Teichert Shifler Mining and Reclamation Project

Yolo County Board of Supervisors

Tuesday, January 11, 2022

HEARING OVERVIEW

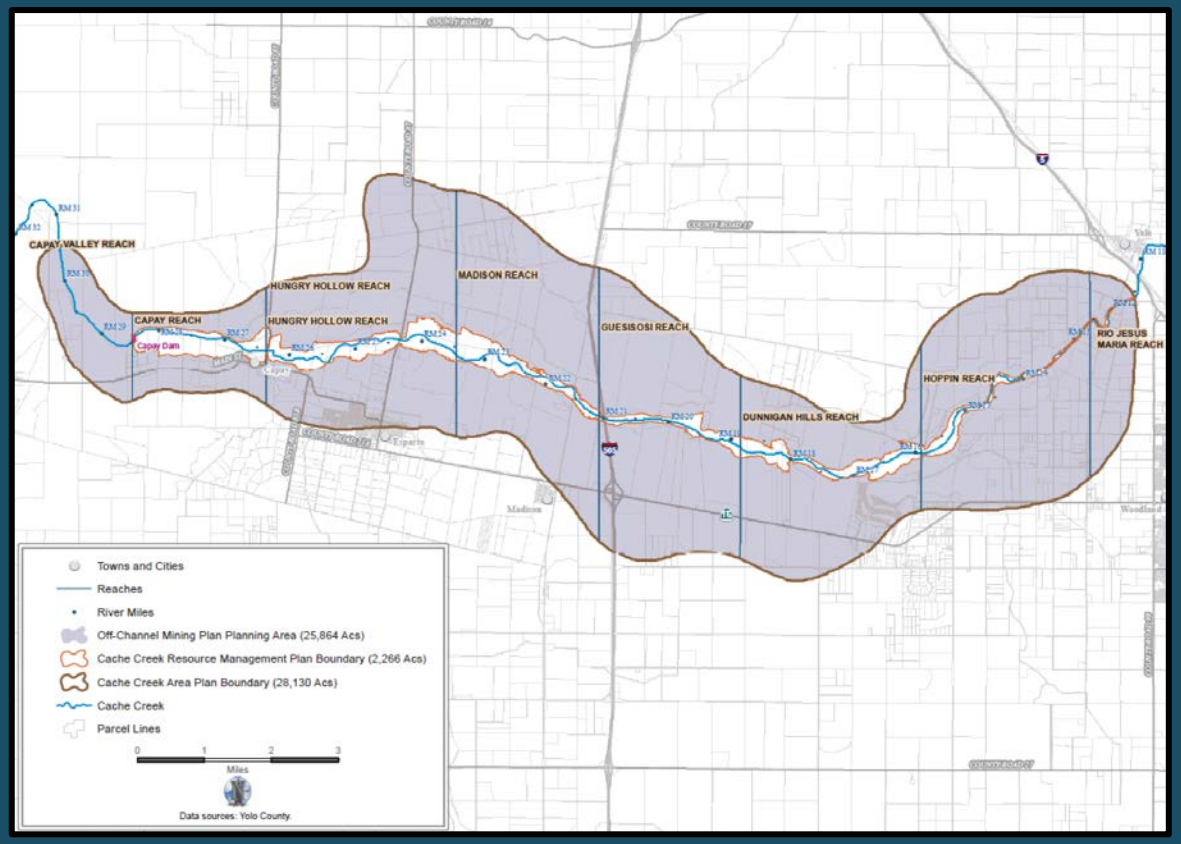
1. Staff Presentation
2. Applicant Remarks
3. Questions from Supervisors
4. Public Hearing
5. Board Discussion
6. Board Action

AGGREGATES

- Sands and gravels
- Most basic construction material
- Concrete; mortar; asphalt; base material
- Per capita demand is 5.7 to 7.6 tons annually
- Average home uses 400 tons of aggregate
- Average school or hospital uses 15,000 tons
- Essential product

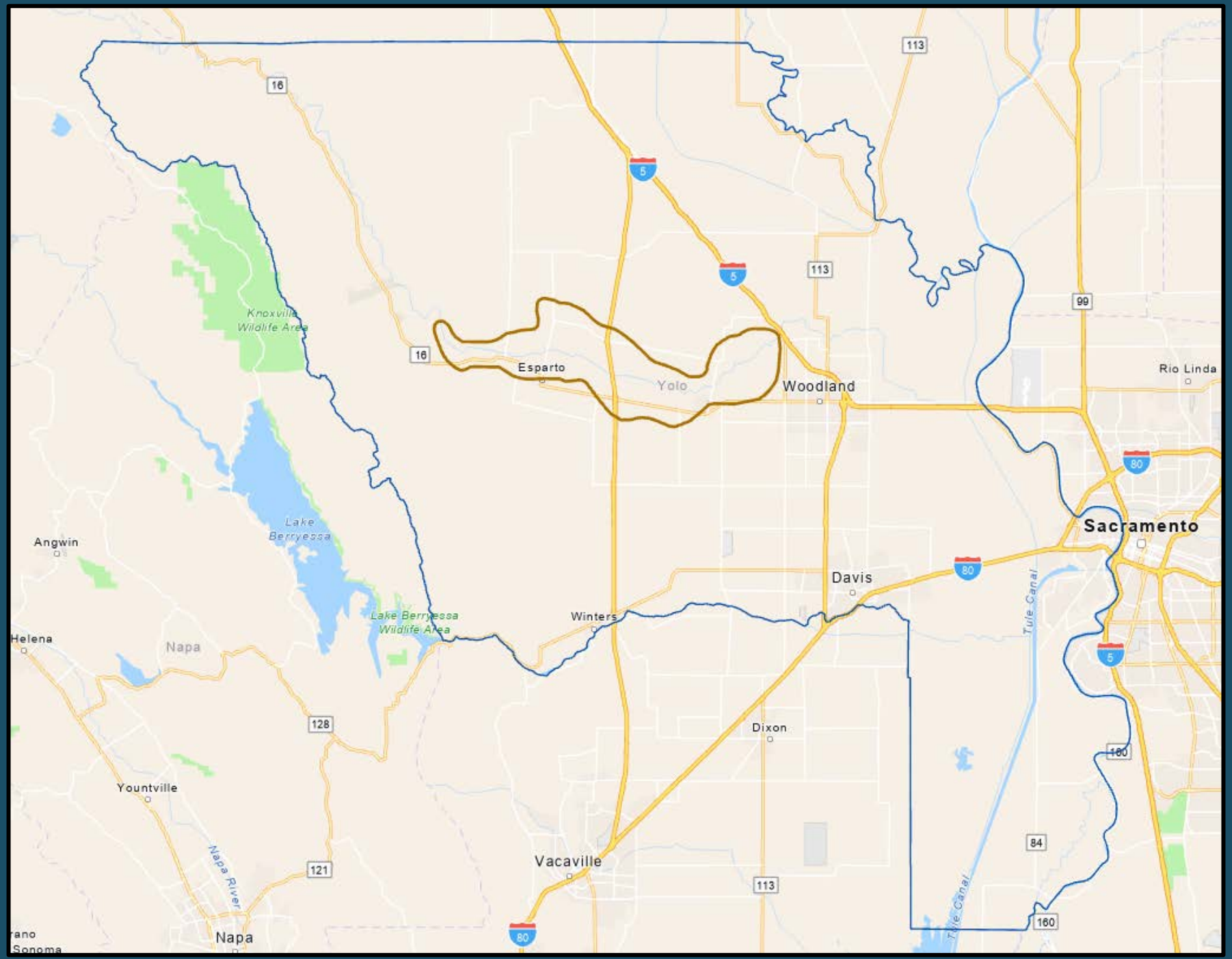
CACHE CREEK AREA PLAN

- State Mandate (SMARA)
- 1995 Technical Studies
- CCAP = CCRMP, CCIP, OCMP, Ordinances
- 1996 Adopted and Public Vote
- Rigorous Regulatory Framework (plans, policies, regulations)
- Adaptive Management – Watershed Focus – Science Based
- 2017 Technical Studies
- 2018 Cache Creek Parkway Plan (Baseline Inventory)
- 2019 Comprehensive CCAP Update
- Balances Priorities/Establishes County Policy
- Best Practices



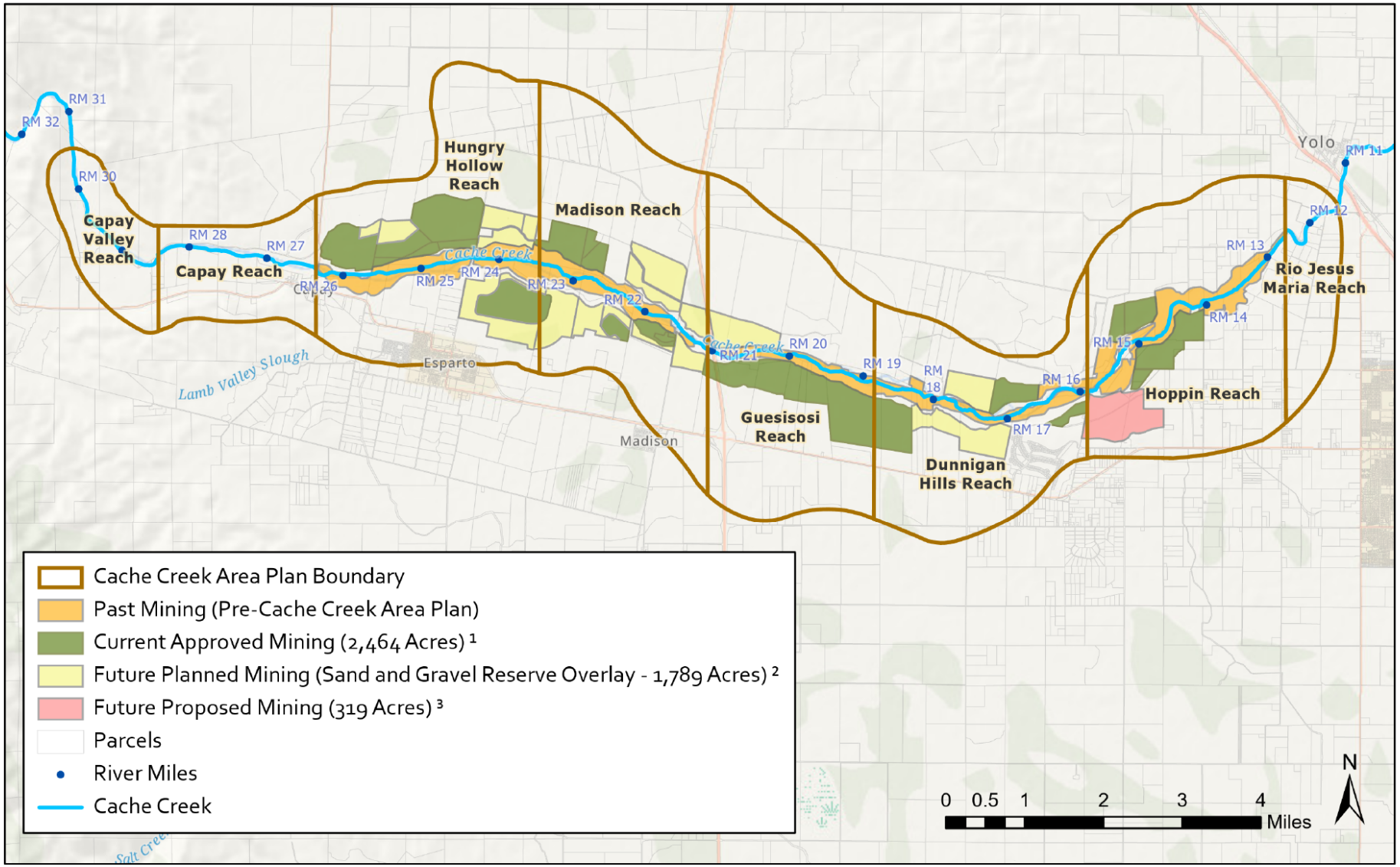
PRIORITIES AND POLICIES

- Ensures local supply of aggregate and local benefit
- Identifies limited areas where mining is allowed
- Eliminated in-channel mining in favor of controlled off-channel mining
- Traded vested rights for conditional use permits
- Establishes reclamation priorities
- Requires agricultural preservation
- Results in creek restoration
- Creates public access, trails, and open space parkway
- Results in economic benefits


16
113
5
5
113
99
16
Esparto
Yolo
Woodland
Rio Linda
Knoxville
Wildlife Area
80
Sacramento
Lake
Berryessa
Angwin
Davis
80
Tule Canal
Lake Berryessa
Wildlife Area
Winters
Helena
Napa
5
128
Dixon
160
Yountville
84
Napa River
121
Vacaville
113
80
160
Napa
Sonoma

Cache Creek Area Plan - Past, Current, and Future Mining

9/17/2020



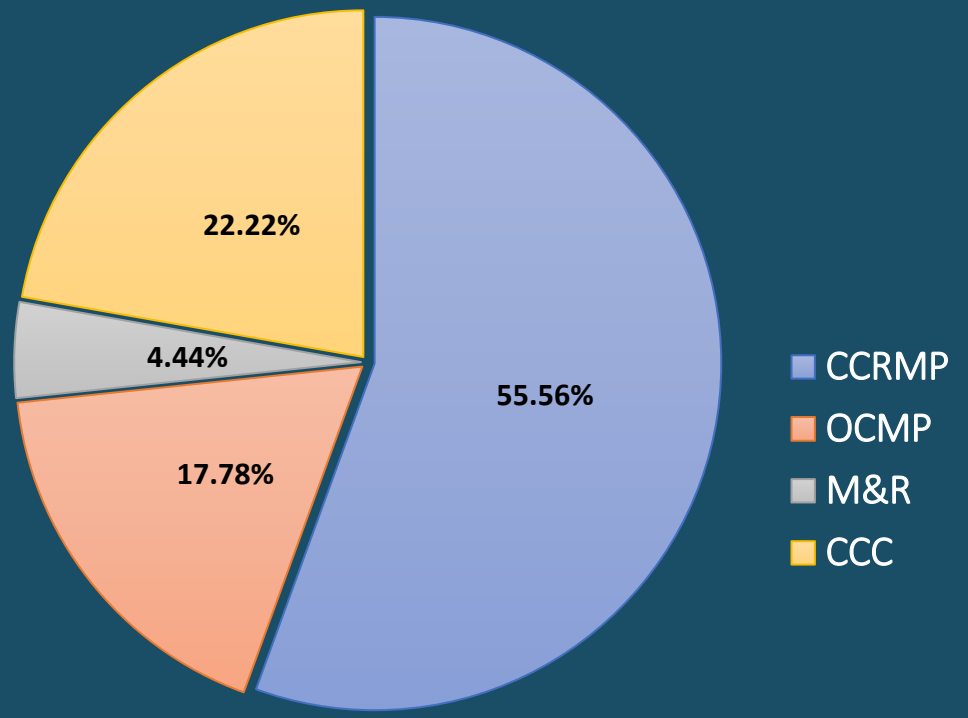
1 Due to minor inaccuracies in the database and polygon boundaries, this total may be overstated by +/- 5 acres.
2 Prior to adoption of the CCAP Update in December 2019, total SGRO zoned acreage was 1,001 acres. With adoption of the CCAP Update, the SGRO was added to an additional 788 acres, for a total of 1,789 acres.
3 This reflects the actual proposed mining acreage in the Teichert Shifler application. An additional +/- 81 acres assumed for rezoning as a part of the CCAP Update represented portions of the Shifler property not ultimately included in the Teichert Shifler application.

Folder: I:\GIS\Projects\Natural Resources\Large Scale Cache Creek Maps\

OCMP Figure 5

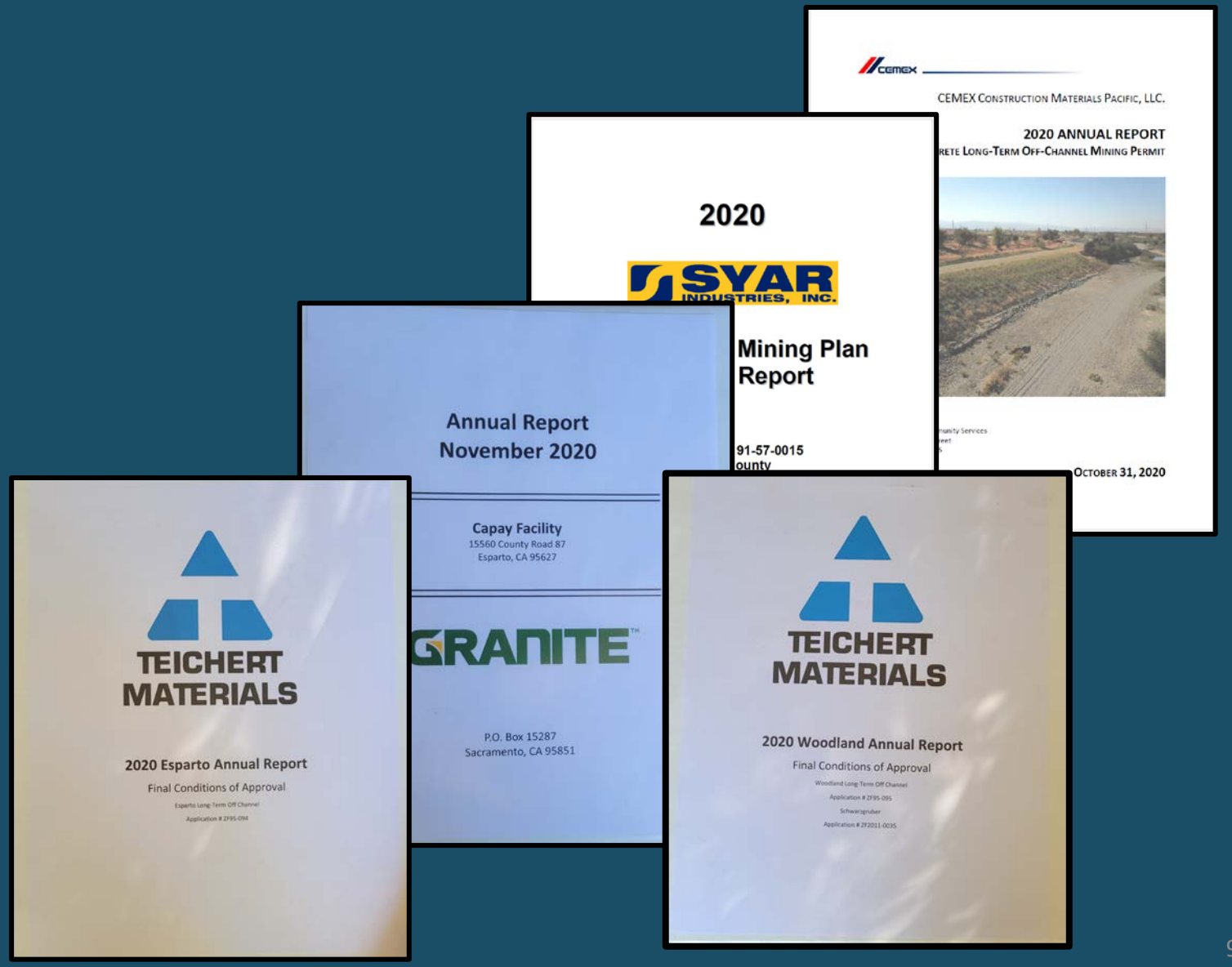
GRAVEL FEE PROGRAM

- Gravel Mining Fee Ordinance (Title 10, Chapter 11)
- Establishes fee schedule based on tonnage sold
- Current fee = $0.643 per ton
- Funds: implementation, monitoring, inspections, administration, habitat restoration, mercury management, parkway operation
- Program and Parkway are 100% self-funded



