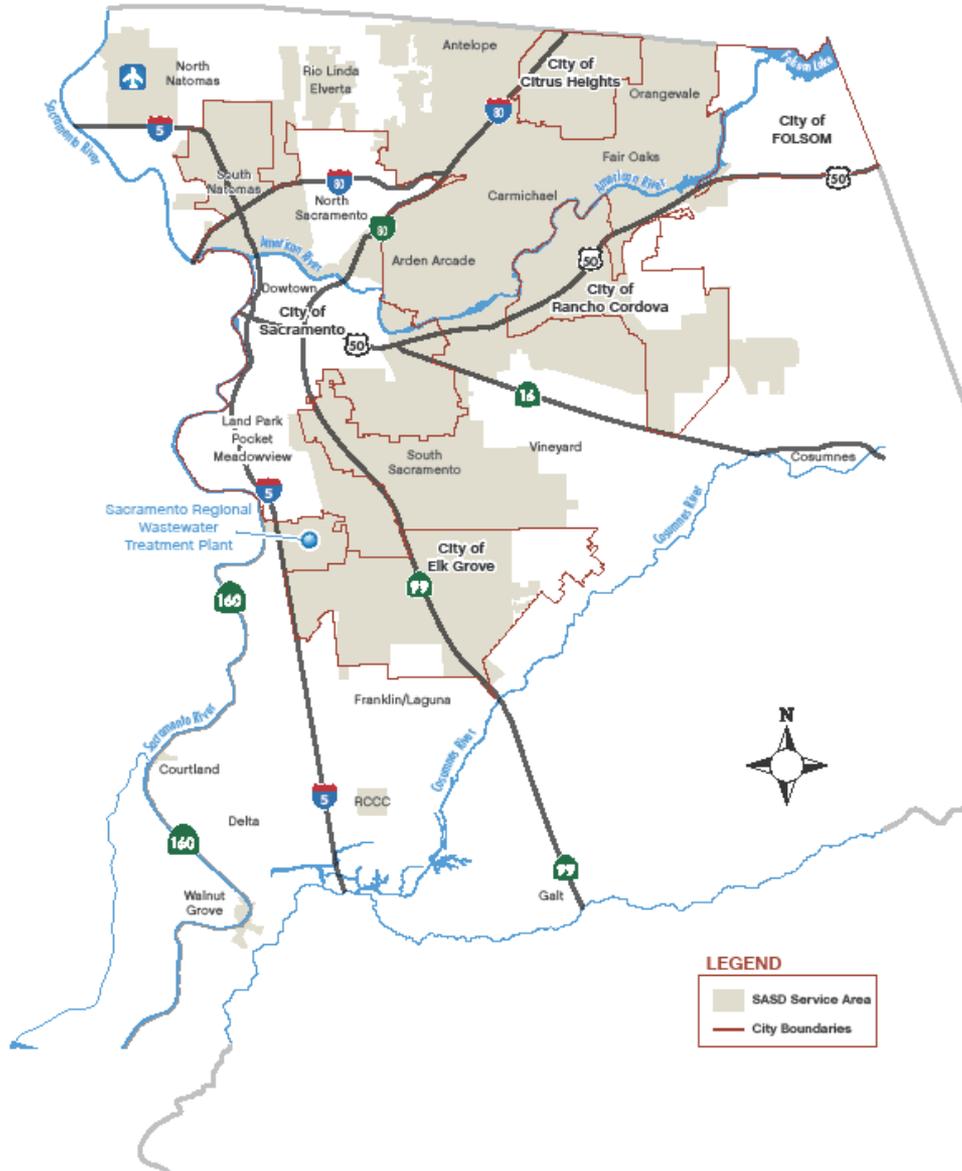
Stephen Moore (SASD/Regional San)

Chris Hunley (EMD)

Sewer – SASD

- Role of the Sacramento Area Sewer District (SASD)
 - Local collection system (design flow < 10 MGD)
 - Provides service to unincorporated Sacramento County, Elk Grove, Citrus Heights, Rancho Cordova, and parts of Sacramento and Folsom
 - Over 1.2 million people served
 - Over 4,400 miles of sewer pipe (mains and laterals)
 - Over 100 sewer pump stations
 - Facilities needed for development are constructed by developers and given to SASD

