

NITRATE CONTROL PROGRAM

CVCWA 2025 Annual Conference

Pathway A Representative

Paul Bedore

Robertson-Bryan, Inc.

Pathway B Representative

Heather Grove

City of Manteca



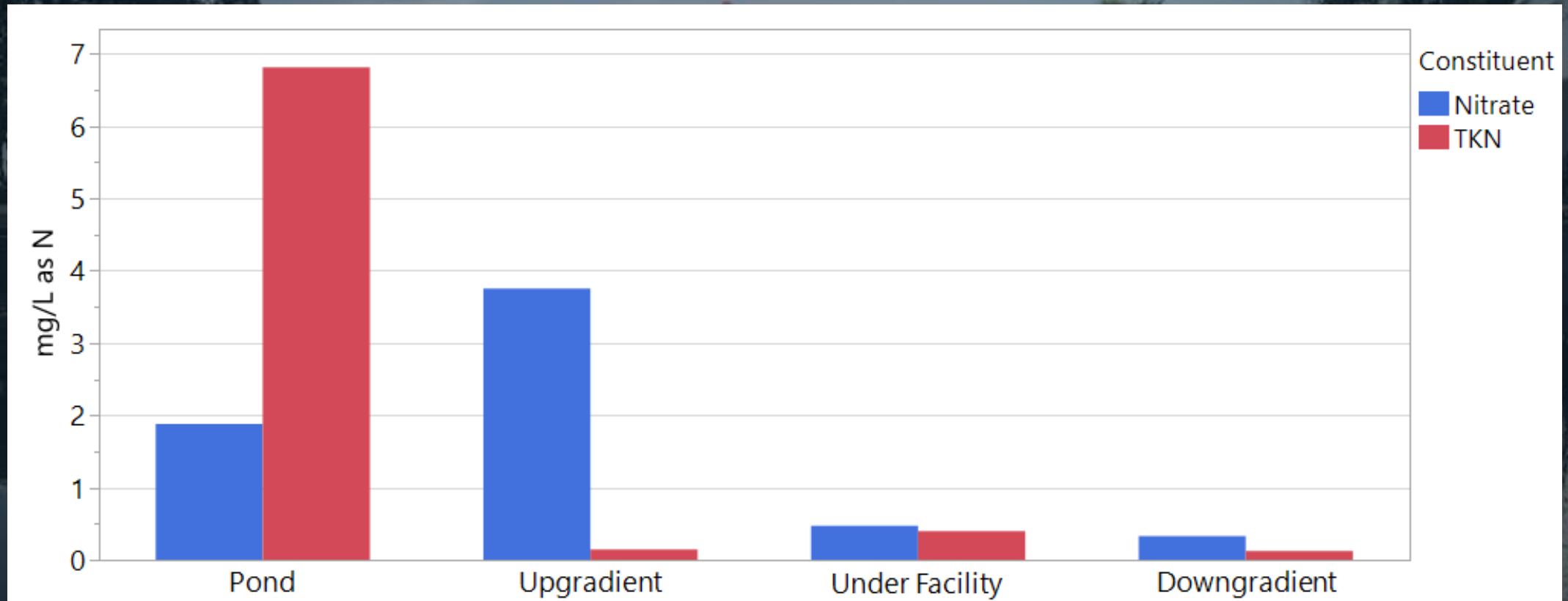
QUESTION 1

Describe your agency or agencies you have worked for.

PATHWAY A – EXAMPLE FACILITIES

	Recycled Water (RW)	Non-RW Discharges
Facility Info	- Land application - Fully nitrified-denitrified RW	- Ponds/Basins - Clay or Native Materials - Influent, WAS, secondary effluent - Sludge Drying Beds
Type of Permit	RW General Order Master Reclamation Permit	Waste Discharge Requirements NPDES Permit
Water Quality	- Recycled Water: 2 – 7 mg/L Nitrate as N - Groundwater: Variable	Pond Water: 2 – 7 mg/L Nitrate as N 1 – 40 mg/L TKN (ammonia & organic N) Groundwater: Variable
Key Factors:	Low nitrate in RW	- Demonstrate groundwater is protected - Low seepage rates & nitrogen removal within the ponds/basins