ANNUAL OPERATOR RESPONSIBILITIES

- Area and tonnage mined
- Water levels every quarter
- Water quality every six months
- Site conditions
- Haul route evaluation
- Verification of flood protection, setback from creek, on-site drainage



ANNUAL COUNTY RESPONSIBILITIES

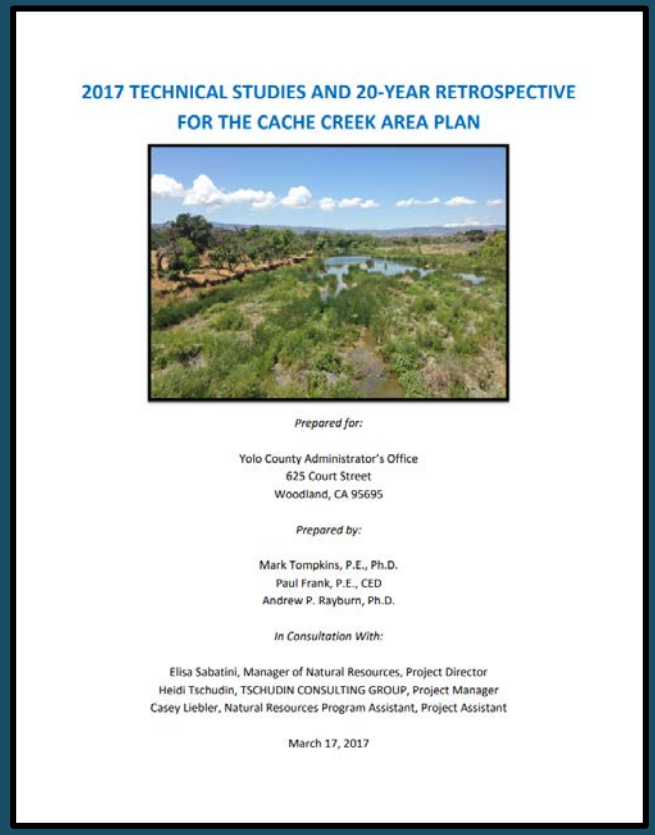
- Inspections of Mining Site and Operations
- Compliance Review of Mining/Reclamation Operations
- Compliance with CEQA Mitigation Measures
- Compliance with Development Agreements
- Compliance with SMARA
- In-Channel Water Quality Testing
- Mercury Conditions

CACHE CREEK TAC RESPONSIBILITIES

- Aerial Survey
- Digital Terrain Model
- Creek Inspection
- Erosion Evaluation
- Biological and Habitat Survey
- Invasive Species Control
- Recommend Restoration and Channel Stability Projects

PROGRAM ADAPTATION
10-YEAR MANDATORY REVIEW

- Review and update of entire program (CCAP)
- Review and update of each mining permit
- Review and update of gravel fees


2017 TECHNICAL STUDIES AND 20-YEAR RETROSPECTIVE
FOR THE CACHE CREEK AREA PLAN

Prepared for:

Yolo County Administrator's Office
625 Court Street
Woodland, CA 95695

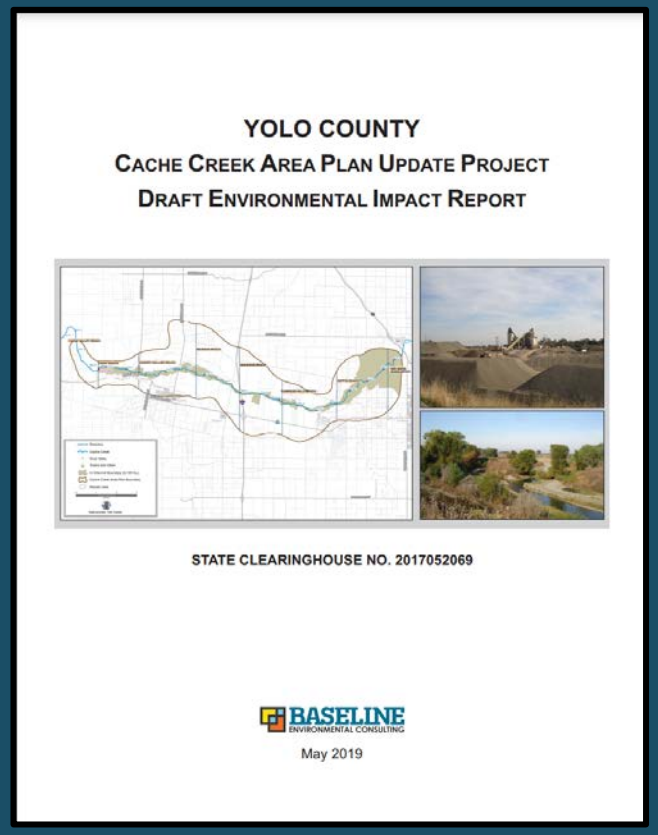
Prepared by:

Mark Tompkins, P.E., Ph.D.
Paul Frank, P.E., CED
Andrew P. Rayburn, Ph.D.

In Consultation With:

Elisa Sabatini, Manager of Natural Resources, Project Director
Heidi Tschudin, TSCHUDIN CONSULTING GROUP, Project Manager
Casey Liebler, Natural Resources Program Assistant, Project Assistant

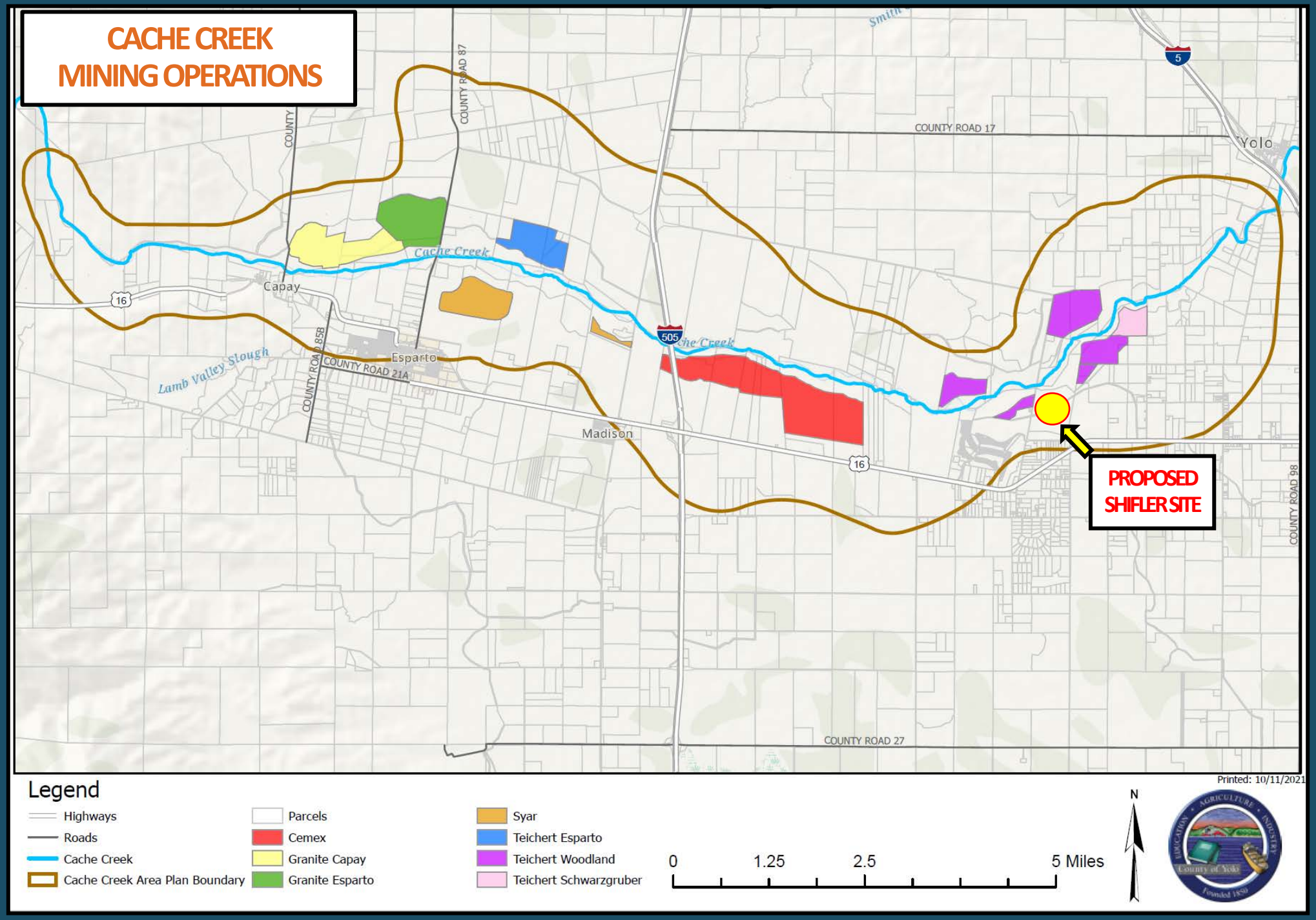
March 17, 2017


YOLO COUNTY
CACHE CREEK AREA PLAN UPDATE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2017052069

BASELINE ENVIRONMENTAL CONSULTING

May 2019


CACHE CREEK
MINING OPERATIONS
COUNTY ROAD 87
COUNTY ROAD 17
Yolo
Cache Creek
Capay
16
505
Esparto
COUNTY ROAD 85B
COUNTY ROAD 21A
Lamb Valley Slough
Madison
PROPOSED
SHIFLER SITE
COUNTY ROAD 98
COUNTY ROAD 27
Printed: 10/11/2021
Legend
Highways
Roads
Cache Creek
Cache Creek Area Plan Boundary
Parcels
Cemex
Granite Capay
Granite Esparto
Syar
Teichert Esparto
Teichert Woodland
Teichert Schwarzgruber
0
1.25
2.5
5 Miles
N

APPROVED RECLAMATION

Operation	Total Acreage	Agriculture	Habitat	Recreation + Open Space	Other Uses
CEMEX	716 acres	476 acres	61 acres	153 acres	26 acres
Granite Capay	312 acres	121 acres	60 acres	127 acres	4 acres
Granite Esparto	313 acres	112 acres	44 acres	157 acres	0 acres
Syar	248 acres	46 acres	60 acres	142 acres	0 acres
Teichert Esparto	149 acres	0 acres	31 acres	98 acres	20 acres
Teichert Woodland	252 acres	115 acres	16 acres	93 acres	28 acres
Teichert Schwarzgruber	41 acres	0 acres	8 acres	32 acres	0 acres
Totals	**2,031 acres**	**870 acres**	**281 acres**	**802 acres**	**78 acres**
Teichert Shifler **(proposed)**	320 acres	120 acres	88 acres	91 acres	21 acres

RECENT TECHNICAL REPORTS

bae urban economics

Aggregate Mining Economic Analysis

Prepared for Yolo County

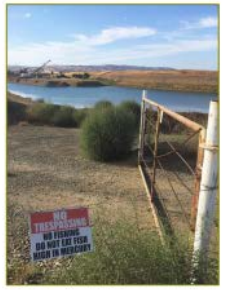
June 30, 2021

CACHE CREEK OFF-CHANNEL AGGREGATE MINING PONDS – 2018 MERCURY MONITORING

Final Report
May 2020

Monitoring and Report by

Darell G. Slotton, Ph.D.*
and
Shaun M. Ayers



* (530) 574-3491
dgslotton@gmail.com

HOUSE
AGRICULTURAL
CONSULTANTS

Providing expertise in agricultural science, management, & appraisal since 1977

Assessment of Reclamation of Mined Lands to Agriculture under the Yolo County CCAP

Gregory A. House & Henry House

House Agricultural Consultants
1105 Kennedy Place, Suite 1
Davis, California 95616
+1 530 753 3361
www.houseag.com

CACHE CREEK PARKWAY PLAN

- 15-mile Parkway
- 2,000 acres of open space and habitat
- Future public access
- 500 acres dedicated since 1999
- 400 acres within next 5 years
- Over 1,100 acres still to come