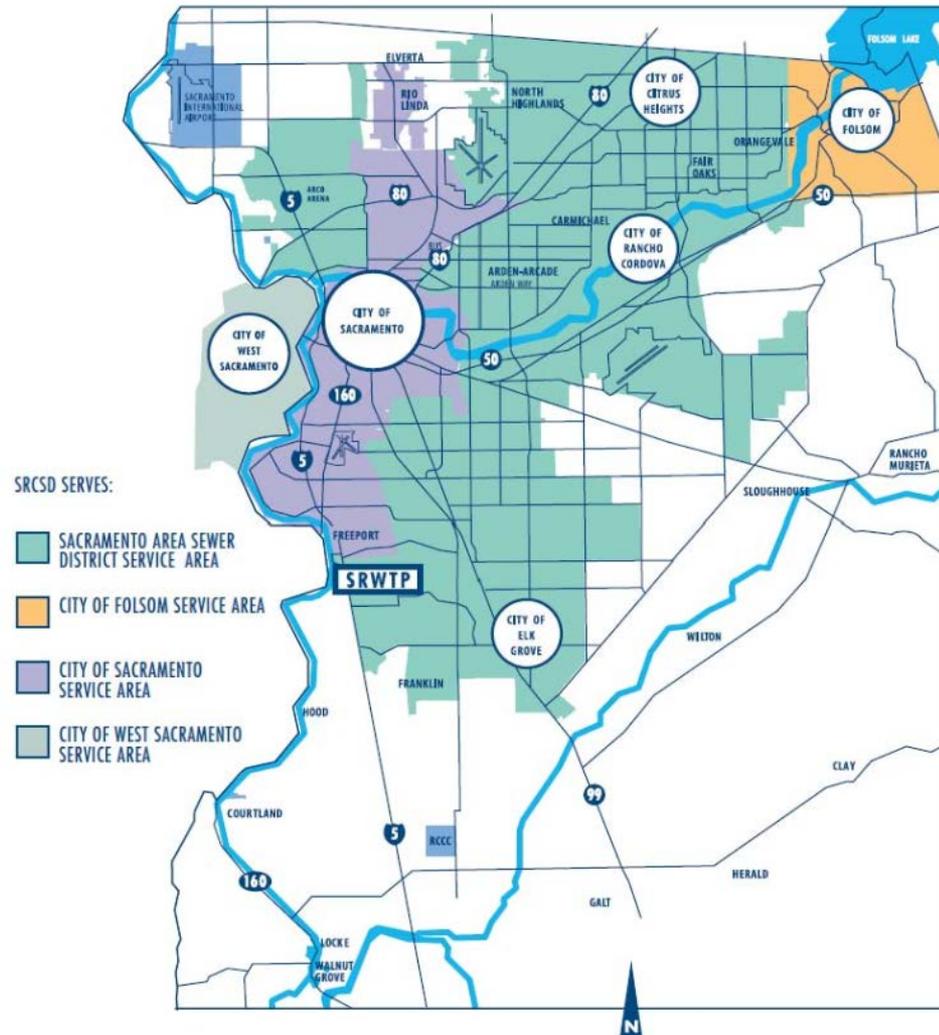
SASD SERVICE AREA



Sewer – Regional San

- Role of the Sacramento Regional County Sanitation District (Regional San)
 - Regional wastewater conveyance (design flow > 10 MGD)
 - Wastewater treatment and disposal
 - Provides service to SASD and the Cities Sacramento, West Sacramento, and Folsom
 - Over 140 miles of interceptor sewer pipe
 - Treats 150 MGD average with capacity of 400 MGD
 - Typically constructs their own facilities

Sewer – Regional San Service Area



Sewer – SASD and Regional San

Sewer System Planning Documents

Prepared by
SASD/Regional San

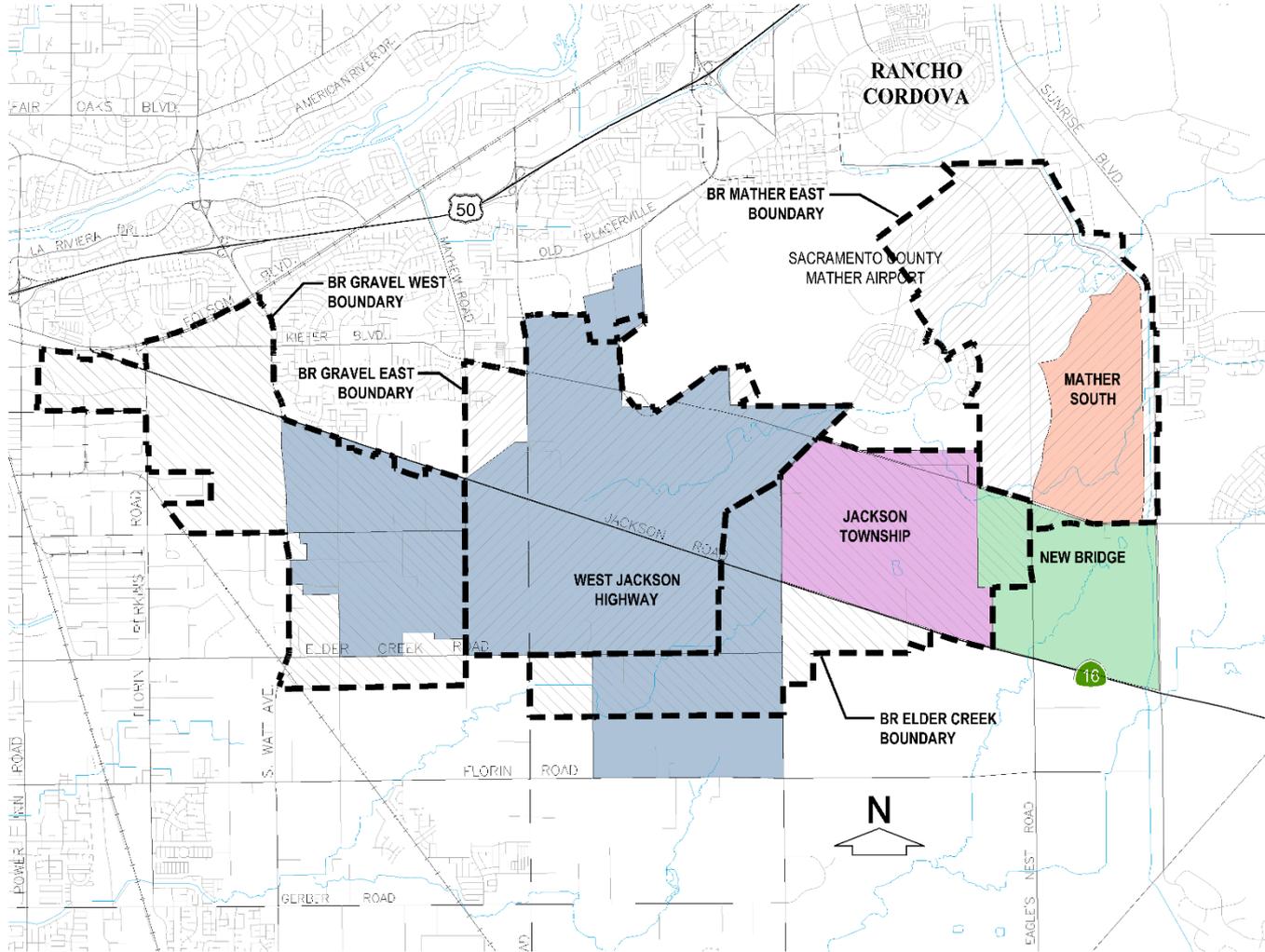
- Regional San Interceptor Sequencing Study (Feb 2013)
- SASD Sewer System Capacity Plan (Nov 2011)