CACHE CREEK PARKWAY PROPERTIES

CAPAY OPEN SPACE PARK

WILD WINGS OPEN SPACE PARK

CACHE CREEK PARKWAY PROPERTIES

CACHE CREEK NATURE PRESERVE

GRANITE WOODLAND REIFF

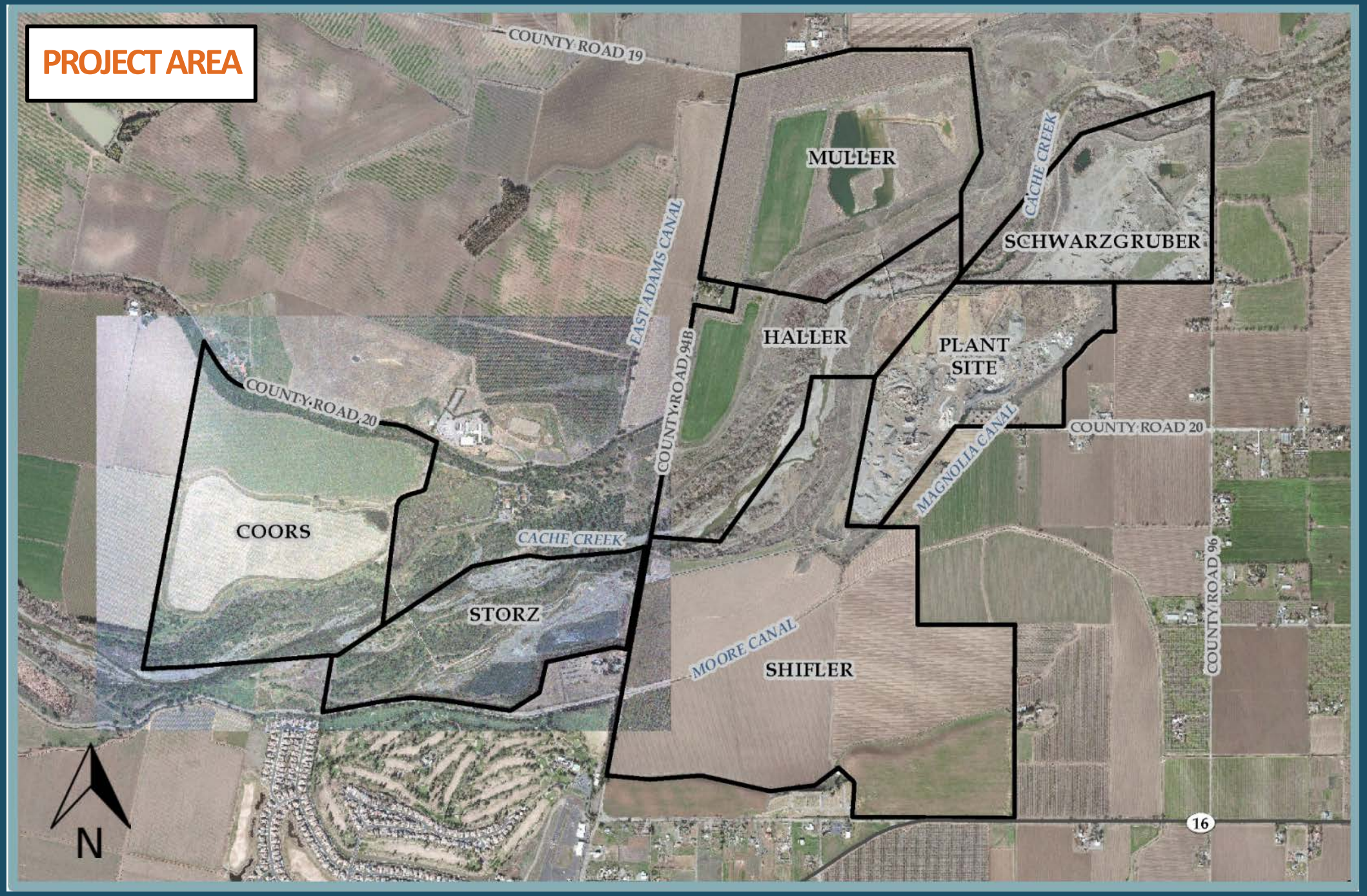
CACHE CREEK PARKWAY PROPERTIES

RODGERS

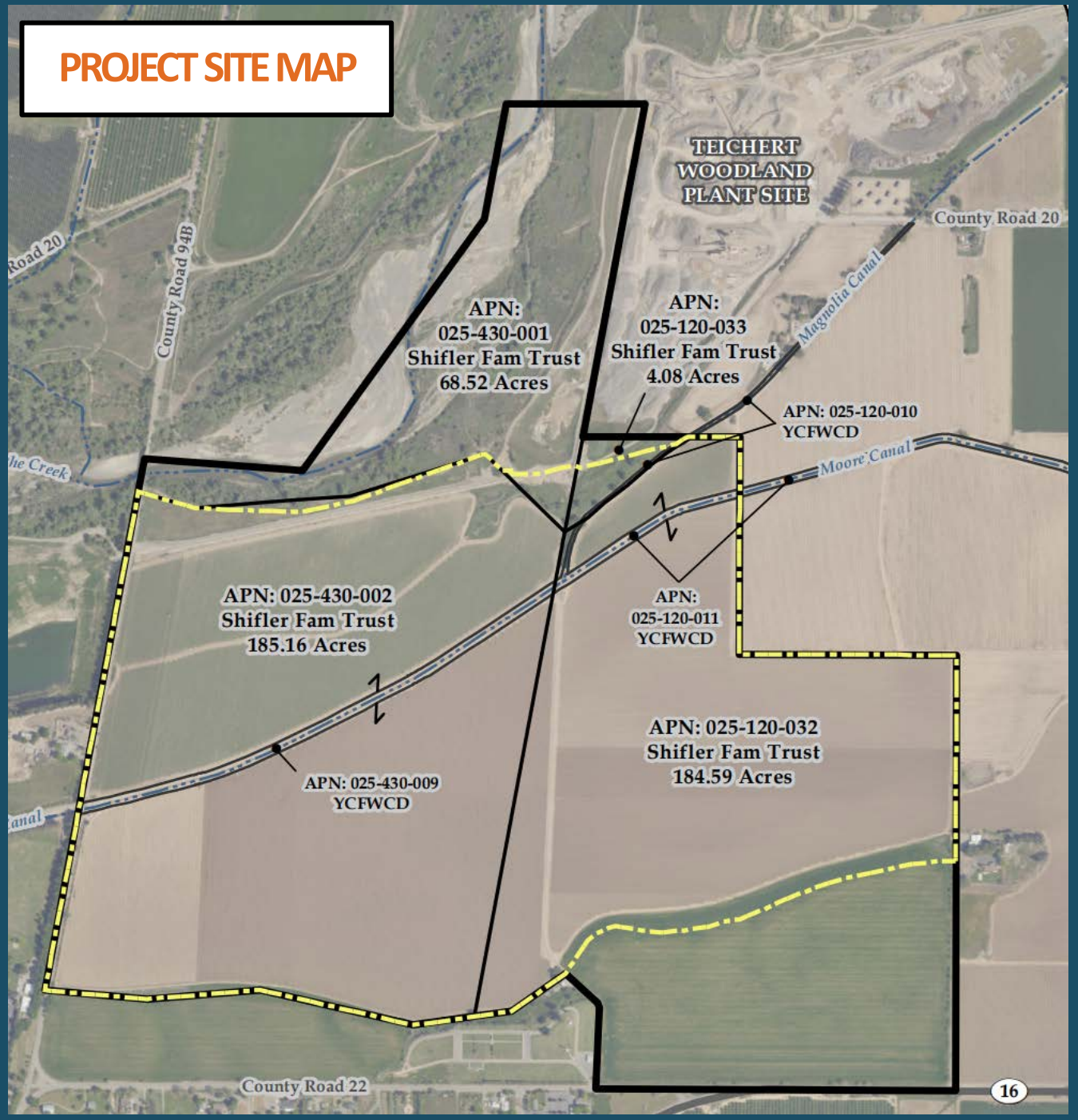
CORRELL

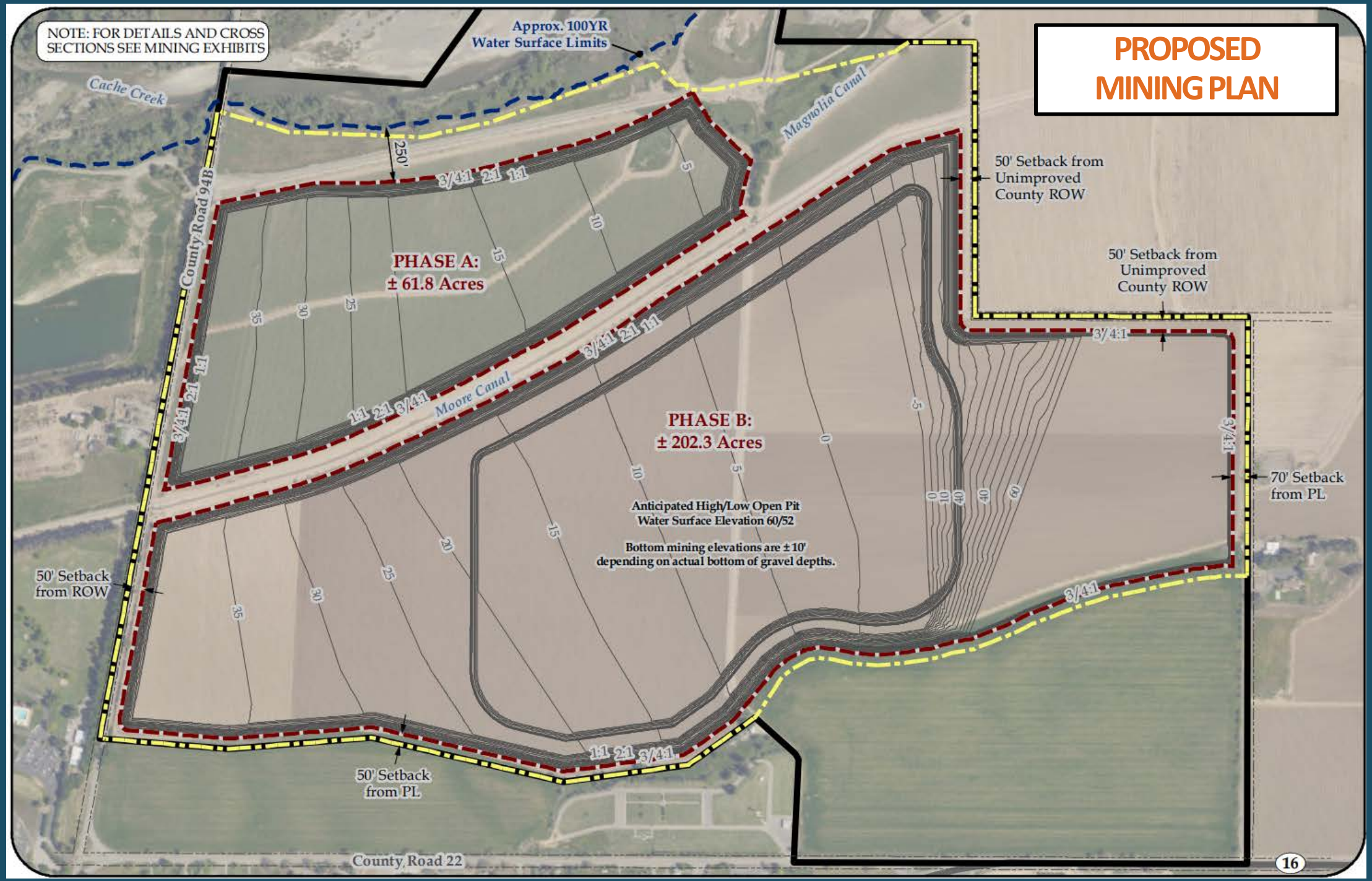
TEICHERT SHIFLER PROJECT

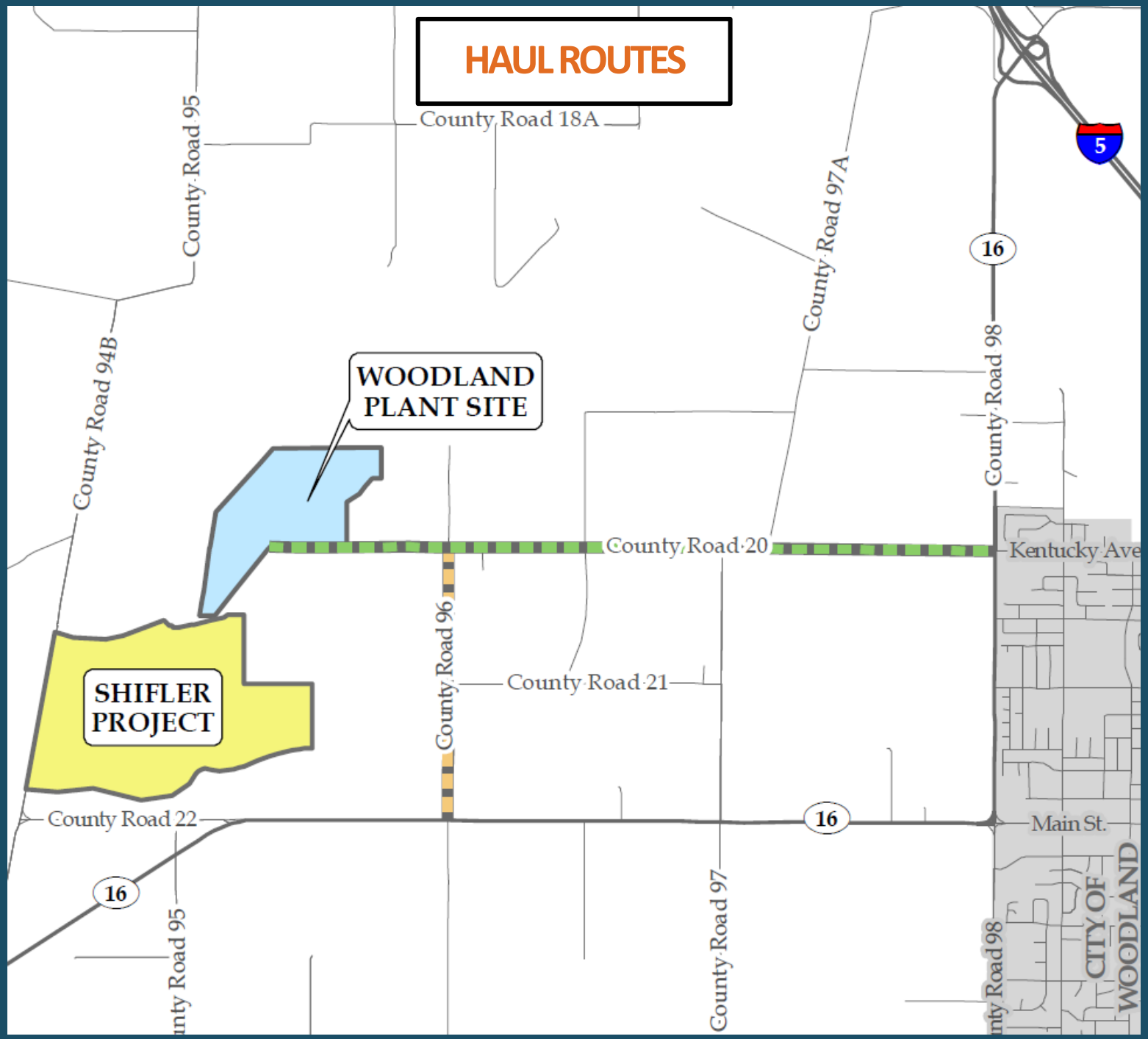
Component	Recommended
Mining Area	264 acres
Reclamation Area	319 acres
Reclamation Uses	Agriculture, Lake, Habitat
Total Tonnage	35.4 mil tons mined
Maximum Annual Tonnage	2.12 mil tons mined/year
Permit Term	30 years
Mining Depths	40 to 110 feet
20% Market Exceedance?	No
Creek Buffer	250 feet minimum
Canal Relocation?	No
Haul Route and Hours of Operation	No change from existing


PROJECT AREA
COUNTY ROAD 19
MULLER
CACHE CREEK
SCHWARZGRUBER
EAST ADAMS CANAL
COUNTY ROAD 94B
HALLER
PLANT SITE
COUNTY ROAD 20
MAGNOLIA CANAL
COUNTY ROAD 20
COORS
CACHE CREEK
STORZ
MOORE CANAL
SHIFLER
COUNTY ROAD 96
16
N

PROJECT SITE MAP




NOTE: FOR DETAILS AND CROSS SECTIONS SEE MINING EXHIBITS
Approx. 100YR Water Surface Limits
Cache Creek
Magnolia Canal
250'
County Road 94B
3/4:1 2:1 1:1
PHASE A:
± 61.8 Acres
Moore Canal
1:1 2:1 3/4:1
PHASE B:
± 202.3 Acres
Anticipated High/Low Open Pit Water Surface Elevation 60/52
Bottom mining elevations are ± 10' depending on actual bottom of gravel depths.
50' Setback from Unimproved County ROW
50' Setback from Unimproved County ROW
3/4:1
70' Setback from PL
50' Setback from ROW
50' Setback from PL
County Road 22
16
PROPOSED MINING PLAN


HAUL ROUTES
County Road 18A
County Road 95
County Road 94B
County Road 97A
16
5
County Road 98
WOODLAND
PLANT SITE
County Road 20
Kentucky Ave
County Road 96
County Road 21
SHIFLER
PROJECT
County Road 22
16
Main St.
16
County Road 95
County Road 97
County Road 98
CITY OF
WOODLAND

HAUL ROUTE AND OPERATING HOURS

Haul Route (since 1996)

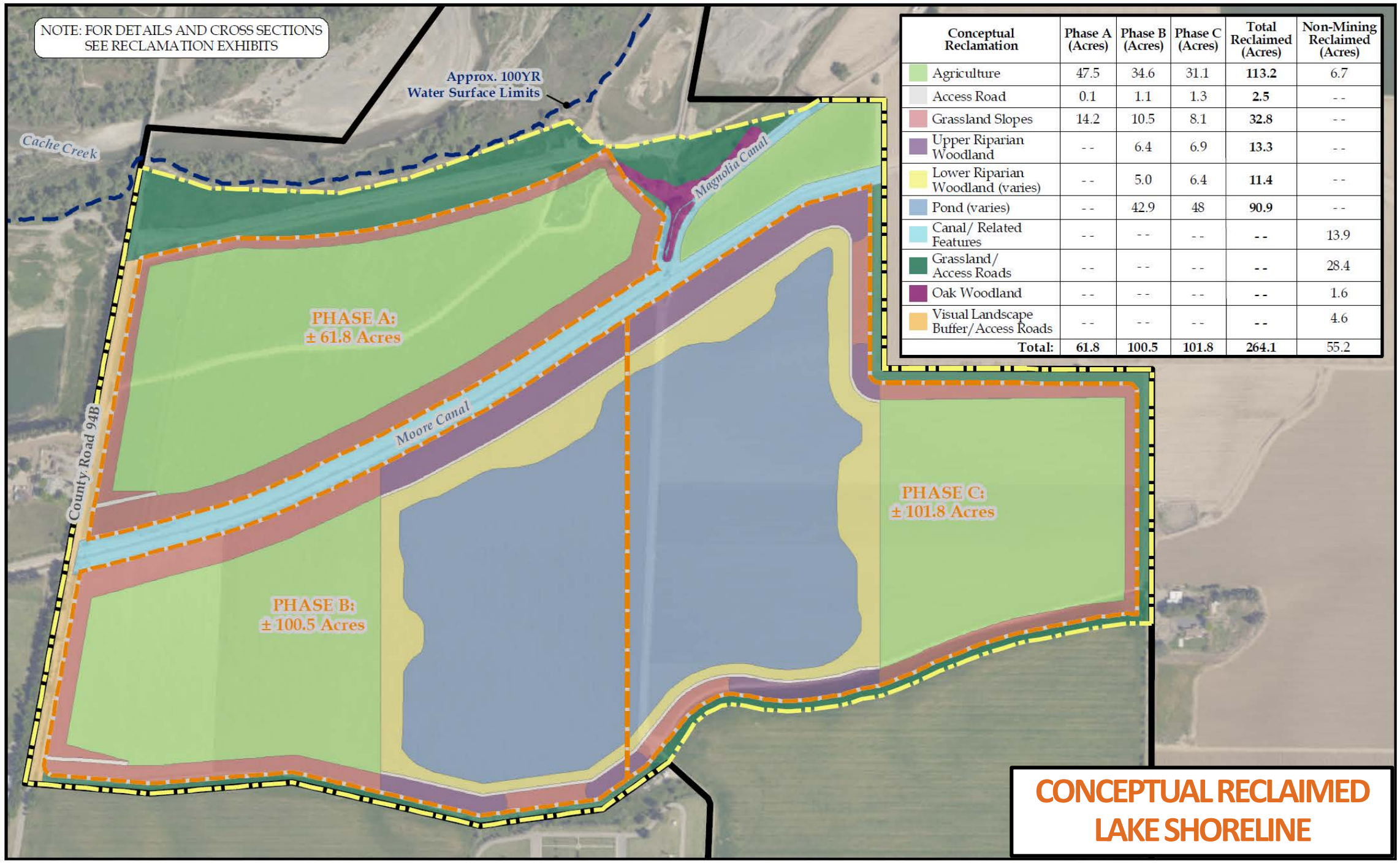
- East on CR 20 to CR 98/SR 16 north to I-5

  and/or

- South on CR 96 to SR 16 west to I-505

Operating Hours (since 1996)

- 6 a.m. – 6 p.m. Mon-Sat (mining)
- 6 a.m. – 6 p.m. Mon-Fri (plant)
- August to October
  - 6 a.m. – 10 p.m. Mon-Fri
  - 6 a.m. – 6 p.m. Sat/Sun
- 24-hours (as needed to meet contracts)



Conceptual Reclamation	Phase A (Acres)	Phase B (Acres)	Phase C (Acres)	Total Reclaimed (Acres)	Non-Mining Reclaimed (Acres)
Agriculture	47.5	34.6	31.1	**113.2**	6.7
Access Road	0.1	1.1	1.3	**2.5**	- -
Grassland Slopes	14.2	10.5	8.1	**32.8**	- -
Upper Riparian Woodland	- -	6.4	6.9	**13.3**	- -
Lower Riparian Woodland (varies)	- -	5.0	6.4	**11.4**	- -
Pond (varies)	- -	42.9	48	**90.9**	- -
Canal/ Related Features	- -	- -	- -	**- -**	13.9
Grassland/ Access Roads	- -	- -	- -	**- -**	28.4
Oak Woodland	- -	- -	- -	**- -**	1.6
Visual Landscape Buffer/Access Roads	- -	- -	- -	**- -**	4.6
Total:	**61.8**	**100.5**	**101.8**	**264.1**	55.2

CONCEPTUAL RECLAIMED LAKE SHORELINE

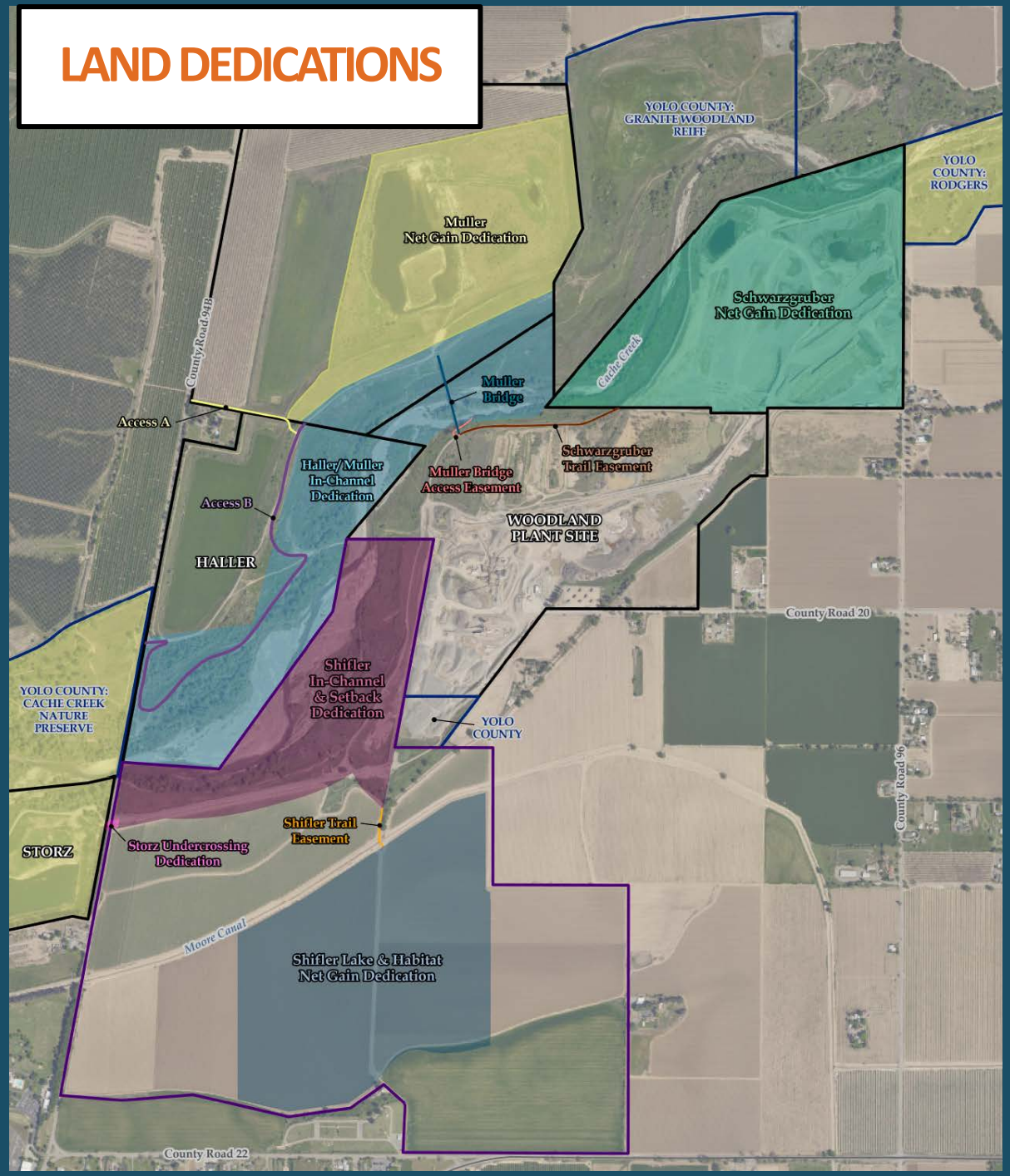
SHIFLER LAKE
EAST BANK RENDERING

SHIFLER LAKE
NORTH BANK RENDERING

DEVELOPMENT AGREEMENT
PUBLIC BENEFIT ITEMS ("NET GAINS")

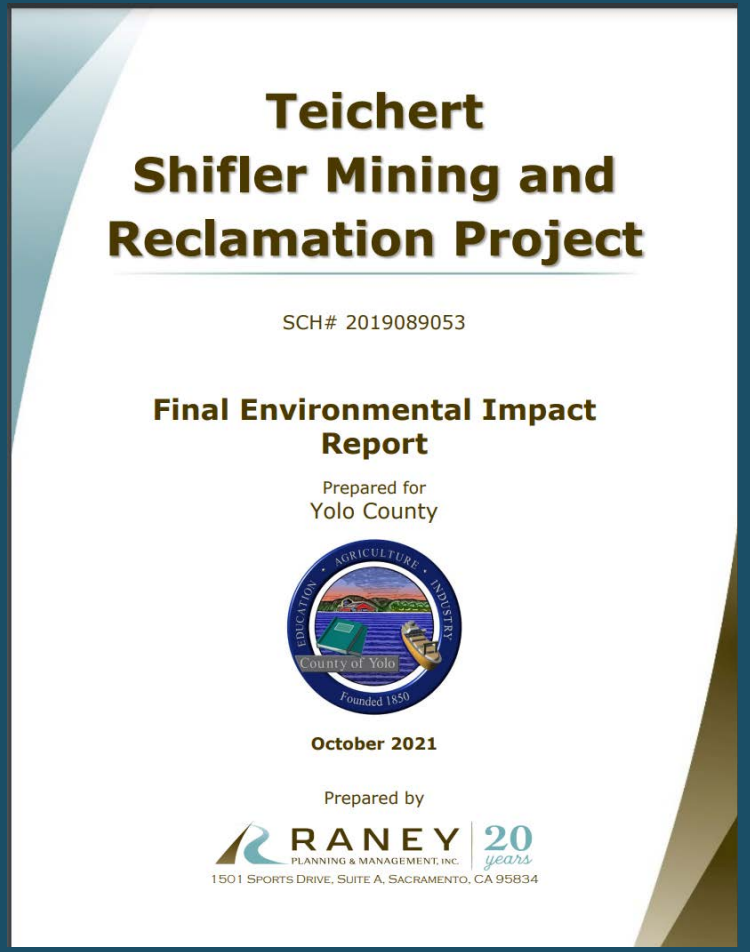
- In-Channel Maintenance – Bar Skimming (CR 87 to I-505; approx. 3 miles)
- Property Dedications
  - Shifler Lake
  - Shifler In-Channel
  - Schwarzgruber
- Cash Donations to Nature Preserve and Parkway Plan
- Safe Pedestrian Crossing of CR 94B for Trail Connection
- Woodland Plant as Sales Tax Place of Sale
- Early Dedication of Teichert In-Channel Haller/Muller
- Enhanced Reclamation of County Borrow Site Property
- Future Trail from Muller Bridge to Schwarzgruber Property
- Removal of Restrictions on Muller Access "B"

LAND DEDICATIONS



ENVIRONMENTAL IMPACT REPORT

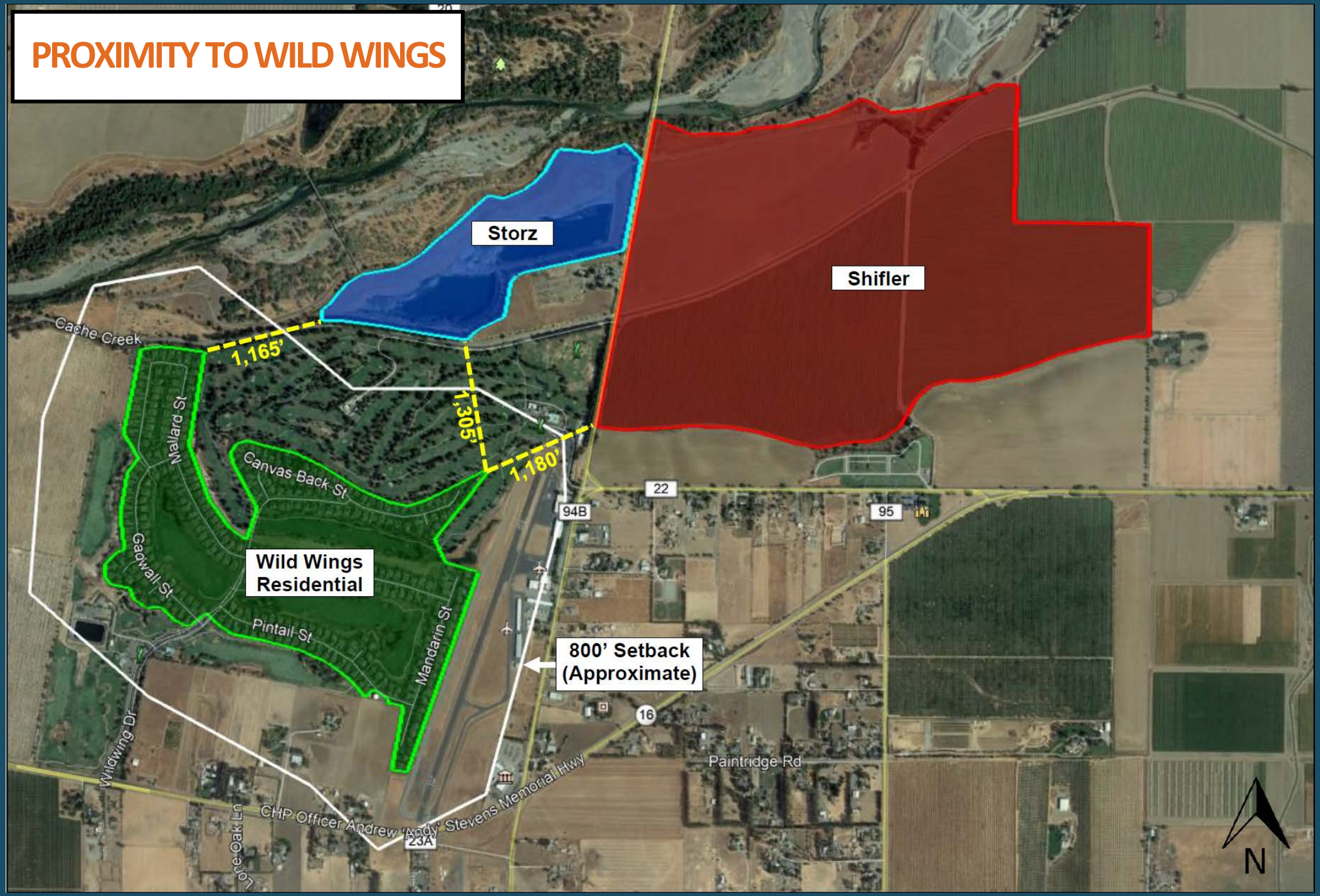
- Draft EIR Released – December 11, 2020
- Final EIR Released – October 15, 2021
- 6 Project Alternatives
- 4 Unavoidable Impacts
- 5 Master Responses
  - Merits of the Project
  - Property Values
  - Transportation and Circulation
  - Hydrology and Water Quality
  - Agricultural Concerns



KEY ISSUES RAISED IN COMMENTS

- Wild Wings
  - Proximity
  - Property Values
  - Disclosures
- Agricultural Resources
- Sustainability and Climate Change
- Mercury
- Water Quality and Quantity
- Tribal Cultural Resources
- Liability and Accountability

PROXIMITY TO WILD WINGS



TRAFFIC AND CIRCULATION

- Truck trips
- Haul route maintenance and improvements
- Widen CR 96 from CR 20 to SR 16
- Fair share for signal at SR 16 and Wild Wings

AGRICULTURAL RESOURCES

- General Plan and CCAP constrain mining acreage
- Analyzed in CCAP Update EIR
- Project will impact 258 acres of farmland
- Reclamation of a minimum of 113 acres to agriculture
- Permanent protection of a minimum of 145 acres of farmland
- Dedication of 212 acres of additional Parkway land as “equivalent” net gains

SUSTAINABILITY AND CLIMATE CHANGE

- Consistent with General Plan
- Consistent with Climate Action Plan
- Consistent with CEQA (Section 15183.5(b))
- Consistent with CCAP Update Final EIR
- Local Source of Gravel
- Incentives for Recycling
- Reductions in Numbers of Aggregate Plants
- Electric Conveyor System
- Woodland Plant Upgrades
- Woodland Plant Recycling Program
- Proximity to Market
- Vehicle Fleet Conversion
- Project-Level GHG Reduction Plan (MM 4.3-7)
- Electric Vehicle Charging Plan (MM 4.3-8)
- Applicant Green Energy Portfolio Practices and Commitments (Appendix I, Final EIR)
- 100% Renewable Energy (VCE) at Woodland Plant and Facilities by 2026

WATER QUALITY AND QUANTITY

- Required Monitoring and Reporting
  - Water Levels 4x per year
  - Water Quality 2x per year
- Over 40 years of Site-Specific Monitoring and Reporting
- Six Technical Reports Prepared for Project
- No evidence of Significant Impact to Water Levels or Quality

WATER USE COMPARISON

Site	Total Acres	Acre Feet/Year	AF/Year/Acre
Teichert Esparto - Current	148 acres	470 AF	3.17 AF
Teichert Schwarzgruber - Current	133 acres	723 AF	5.4 AF
Shifler - Current (Agricultural Water Use)	319 acres (265 farmed acres)	530-795 AF	2.0-3.0 AF
Total current groundwater use: 10.57 to 11.57 AF/acre			
Shifler – Proposed (Mining Use)	319 acres (262 mined acres)	1,910 AF	6.0 AF

TRIBAL CULTURAL RESOURCES

- CEQA Coordination
- Cultural Resources Assessment and Peer Review
- Tribal Cultural Resources Consideration and Field Testing
- Tribal Consultation
- Tribal Monitoring Agreement
- Operator Awareness Training

LIABILITY AND ACCOUNTABILITY

- Permit and regulatory compliance required and verified during operation and reclamation
- Applicant responsibility longer for some issues (e.g., mercury monitoring)
- Liability for contamination, negligence, or illegal behavior may be longer
- County indemnified through Development Agreements
- Due diligence period for all dedications
- Annual financial guarantees required for reclamation

MERCURY

- Known existing condition
- Mercury concerns are statewide and watershed-wide
- CCAP ended commercial mining in-channel
- CCAP protects humans and wildlife
- CCAP allows for new habitat and open space
- CCAP monitoring requirements (County Code Section 10-5.517)
- Mercury concerns pre-exist aggregate mining
- Under CCAP aggregate mining does not cause significant impacts related to mercury
- Maintenance and Remediation Fee

CCAP MERCURY MONITORING

- Monitoring Protocols
- Ambient Threshold
- Monitoring By Phase
- Required Reporting
- Required Responses
- Expanded Analysis
- Lake Management
- Fix It or Fill It

MONITORING RESULTS

Fish Monitoring

Pit	2015	2016	2017	2018	2019	2020	2021
Cemex – Phase 1	≤	≤	≤	≤	≤	LAB	LAB
Cemex – Phase 3-4	>	>	>	>	>	LAB	LAB
Syar – B1	>	>	>	>	>	LAB	LAB
Syar – West			INC	≤	INC	LAB	LAB
Teichert – Esparto Mast			INC	>	>	LAB	LAB
Teichert – Esparto Reiff	INC	>	>	>	>		
Teichert – Woodland Storz		INC	INC	≤	≤	LAB	LAB

Water Column Profiling

Pit	2015	2016	2017	2018	2019	2020	2021
Cemex – Phase 1 *(Control)*				✓	✓	✓	✓
Cemex – Phase 3-4				✓	✓	✓	✓
Syar – B1				✓	✓	✓	✓
Syar – West *(Control)*				✓	✓	✓	✓
Teichert – Esparto Mast							
Teichert – Esparto Reiff				✓	✓	✓	✓
Teichert – Woodland Storz							

Bottom Sediment Collection (one-time)

Pit	2015	2016	2017	2018	2019	2020	2021
Cemex – Phase 1 *(Control)*				✓			
Cemex – Phase 3-4				✓			
Syar – B1				✓			
Syar – West *(Control)*				✓			
Teichert – Esparto Mast							
Teichert – Esparto Reiff				✓			
Teichert – Woodland Storz							

Report Status

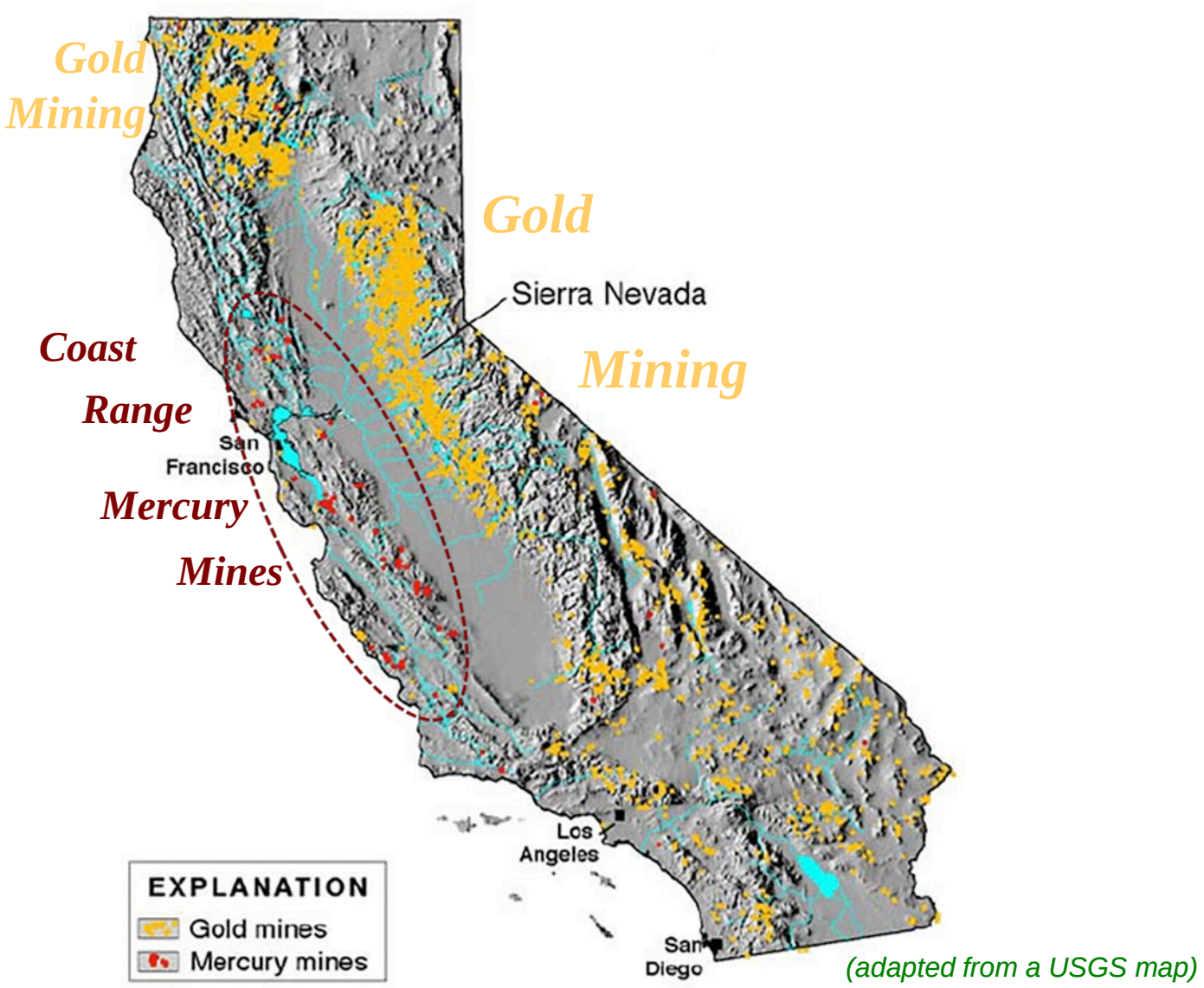
Sampling	2015	2016	2017	2018	2019	2020	2021
Fish Monitoring	FINAL	FINAL	FINAL	FINAL	DRAFT	LAB	LAB
Water Column Profiling				FINAL	DRAFT	PNDG	PNDG
Bottom Sediments (1x)				FINAL			

Green = At or below ambient
Red = Above ambient
INC = Inconclusive
LAB = Laboratory work underway
PNDG = Report pending

MERCURY EXPERT PRESENTATION

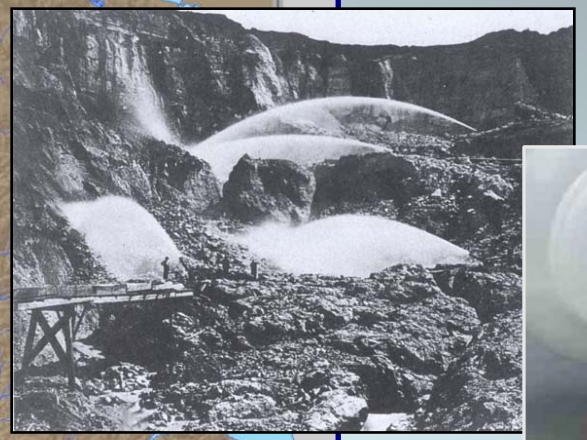
- Dr. Darell Slotton
- Expert in applied aquatic ecology specializing in mercury bioaccumulation research
- Over 35 years studying mercury bioaccumulation
- Many different studies in the Cache Creek watershed since 1985
- Started and led a mercury analytical laboratory and applied research team at University of California-Davis since 1987
- Developed important new monitoring and analytical techniques in mercury analysis
- Over 70 published scientific reports
- Conducted mercury assessment projects throughout California and internationally
- Consulting expert on CCAP since 1995