Sewer System Development

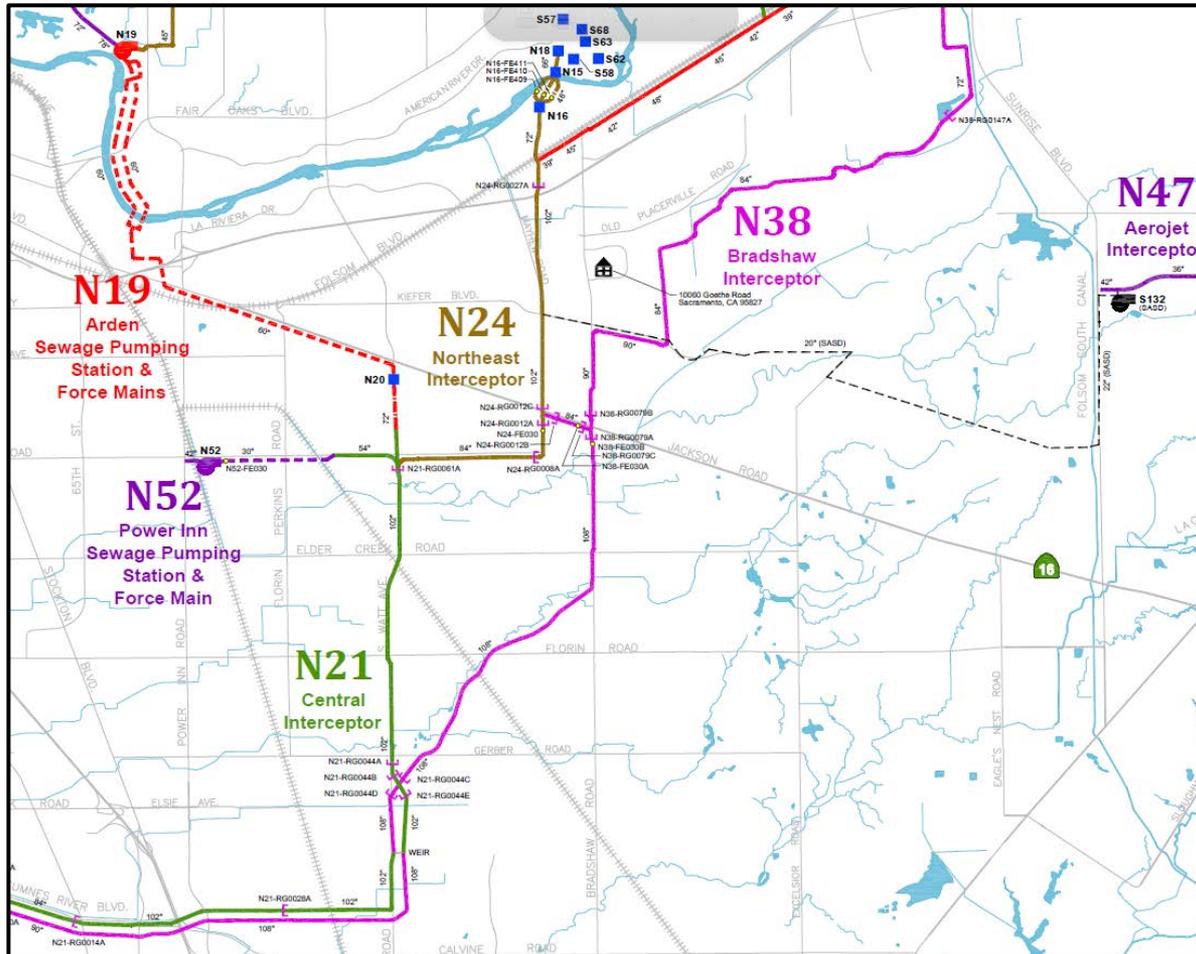
Prepared by
Developer and
Approved by
SASD/Regional San

- Project Specific Sewer Studies
 - Environmental/Financial (Level 1)
 - Master Plan/Specific Plan (Level 2)
 - Subdivision Plan (Level 3)
- Pump Station Design Report
- Improvement Plans

2010 SASD System Capacity Plan Vs Project Maps



Sewer – Regional San



Regional San Existing Interceptors

Sewer – SASD and Regional San

Existing Sewer Facilities

- Bradshaw and Central Interceptors only

Proposed Sewer Facilities

- West Jackson Highway – Master Plan in Review
- Jackson Township – Master Plan in Review
- NewBridge – Approved
- Mather South – Approved; however, may need to amend due to substantial changes to the land use plan

Sewer – EMD

Role of EMD

- Protect Public Health & Environment

EMD Role in the Planning Process

- Evaluate onsite waste water capabilities
 - New Development without public sewer
 - New Development without public water or sewer

Sewer – SASD and EMD

Existing Septic Systems

- Repair Permits Only
 - ✓ 200-foot Rule

Exceptions to 200-foot Rule

- Force Main (pressurized pipe)
- Pumping Required
- Crossing Another Property
- Residential: Twice as Expensive as Septic

Sewer – SASD, Regional San, and EMD

Questions and Comments
15 minutes

Sacramento County Water Agency

Michael Grinstead

Sacramento County Water Agency

What are we talking about today?

Sacramento County Water Agency Water Supply Planning For New Growth Areas

- Planning Documents
- Document Updates
- Project Location
- Water Supplies
- Infrastructure
- Recycled Water

Sacramento County Water Agency

Planning Documents

- Water Supply Master Plan
 - Identifies water demands
 - Describes water sources and facilities
 - Provides financial analysis
 - Broad overview
- Water System Infrastructure Plan
 - Planning and implementation tool
 - In depth facility planning
- Urban Water Management Plan
 - Projects water supply and demand over 25 years in 5-year increments for different water year types (i.e. wet and dry)

Sacramento County Water Agency

Planning Document Updates

- Water Supply Master Plan
 - Requires amendments to include proposed growth areas
 - Draft amendments need Board approval
- Water System Infrastructure Plan
 - Draft is complete and moving through approval process
 - Update supported development of the Master Plan amendments
- Urban Water Management Plan
 - Currently being updated, informed by the Water System Infrastructure update and Master Plan amendments
 - Scheduled for Board approval in June of this year