Mercury in California: Historic Mining Legacy



(adapted from a USGS map)

California Mercury: Historic Mining Legacy



Sierra

Nevada

Cache Creek

Coast

Gold Mining

Range

Zone

Mercury

Mines

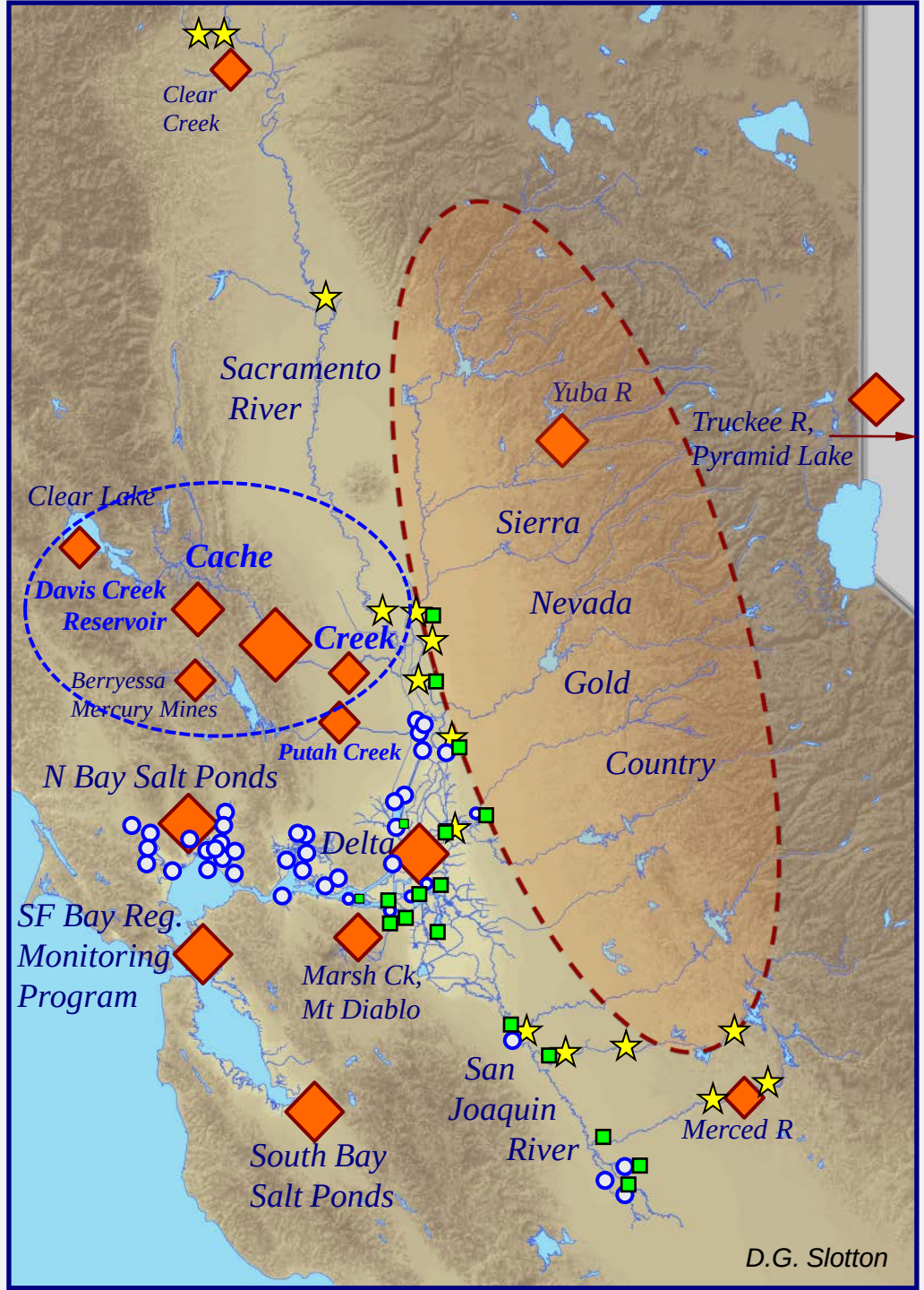
New Almaden

An estimated 9 MILLION pounds of mercury were lost into Sierra rivers

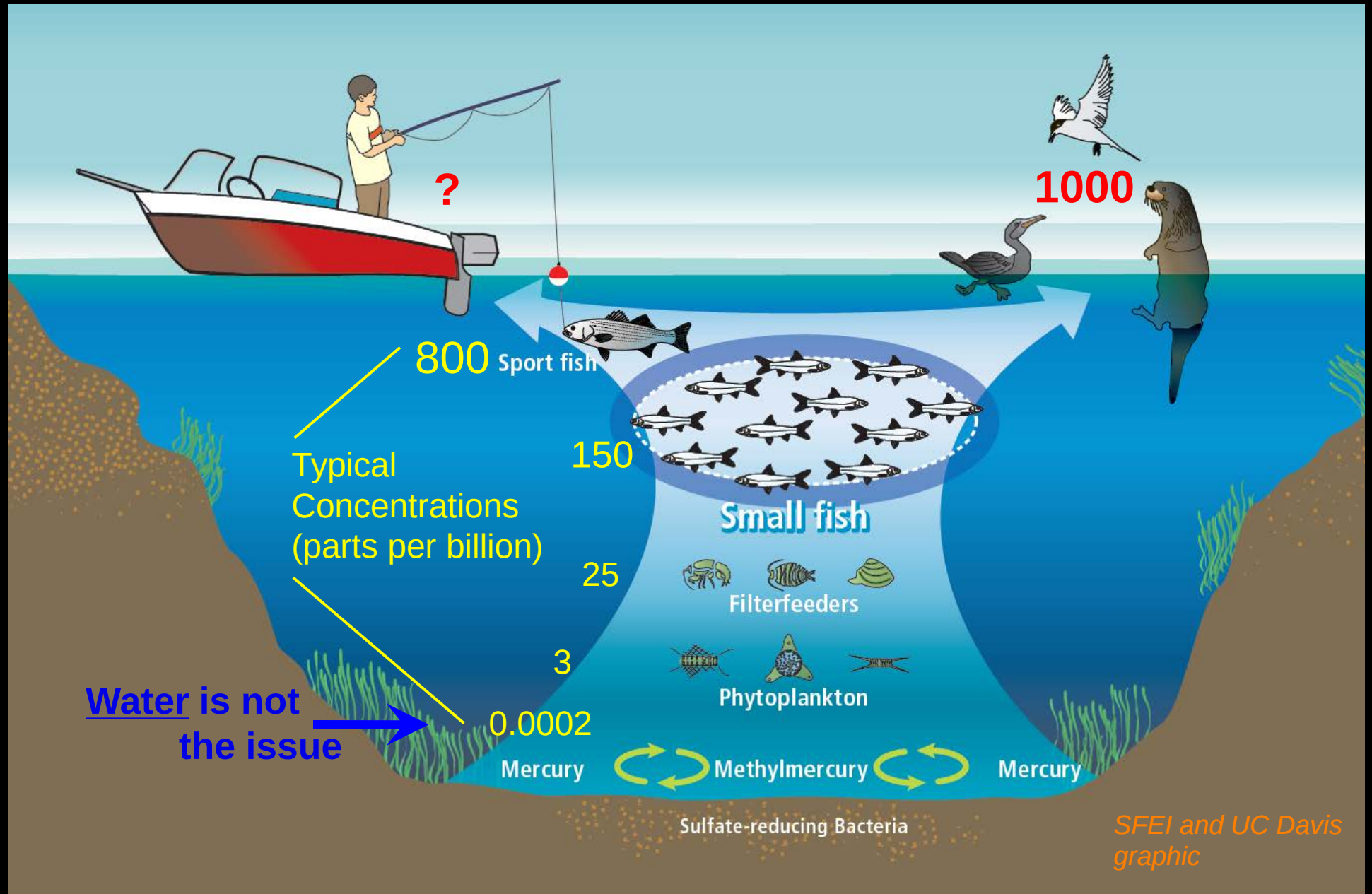
Regional Mercury Projects, 1985 – (now)

(Slotton lab, UC Davis)

- Sierra gold zone
- Coast Range watersheds
- Sac / San Joaquin Delta
- San Francisco Bay
- SF Bay – whole watershed
- Cache Creek watershed



MethylImercury – *Biomagnification*
up the Human and Wildlife Food Chains



SFEI and UC Davis graphic

Two 10,000 gallon tanker trucks
= about a lifetime of drinking water

= 80 years x 2.6 liters/day:
20,000 gallons, or 75,000 liters

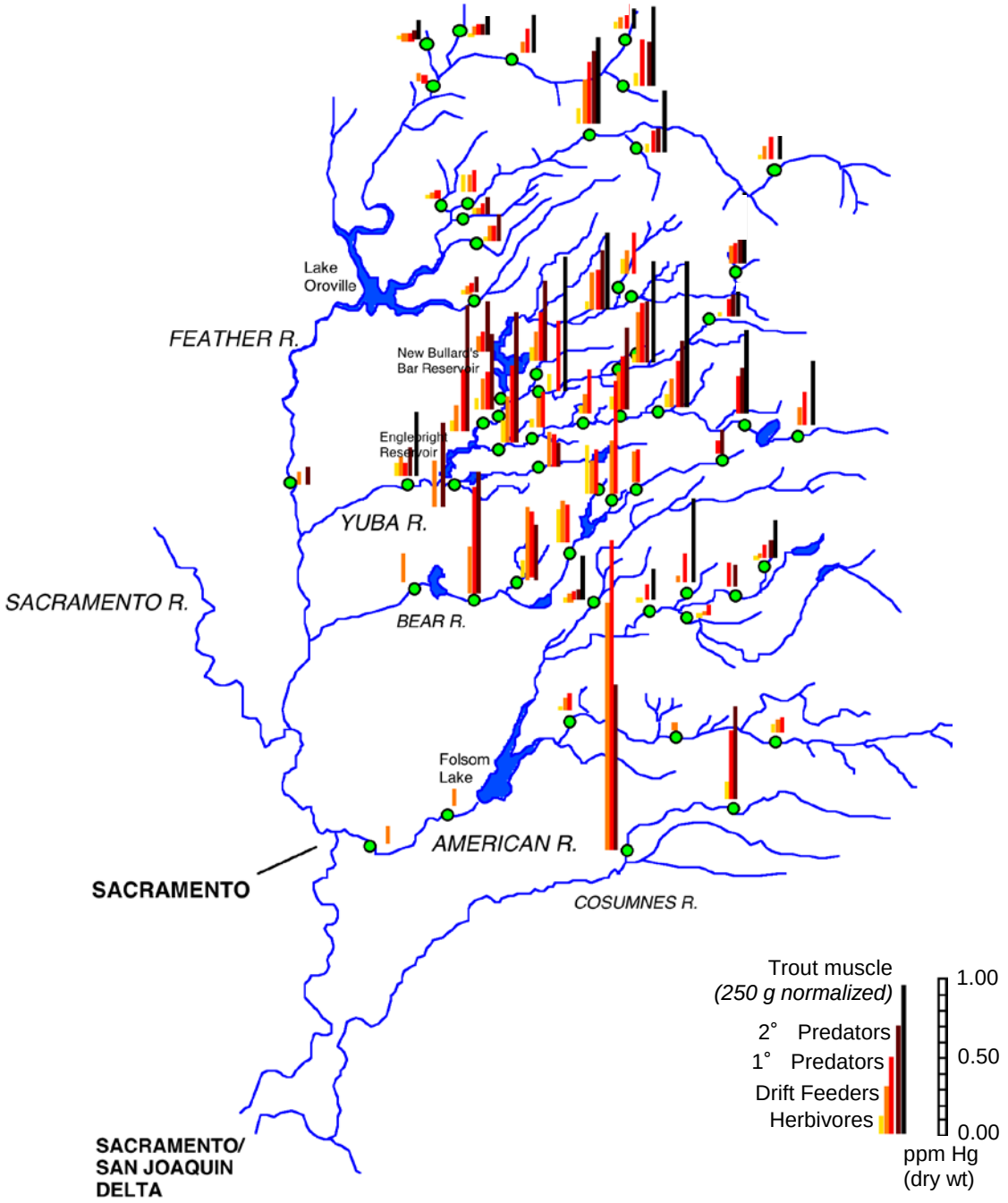
75,000 L x .002 µg/L = **<u>150 µg Methylmercury.</u>**
Lifetime *– from <u>high mercury</u> water*

One meal of (bass) from same site:
'Standard portion' = 8 ounces = 227 g
227 g x 1.5 µg/g = **<u>340 µg Methylmercury</u>**

"It's the fish"

D.G. Slotton

Trout and Aquatic Insect Mercury in Sierra Nevada Watersheds (1993-1997)

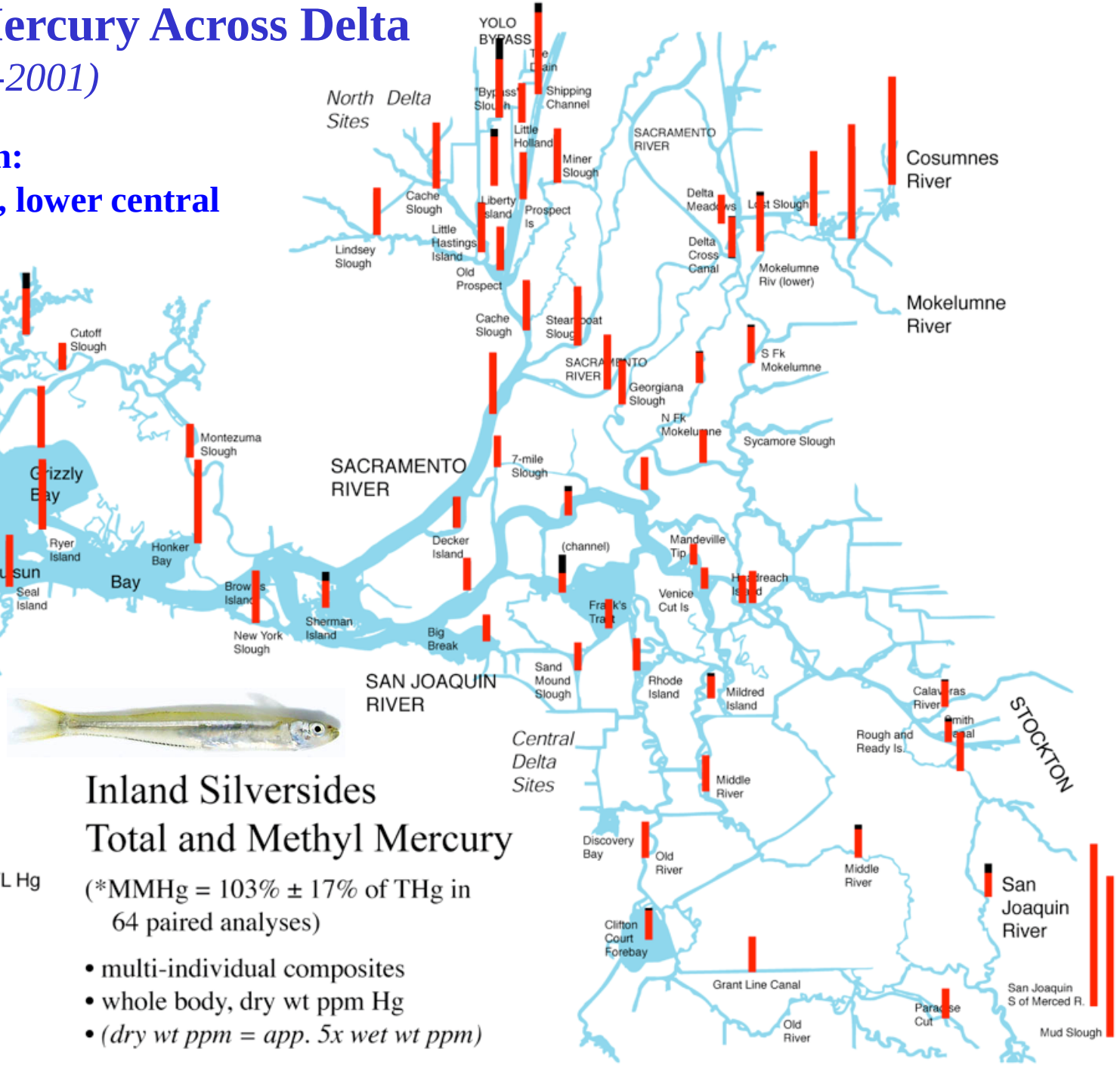


- Strong signal of residual, bioavailable mercury
- Centered on historic gold mining zone
- Low, baseline levels in un-mined rivers

Small Fish Mercury Across Delta

(UC Davis 1997-2001)

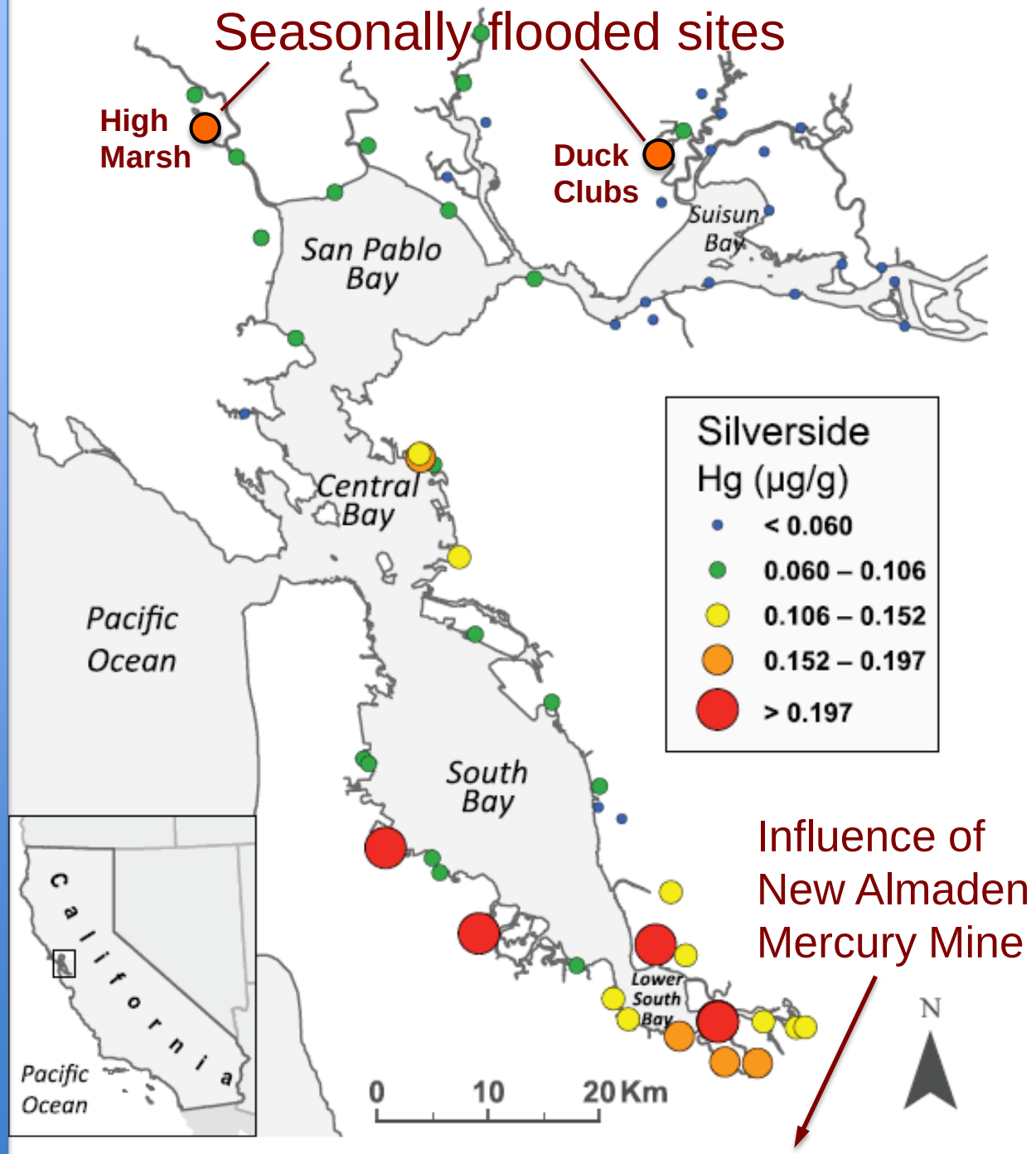
- **Regional pattern:**
  elevated inflows, lower central



San Francisco Bay Small Fish Mercury Trend (2008-2010)

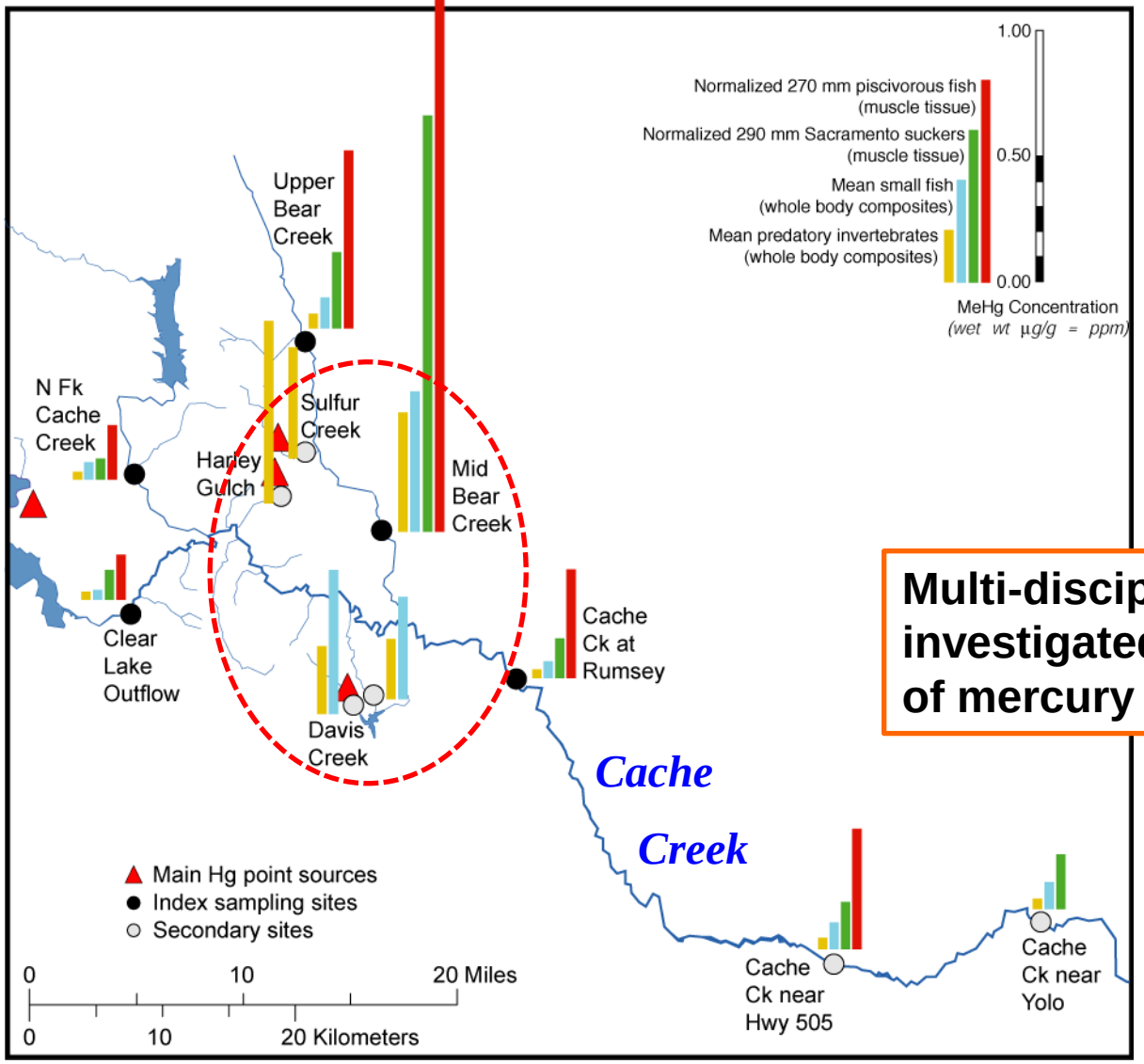
From Greenfield *et al.* (2013)

SFEI Regional Monitoring Program (RMP)
and
UC Davis



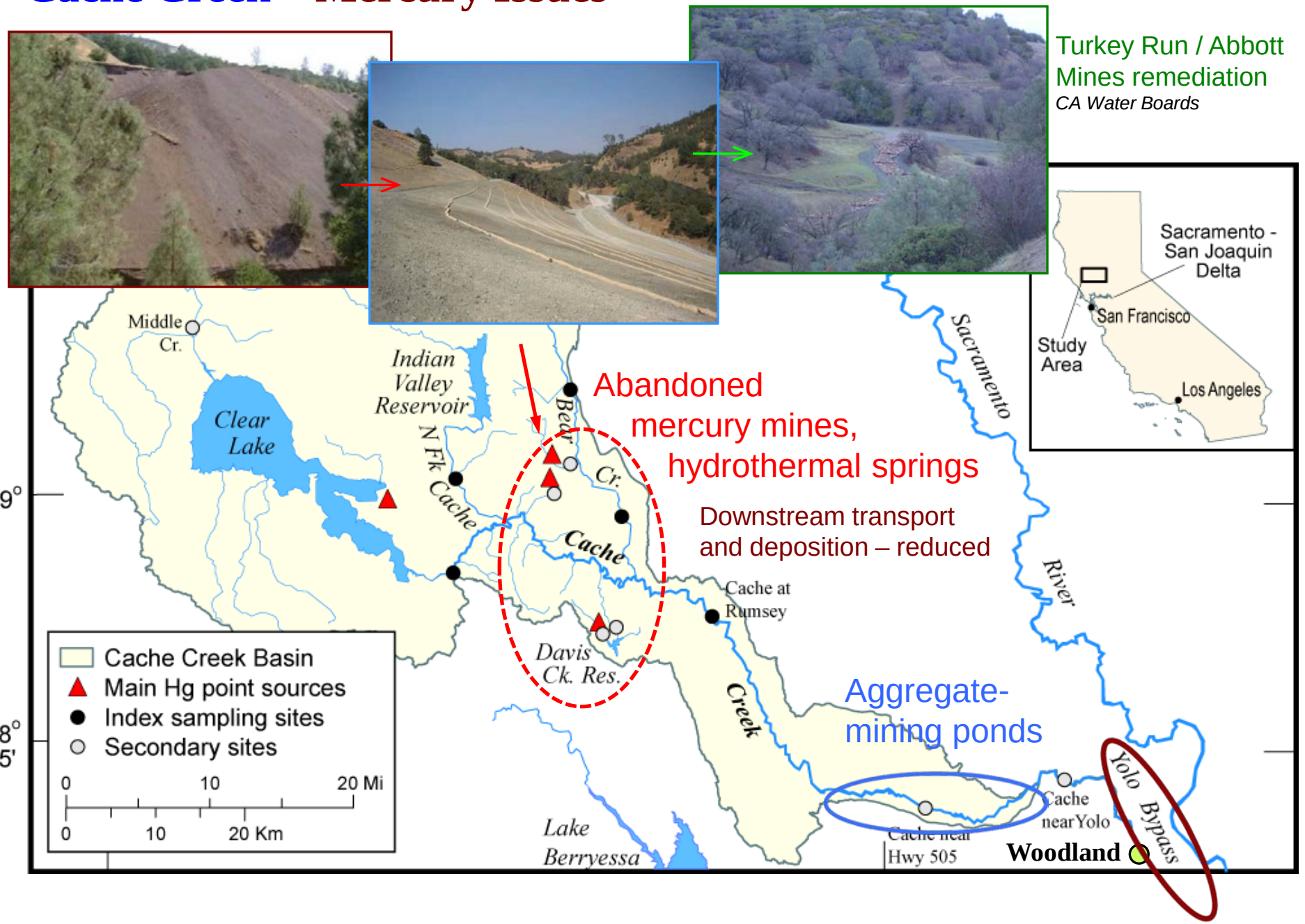
Mercury Levels in Matching Fish Samples Across the Cache Watershed

Site data (greatly reduced) from multi-year, seasonal collections; *1998-2001 CalFed studies*



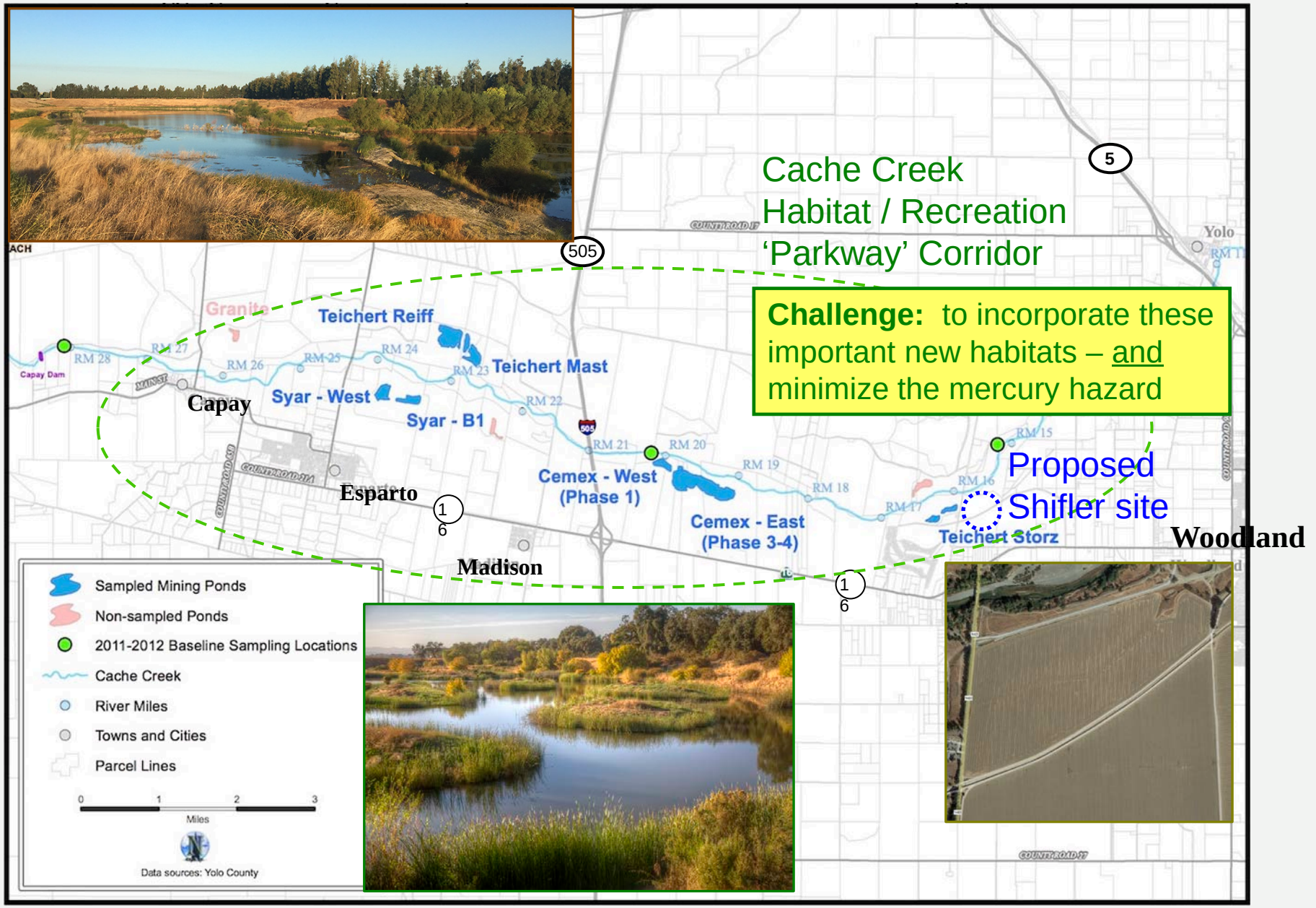
Multi-disciplinary team investigated all aspects of mercury cycling

Cache Creek – Mercury Issues



Cache Creek Off-Channel Aggregate Mining Ponds

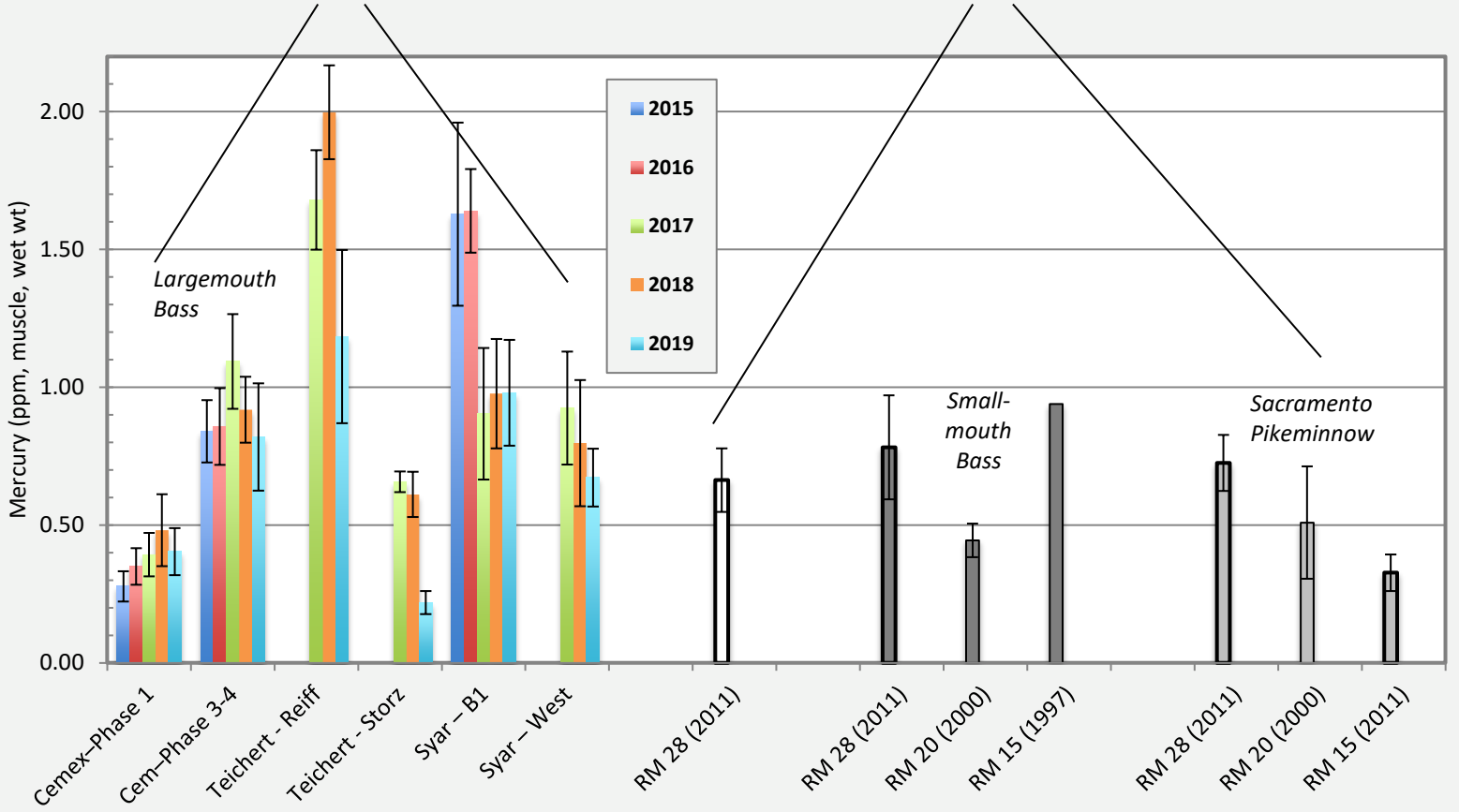
- Moved out of the creek channel
- Strict regulatory Ordinance



Summary monitoring data from angling-size bass:

Aggregate pond sites and Cache Creek comparisons

(app. 20 individual fish analyses per bar)