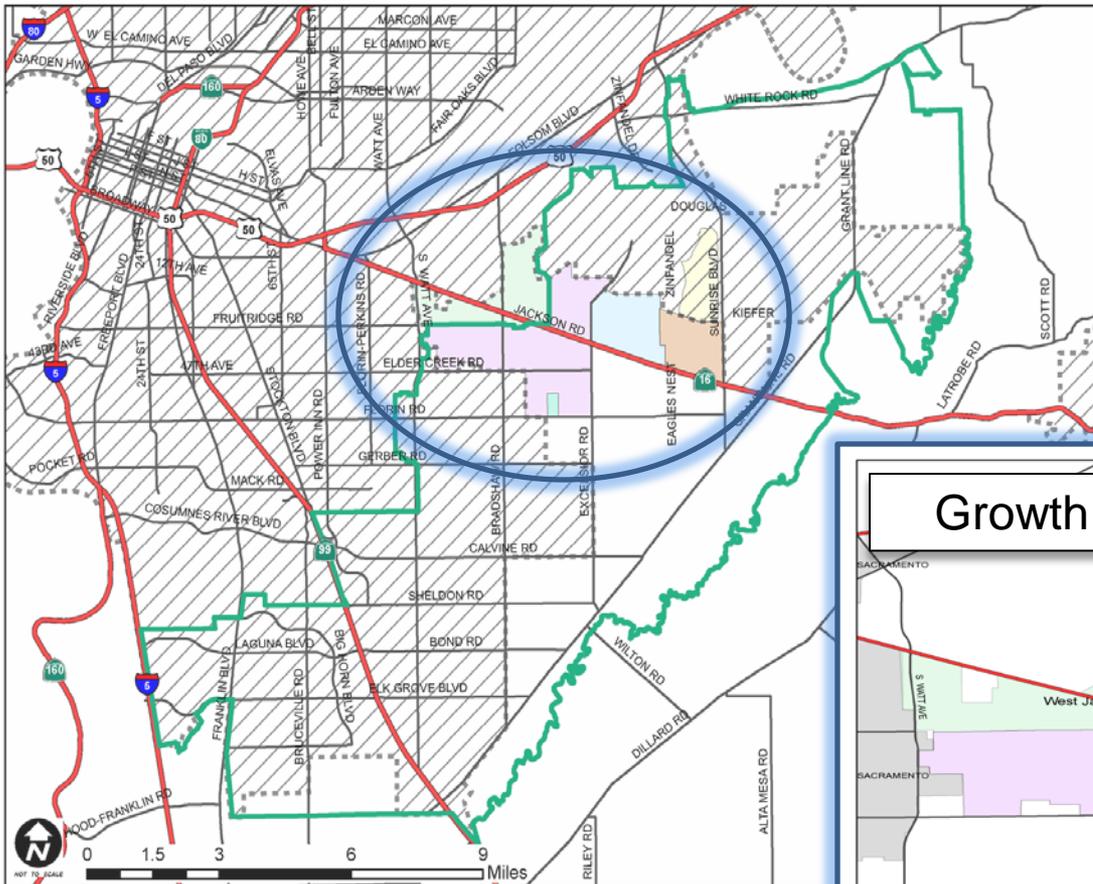
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Planning Document Updates

Water Supply Assessment

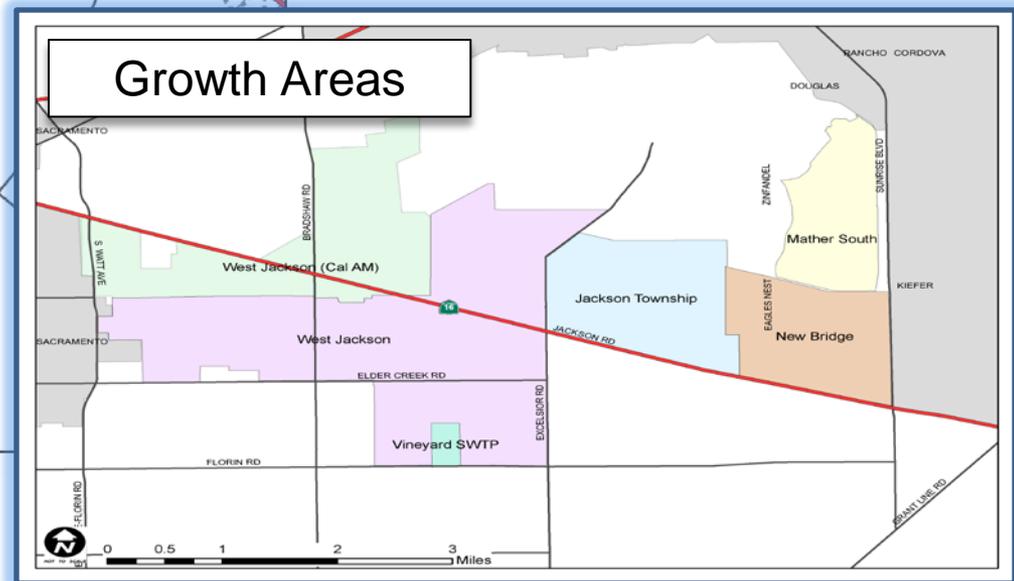
- Shows whether adequate water supply has been planned for each development
- Required by California Water Code
- Uses information from other planning documents
- Will be developed as part of CEQA Process