– Fish mercury was found above creek comparison levels at three of the ponds

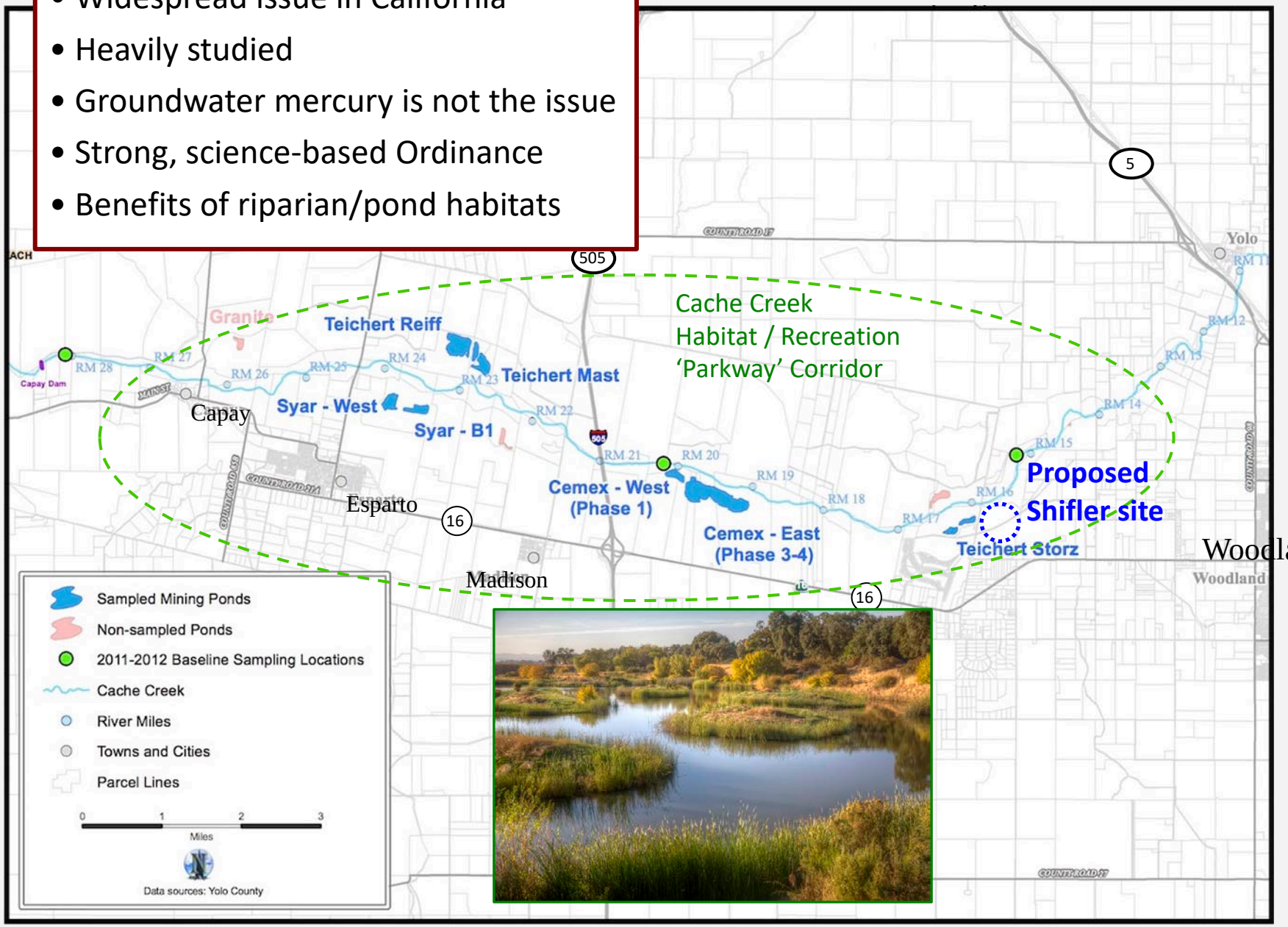
– Adaptive management program – triggered:

– Expanded testing; development/implementation of mercury management plans

– Over-riding regulatory requirement: "Fix it or fill it"

Summing Up:

- Widespread issue in California
- Heavily studied
- Groundwater mercury is not the issue
- Strong, science-based Ordinance
- Benefits of riparian/pond habitats



OTHER ANALYZED ISSUES

- Aesthetics
- Air Quality, GHGs, and Energy
- Biological Resources
- Geology and Soils, Mineral Resources, Paleontological Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Public Services, Utilities, Service Systems
- Cumulative Impacts
- Alternatives

PLANNING COMMISSION RECOMMENDATIONS

- Increase vegetative cover performance standards in Reclamation Plan
- Include test plots for reclamation
- Require VCE power at 100% carbon free levels from start of mining

- Limit mining to tonnage limit approved for Schwarzgruber
- Require additional off-site easements on 212 acres of farmland
- Limit mining to 62 acres Phase A area north of Moore Canal

RECOMMENDED ACTIONS

- Certify EIR (Att. B)
- Approve General Plan Amendment (Att. C)
- Approve Rezoning ordinance (Att. D)
- Approve Mining Permit (Att. E and Att. G)
  - Approve Conditions of Approval
  - Approve Tonnage Transfers
  - Reject 20% Exceedance
  - Authorize Mining in Streamway Influence Zone
- Approve Reclamation Plan (Atts. E, F, and G)
- Authorize Execution of Development Agreement (Att. H)
  - Approve Acceptance of Equivalent Net Gains

REASONS FOR LOCAL SOURCE OF AGGREGATE

- State policy
- Local policy
- Aggregate can only be mined where it occurs
- Non-local sources are inconsistent with General Plan and CCAP
- Non-local sources worsen climate change impacts
- Non-local sources worsen air quality and energy impacts
- Non-local sources do not mitigate for loss of farmland
- Non-local sources do not manage water resources
- Non-local sources do not monitor or manage mercury
- Non-local source do not build Cache Creek Parkway
- Non-local sources impact County roads
- Non-local sources increase construction costs
- Cache Creek Parkway and HCP/NCCP at risk without CCAP

REASONS FOR STAFF RECOMMENDATION

- Documented important gravel reserve
- Consistent with General Plan
- Consistent with CCAP
- Consistent with County Climate Action Plan
- Minimizes impacts to surrounding land uses and environment
- Minimizes and mitigates impacts to farmland
- Consolidates plant sites and upgrades Woodland Plant
- Program and project incorporate sustainability
- Important net gains and open space benefits
- Economic and fiscal benefits
- Project has been scaled back and improved

END OF STAFF PRESENTATION

PROJECT TONNAGE OVERVIEW

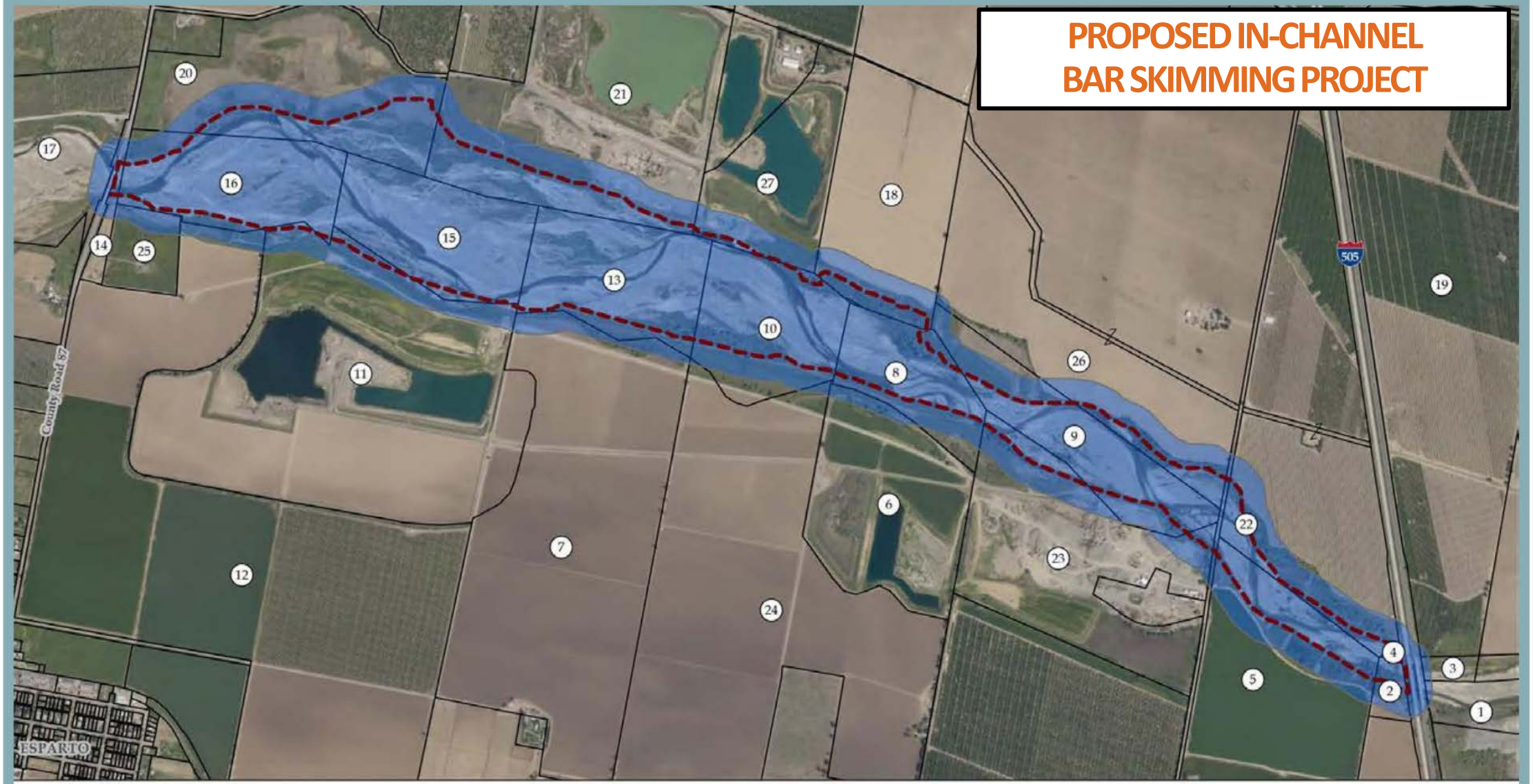
Tonnage	Teichert Esparto	Teichert Schwarzgruber	Combined (Esparto + Schwarzgruber)	Teichert Shifler (Original Proposal)	Teichert Shifler (Staff Rec)	Teichert Shifler (PC Rec)
Total	33.33 mil mined	17.88 mil mined	51.21 mil mined	41.60 mil mined	35.40 mil mined	±7.00 mil
	30.00 mil sold	15.20 mil sold	45.20 mil sold	35.25 mil sold	30.00 mil sold	
Annual	1,176,471 mined	1,176,471 mined	2,352,942 mined	2,352,942 mined	2,117,648 mined	1,176,471 mined
	1,000,000 sold	1,000,000 sold	2,000,000 sold	2,000,000 sold	1,800,000 sold	1,000,000 sold
20% Exceedance	0	235,295 mined	235,295 mined	235,295 mined	0	0
	0	200,000 sold	200,000 sold	200,000 sold	0	
Max Annual	1,176,471 mined	1,411,766 mined	2,588,237 mined	2,588,237 mined	2,117,648 mined	1,176,471 mined
	1,000,000 sold	1,200,000 sold	2,200,000 sold	2,200,000 sold	1,800,000 sold	1,000,000 sold
Acres Mined	148	41	189	277	264	62

AGRICULTURAL MITIGATION MATH

(rounded estimates)

- CCAP "base" requirement of 1:1 offset for permanent farmland loss
- 258 ac. impacted – 113 ac. reclaimed = 145 ac. permanent impact
- 145 ac. perm impact – 145 ac. offsite easement = 0 ac. at 1:1
- CCAP also requires “equivalency” with Countywide mitigation requirement of up to 3:1 for prime and 2:1 for non-prime
- 136 ac. prime impacted x 3 = 409 ac. max prime
- 9 ac. non-prime impacted x 2 = 18 ac. max non-prime
- 409 ac. prime + 18 ac nonprime = 426 ac. max. obligation
- Max. 426 ac. – 145 ac. offsite = 281 ac.
- 281 ac. – 212 ac. additional net gains = 69 ac. possible remaining obligation
- County Code and Condition #35 require full equivalency

PROPOSED IN-CHANNEL BAR SKIMMING PROJECT



LEGEND:

- 300 Ft Buffer
- In-Channel Bar Skimming Project Limit ± 422.61 Acres
- Parcel Boundaries

SOURCE:

Parcel Boundaries Provided by Yolo County GIS (2020)

Parcel Ownership Provided by ParcelQuest (November 2020)

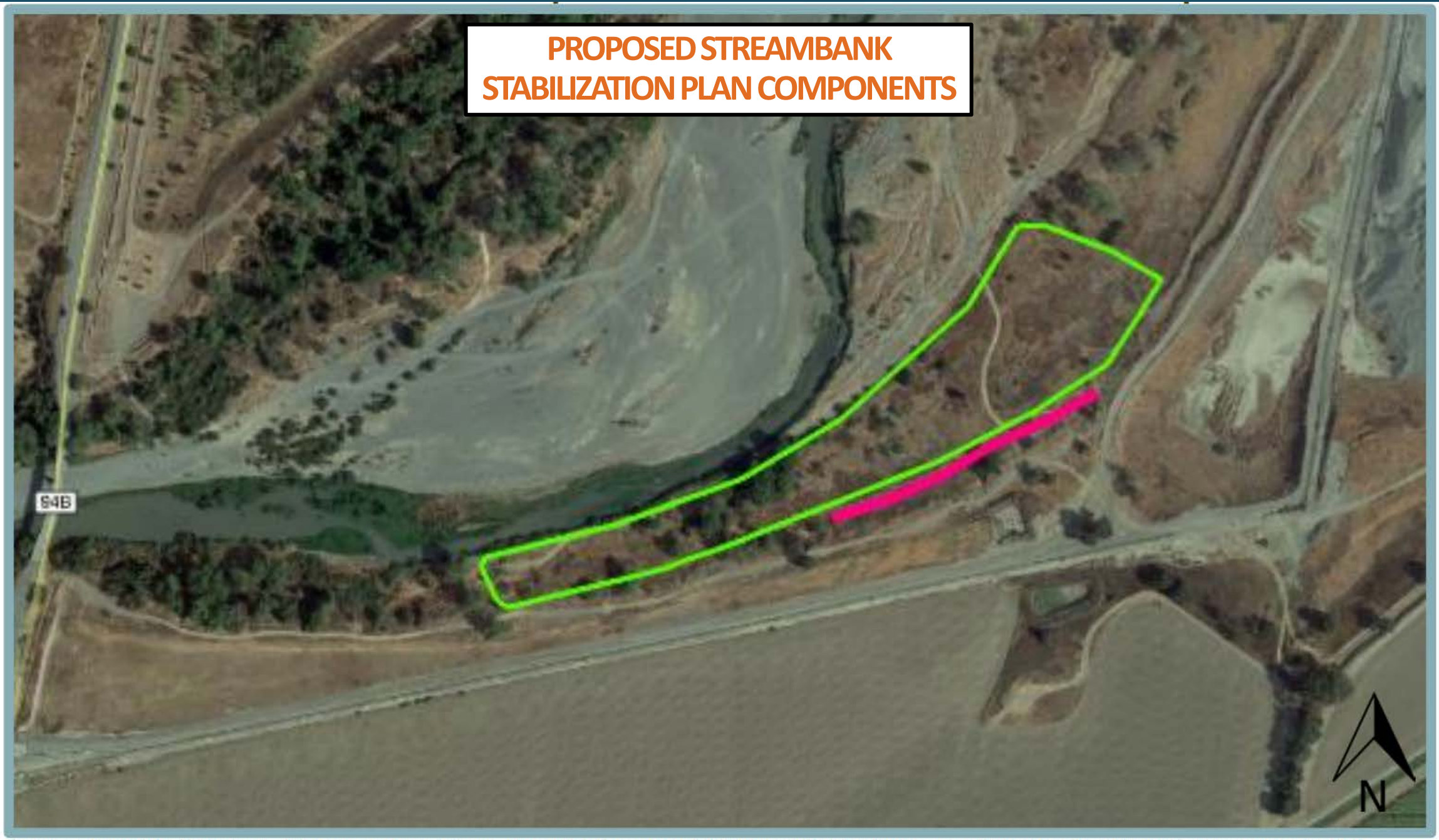
Aerial Photography Provided by ESRI Basemap & Affiliates (Yolo County: April 13, 2018)

0 600 1,200 Feet

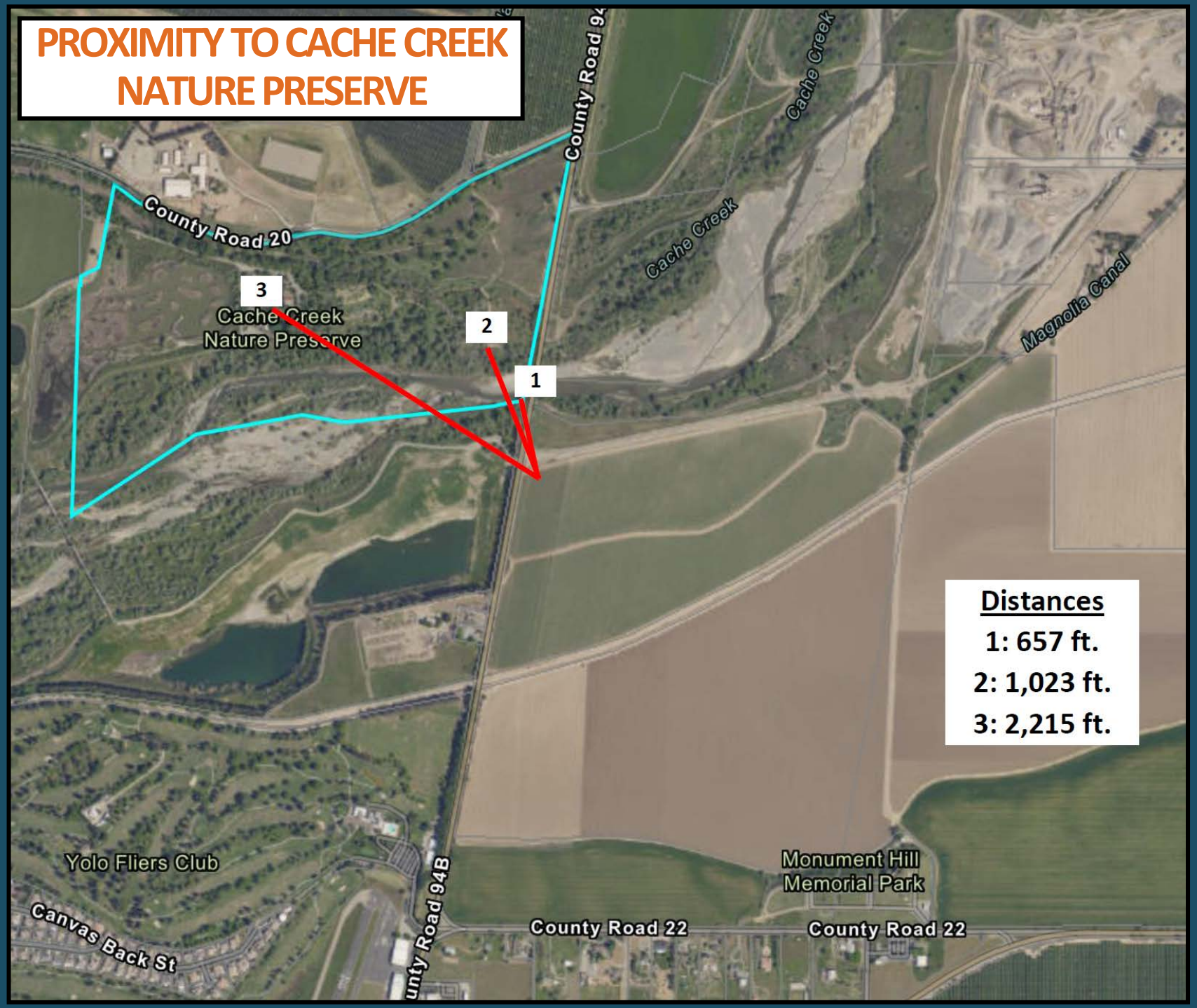
DISCLAIMER:

The data was mapped for assessment purposes only. No liability is assumed for the accuracy of the data shown.

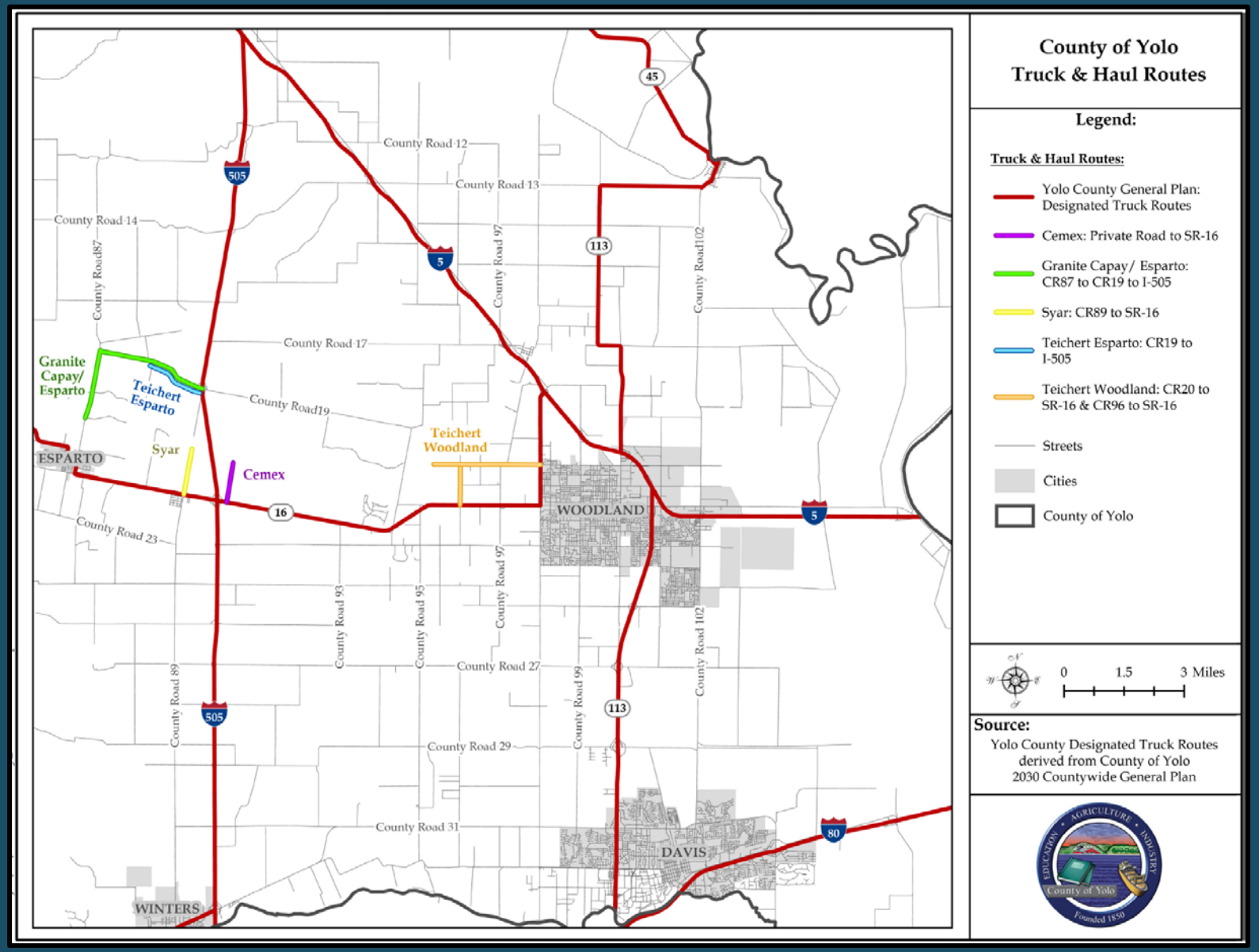
PROPOSED STREAMBANK STABILIZATION PLAN COMPONENTS



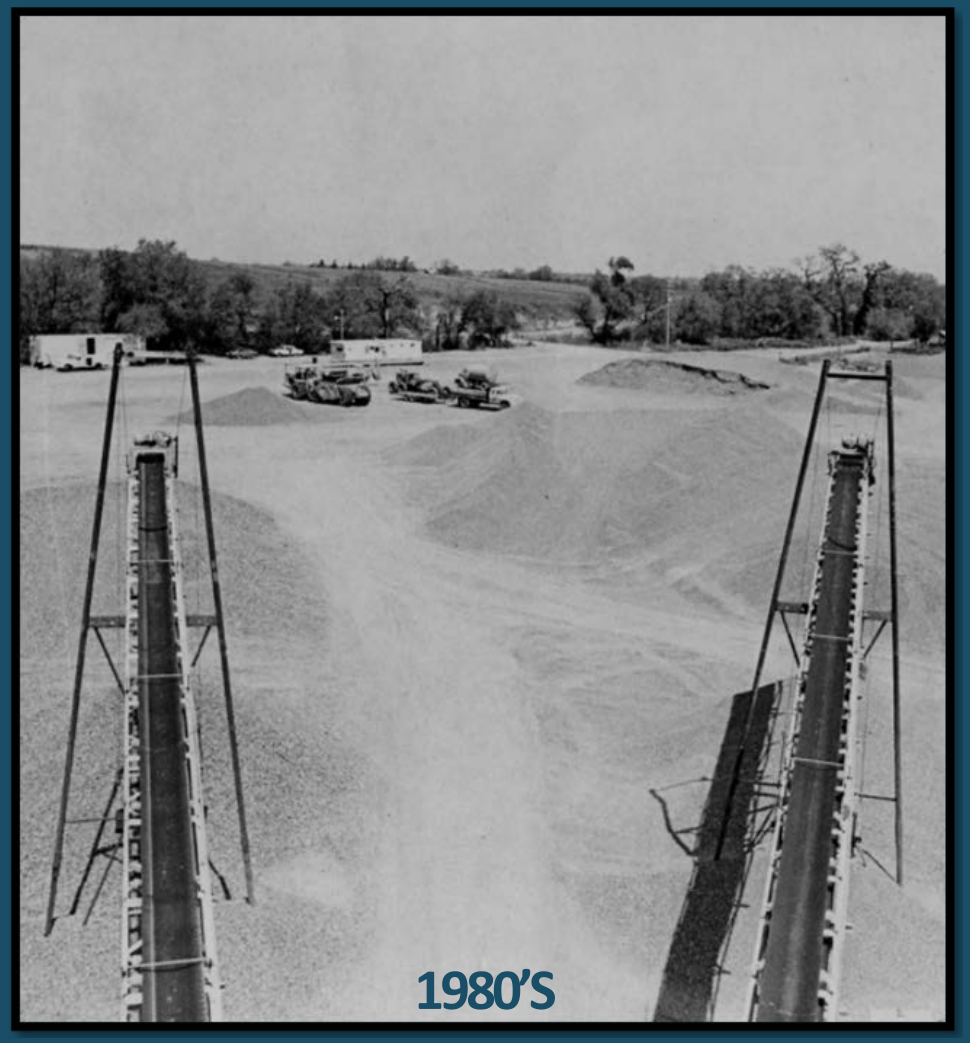
Source: FlowWest. Technical Memorandum: Cache Creek TAC Review Of Teichert Shifler Mining And Reclamation Project. December 3, 2020.


PROXIMITY TO CACHE CREEK NATURE PRESERVE
County Road 94
Cache Creek
County Road 20
Cache Creek
Nature Preserve
Cache Creek
Magnolia Canal
3
2
1
Distances
1: 657 ft.
2: 1,023 ft.
3: 2,215 ft.
Yolo Fliers Club
Canvas Back St
County Road 94B
Monument Hill
Memorial Park
County Road 22
County Road 22

HAUL ROUTES


County of Yolo
Truck & Haul Routes
Legend:
Truck & Haul Routes:
Yolo County General Plan: Designated Truck Routes
Cemex: Private Road to SR-16
Granite Capay/ Esparto: CR87 to CR19 to I-505
Syar: CR89 to SR-16
Teichert Esparto: CR19 to I-505
Teichert Woodland: CR20 to SR-16 & CR96 to SR-16
Streets
Cities
County of Yolo
0 1.5 3 Miles
Source:
Yolo County Designated Truck Routes derived from County of Yolo 2030 Countywide General Plan
County Road 12
County Road 13
County Road 14
County Road 17
County Road19
County Road 23
County Road 27
County Road 29
County Road 31
County Road87
County Road 89
County Road 93
County Road 95
County Road 97
County Road 99
County Road102
Granite Capay/ Esparto
Teichert Esparto
Syar
Cemex
Teichert Woodland
ESPARTO
WOODLAND
DAVIS
WINTERS
505
5
16
113
45
80

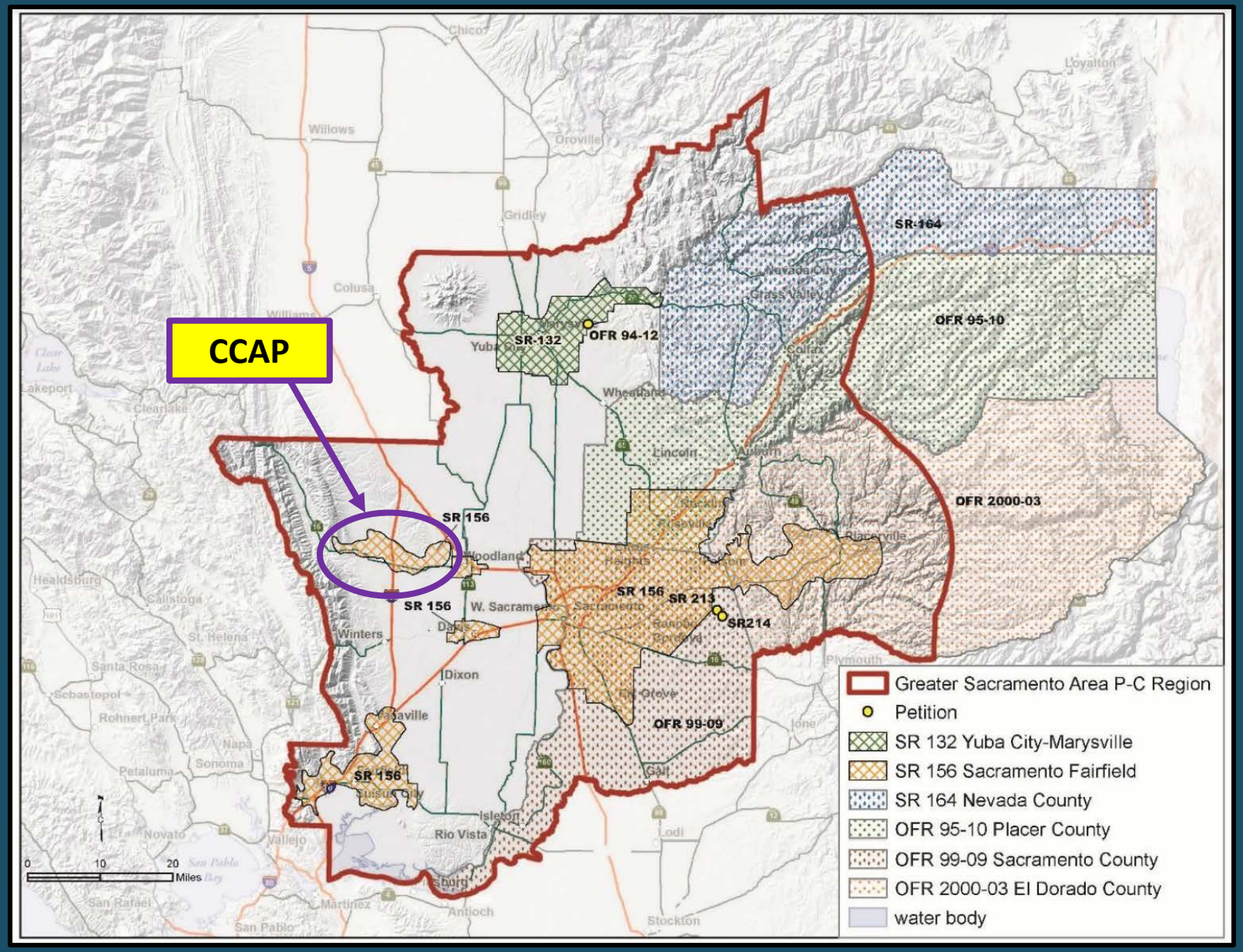
CACHE CREEK NATURE PRESERVE

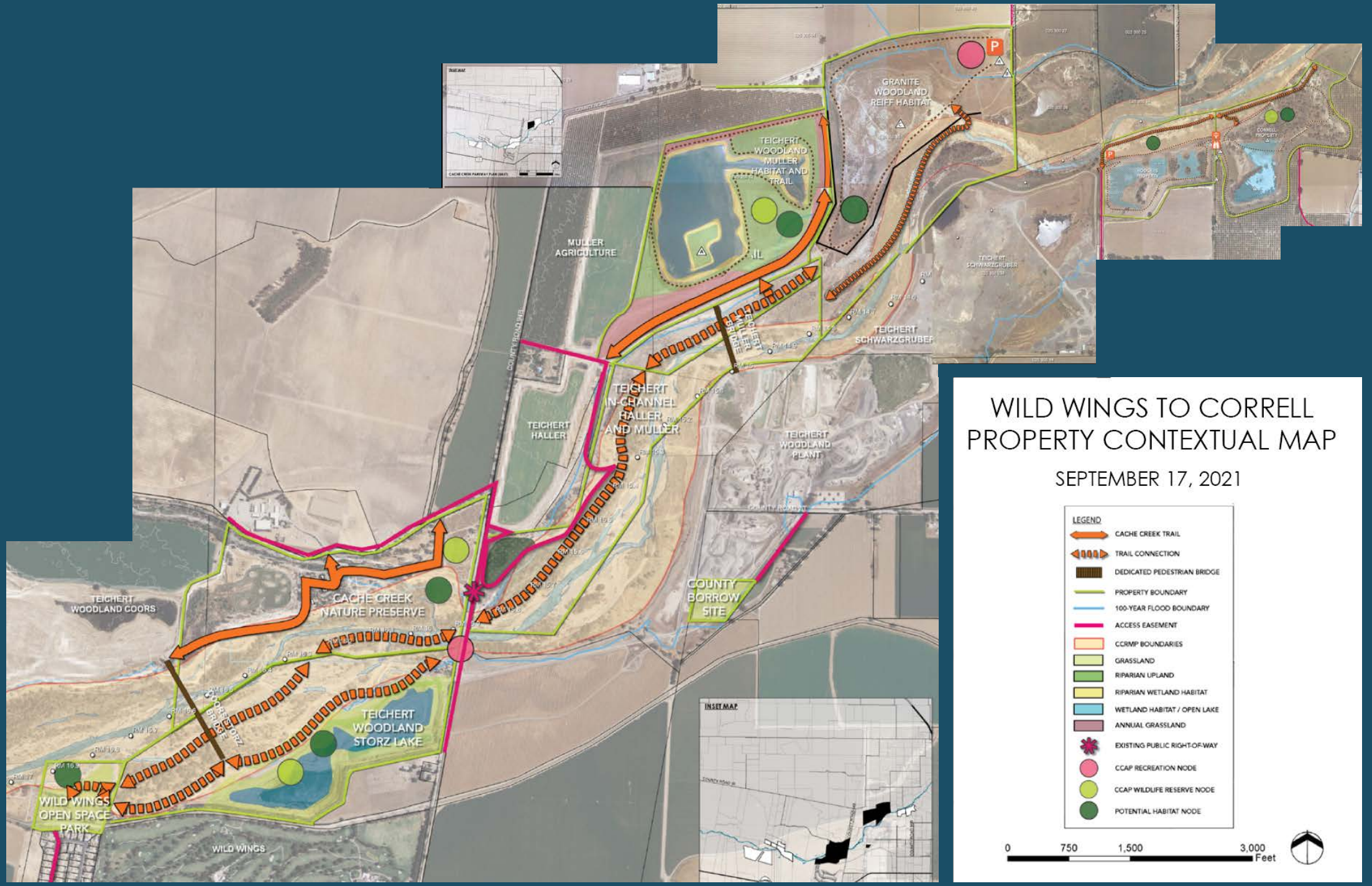


PARKWAY ACTIVATION SCHEDULE

Site	Fee Point?[2]	Now - 2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 -2040	2041 - 2045	2046 - 2050
West End – Phase 1								
COSP	Yes			x				
G-C + G-E Trail	No			x				
West End – Phase 2								
T-E	No				x			
Syar	Yes[3]				x			
West End - Phase 3								
G-E	Yes							x
Central								
Cemex	Yes[3]				x			
Millsap	No				x			
YCFCWCD	No				X[4]			
East End – Phase 1								
T-W-Muller	No	x						
G-W-Reiff	Yes	x						
Rodgers	Yes[3]	x						
Correll	No	x						
East End – Phase 2								
Wild Wings	No		x					
CCNP	Yes		x					
T-W-Storz	Yes[3]		x					
Coors/Storz Bridge	No		x					
East End – Phase 3								
T-In-Channel	No			x				
Muller Bridge	No			x				
County Borrow	No			x				

REGIONAL MARKET FOR AGGREGATE




GRANITE WOODLAND REIFF HABITAT
TEICHERT WOODLAND MULLER HABITAT AND TRAIL
MULLER AGRICULTURE
TEICHERT SCHWARZGRUBER
TEICHERT IN-CHANNEL HALLER AND MULLER
TEICHERT HALLER
TEICHERT WOODLAND PLANT
COUNTY BORROW SITE
TEICHERT WOODLAND COORS
CACHE CREEK NATURE PRESERVE
TEICHERT WOODLAND STORZ LAKE
WILD WINGS OPEN SPACE PARK
WILD WINGS
INSET MAP
WILD WINGS TO CORRELL PROPERTY CONTEXTUAL MAP
SEPTEMBER 17, 2021
LEGEND
CACHE CREEK TRAIL
TRAIL CONNECTION
DEDICATED PEDESTRIAN BRIDGE
PROPERTY BOUNDARY
100-YEAR FLOOD BOUNDARY
ACCESS EASEMENT
CCRMP BOUNDARIES
GRASSLAND
RIPARIAN UPLAND
RIPARIAN WETLAND HABITAT
WETLAND HABITAT / OPEN LAKE
ANNUAL GRASSLAND
EXISTING PUBLIC RIGHT-OF-WAY
CCAP RECREATION NODE
CCAP WILDLIFE RESERVE NODE
POTENTIAL HABITAT NODE
0
750
1,500
3,000
Feet

MINING ECONOMIC ANALYSIS

(results for 2019 analysis year)

- 49 mining employees with an average wage of $123,084 per year
- $766,580 in total property taxes
- $172,580 in sales tax
- $2.1 million in fee revenues
- 29 new jobs
- $5.7 million countywide
- Roadway maintenance
- Foundation and community involvement
- Local aggregate
- Reduced construction costs
- Cache Creek Parkway