Sacramento County Water Agency



Planning Area

- Green is Water Agency Boundary
- Hatched area is Urban Policy Area



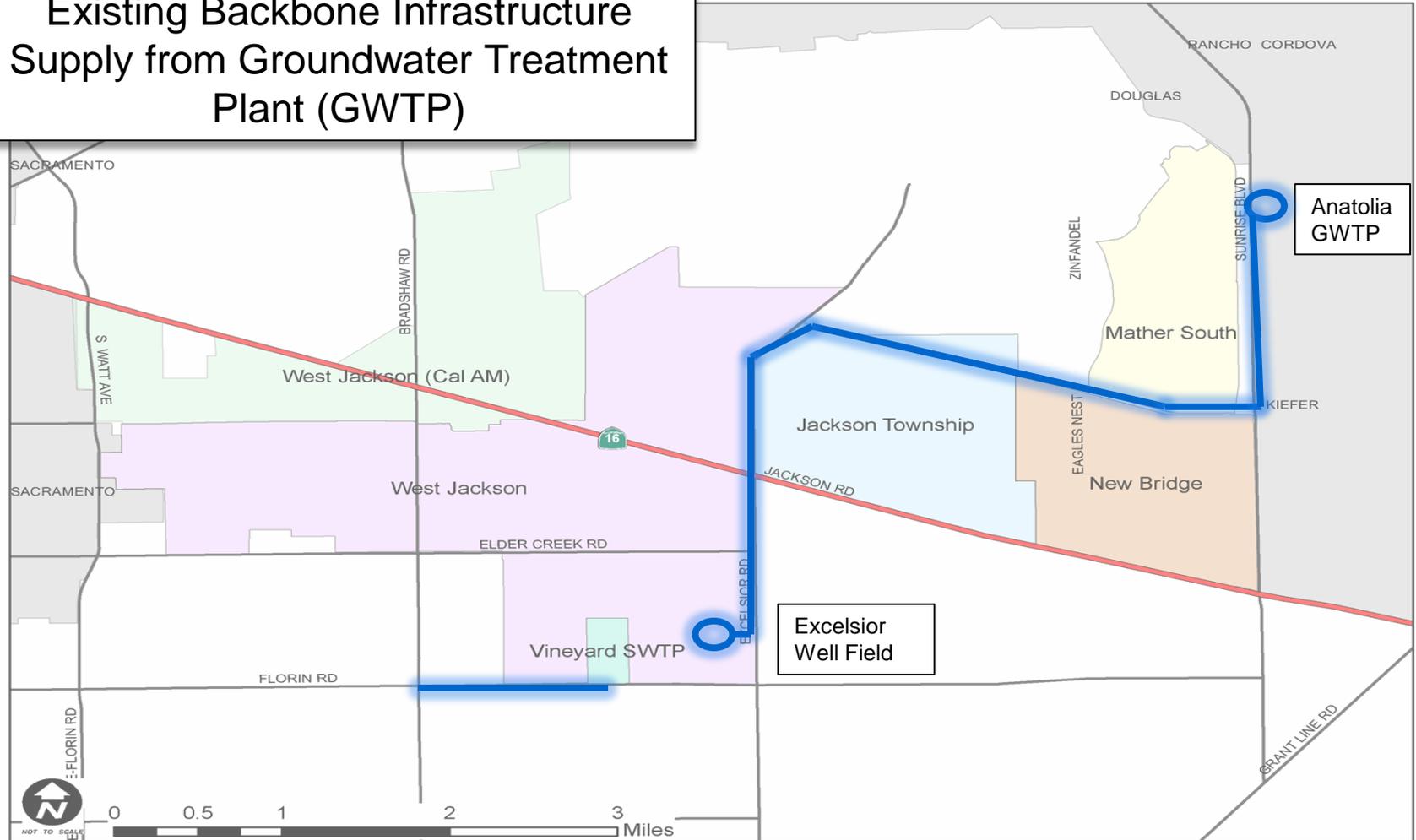
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Water Supplies – Conjunctive Use Program

- Provides for a balance of surface water and groundwater use
- Provides system flexibility to ensure protection of both groundwater and surface water resources
- Provides for reliable water service
- Introduced surface water into basin through the Freeport intake on the Sacramento River treated at the Vineyard treatment plant

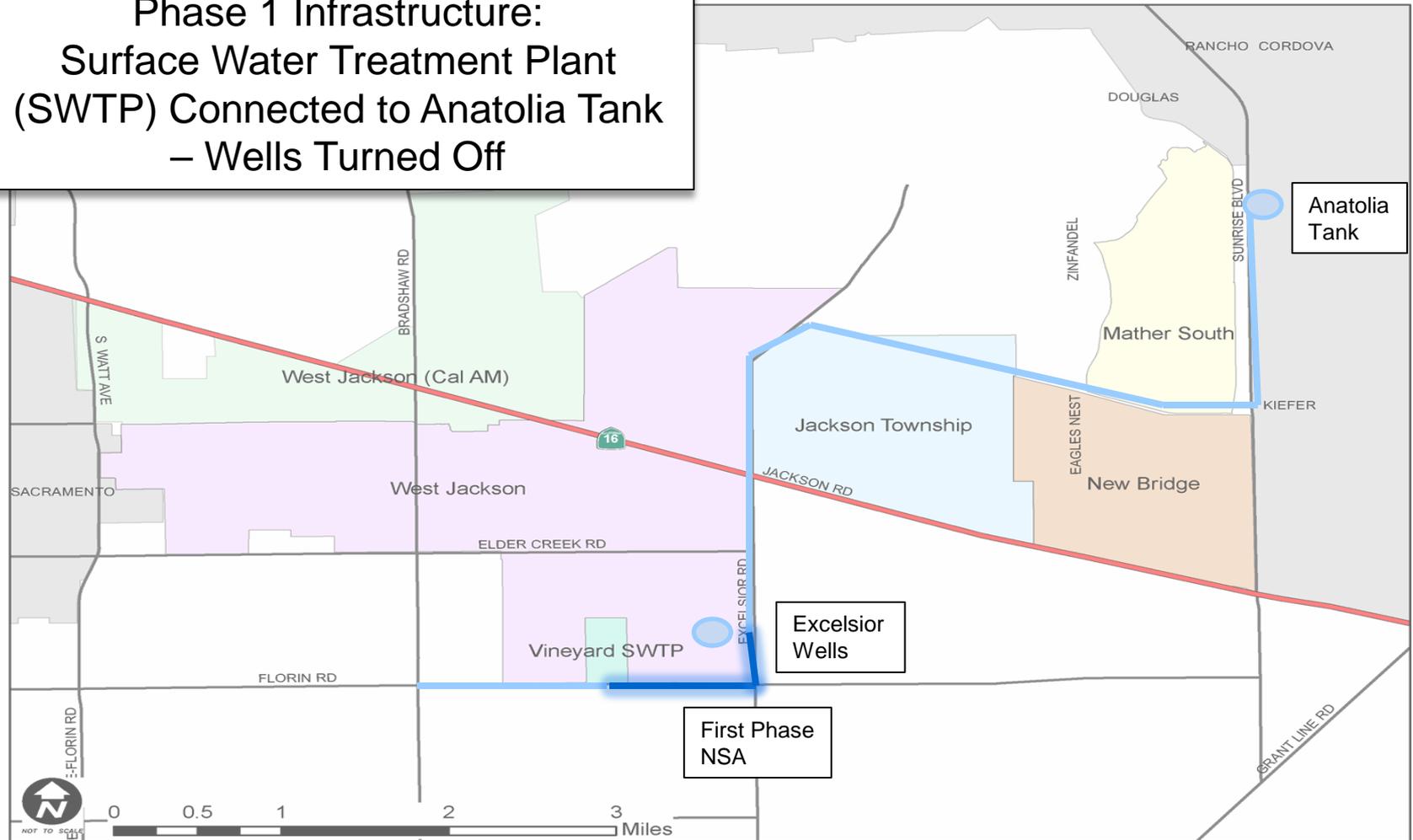
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Existing Backbone Infrastructure
Supply from Groundwater Treatment
Plant (GWTP)



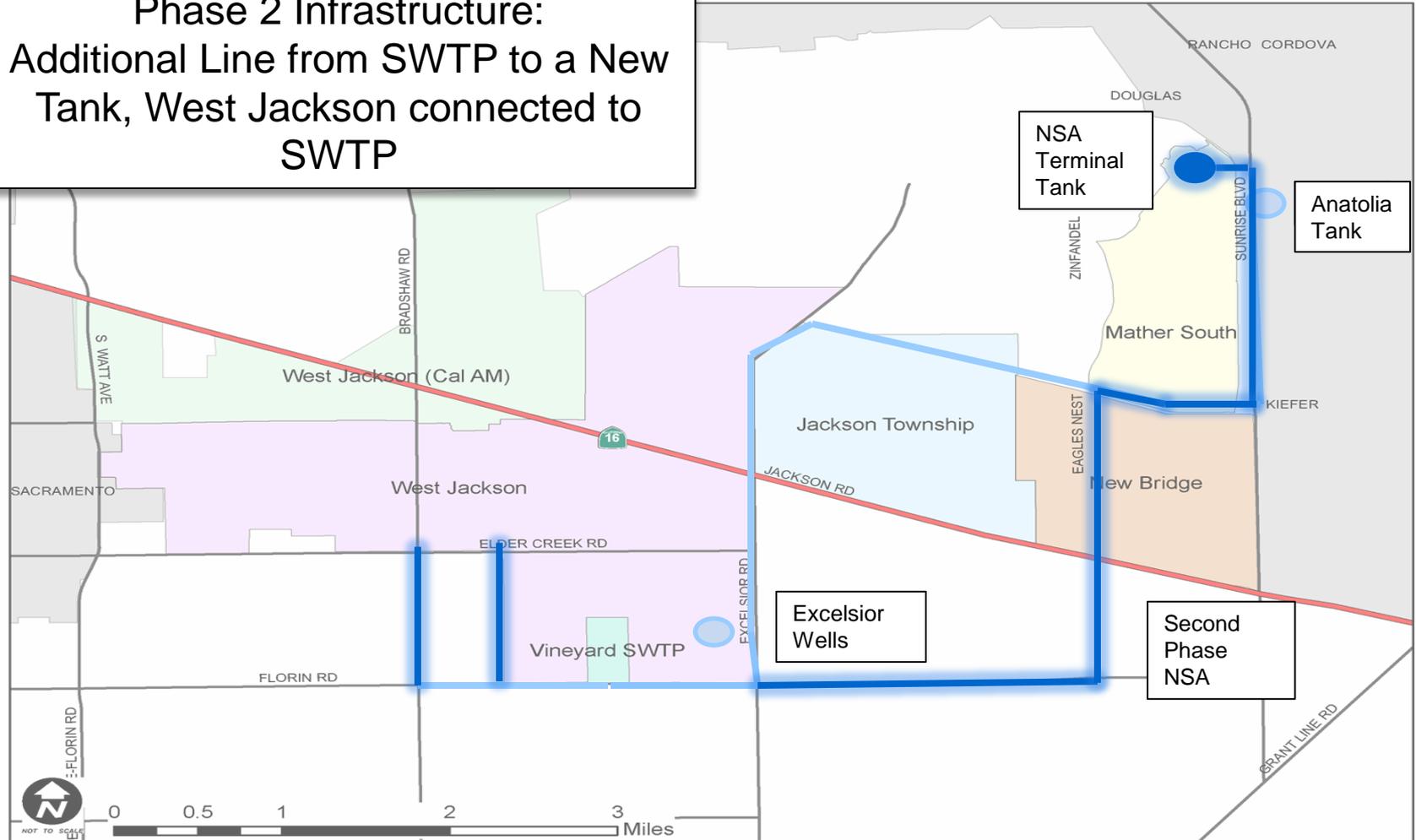
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Phase 1 Infrastructure:
Surface Water Treatment Plant
(SWTP) Connected to Anatolia Tank
– Wells Turned Off

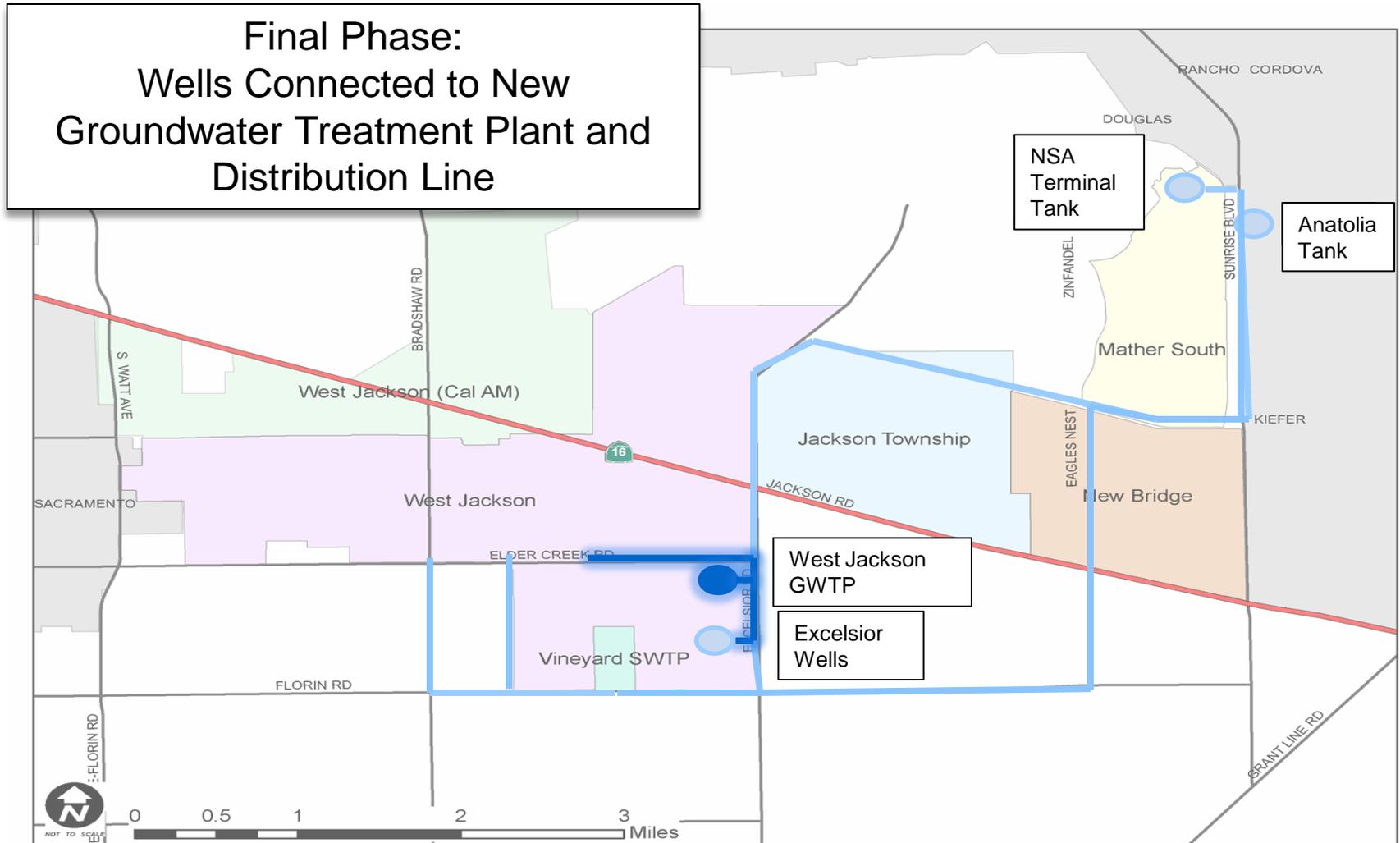


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Phase 2 Infrastructure:
Additional Line from SWTP to a New
Tank, West Jackson connected to
SWTP



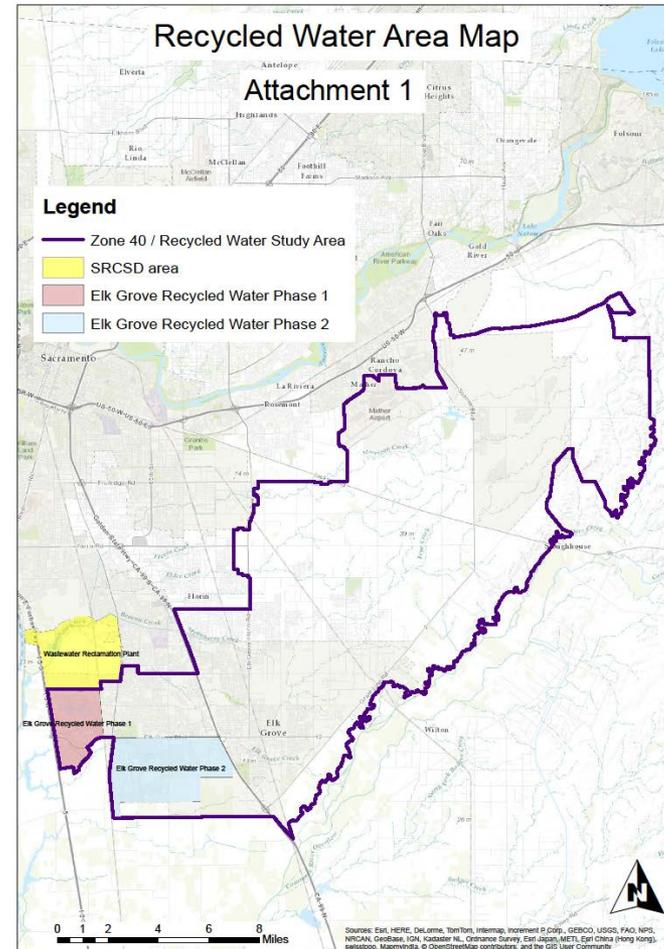
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Recycled Water

- Recycled water is used currently available in the Elk Grove area, which is close to the water recycling treatment facility
- Potential additional uses for recycled water being evaluated in Feasibility Study



SACRAMENTO COUNTY WATER AGENCY
DEPARTMENT OF WATER RESOURCES

1 inch = 2.49 miles

Sacramento County Water Agency

Questions and Comments
15 minutes

Drainage and Flood

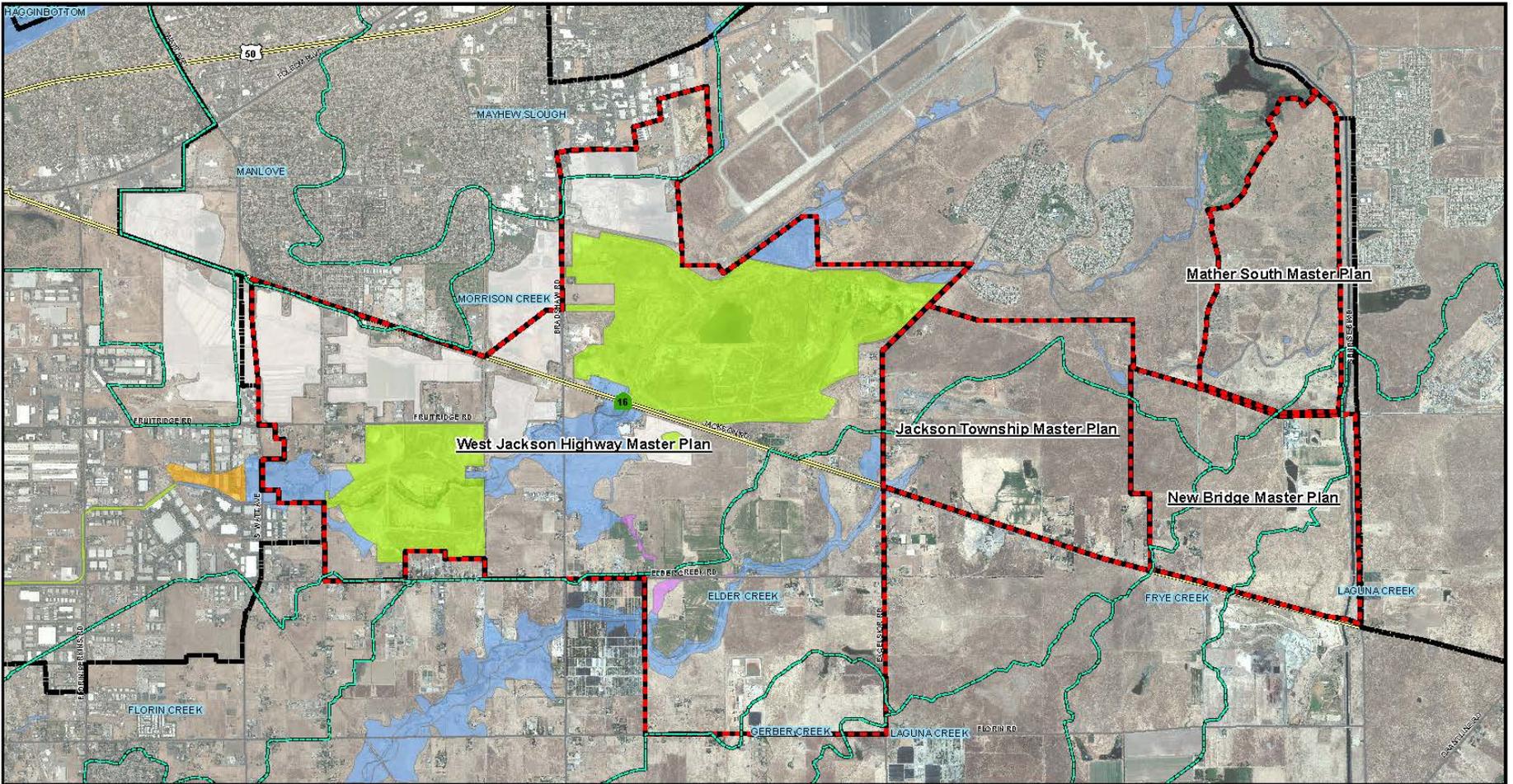
George Booth

Sacramento County Department of Water Resources

Drainage Development and Floodplain Management

Drainage and Floodplain Management

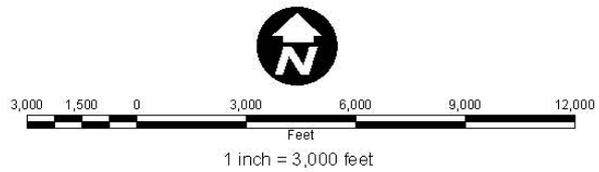
- Rainfall statistics
- Hydrology
- Apply to grading, pipes, channels, basins, pumps
- Local 1:10 year pipe design
- FEMA 1:100 year flood regulations
- State 1:200 year flood regulations
- Climate change



FEMA Floodzone	
	A
	A99
	AE
	AH
	AO
	Proposed Future A Zone

	City Boundary
	Planning Areas
	Watersheds
	Highways
	Major Roads

Date: 8/2/2013



Drainage and Floodplain Management

Computer modeling 'no adverse impact'...

Downstream on Elder Creek

- North Vineyard Station
- Florin Vineyard Gap
- City of Sacramento

Downstream on Laguna Creek

- Vineyard Springs
- City of Elk Grove
- City of Sacramento

Drainage and Floodplain Management

Morison Creek

- Mined areas (West Jackson)
- Realigned creek
- Analysis will include a storm event significantly wetter than the 1:200 year event
- FEMA certification
- Levee maintenance
- Pump stations and basins no adverse impact
- BASH

Drainage and Floodplain Management

Regulations (Regulators) -

- Endangered Species Act (US Fish & Wildlife Service)
- Clean Water Act (US Army Corps of Engineers and CA Water Board)
- Streambed alteration (CA Fish and Wildlife)
- Flood Control (FEMA and Central Valley Flood Protection Board)

Drainage and Floodplain Management

Drainage Master Planning for Development-

- What needs to be built
 - How it fits on the land use plan
- When does it need to be built
 - Phased development plan
- What will it cost to build the trunk drainage
- What will it cost to maintain it

Drainage and Floodplain Management

Questions and Comments
15 minutes

Next Workshop

- May 11, 2016
 - Infrastructure and Municipal Services Planning and Financing Overview

Contacts

Master Plans – Overall Project Management

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Master Plans – Environmental Review

- Cathy Hack, Principal Environmental Analyst: 874-7183;
hackc@saccounty.net

Staff contacts for each project listed in Agenda Handout.