PATHWAY A – EXAMPLE POND SYSTEM



← Groundwater Measurements →

CITY OF MANTECA CV-SALTS PERMITS

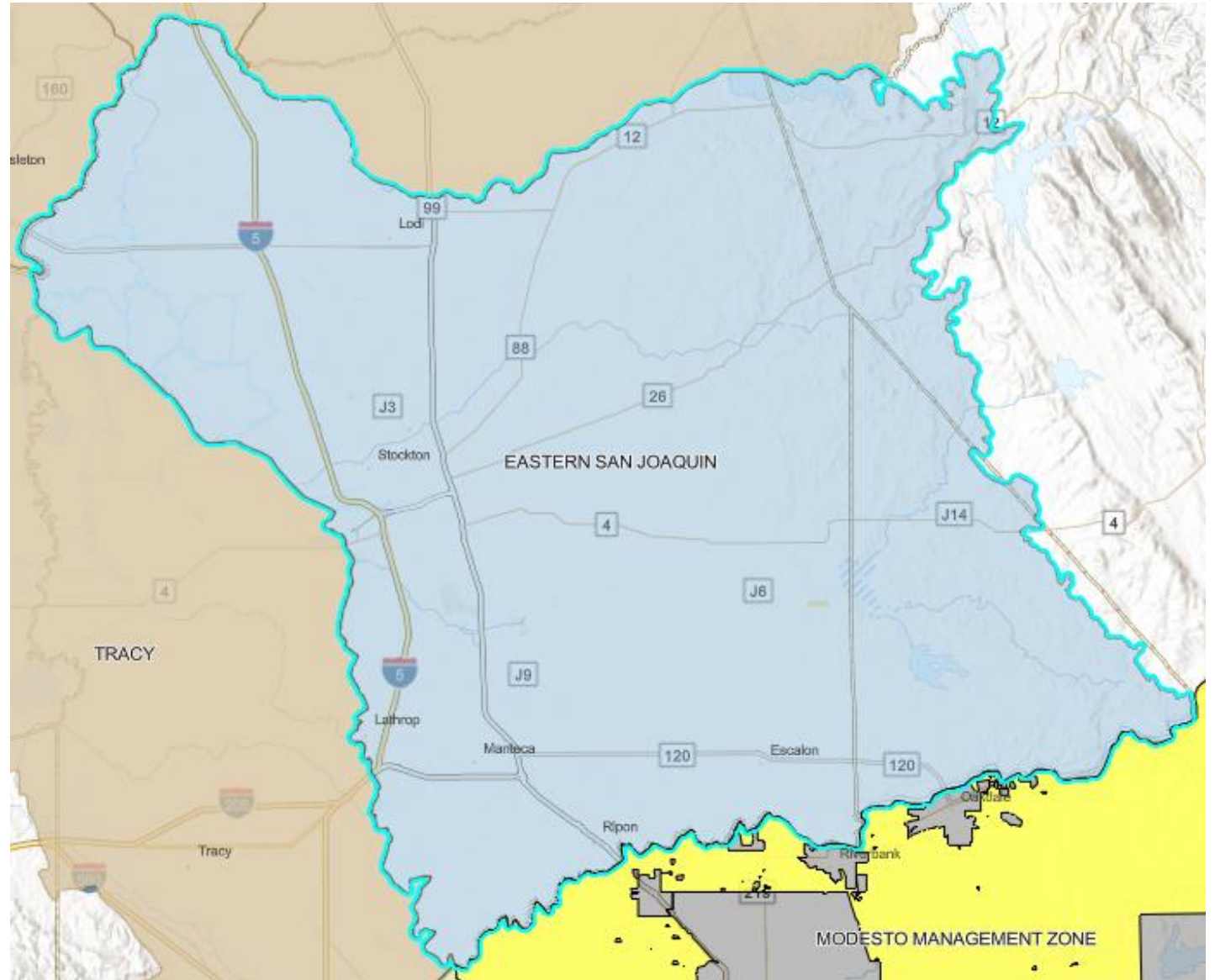
- **TWO PERMITS FALL UNDER CV-SALTS**
 - **WASTEWATER'S NPDES-WDR**
 - **TERTIARY NDN PLANT WITH CAPACITY OF 9.87 MGD**
 - **THE CITY FARMS 127 ACRES SURROUNDING THE TREATMENT PLANT SITE TO THE NORTH, SOUTH AND EAST**
 - **IRRIGATION IS SECONDARY TREATED EFFLUENT**
 - **6 GROUNDWATER MONITORING WELLS**
 - **RECYCLED WATER**
 - **DISINFECTED TERTIARY TREATED EFFLUENT**
 - **CONSTRUCTION PURPOSES**
 - **INTERNAL USE**
 - **LANDSCAPE IRRIGATION AT GREAT WOLF LODGE**
 - **RESIDENTIAL LANDSCAPE IRRIGATION**



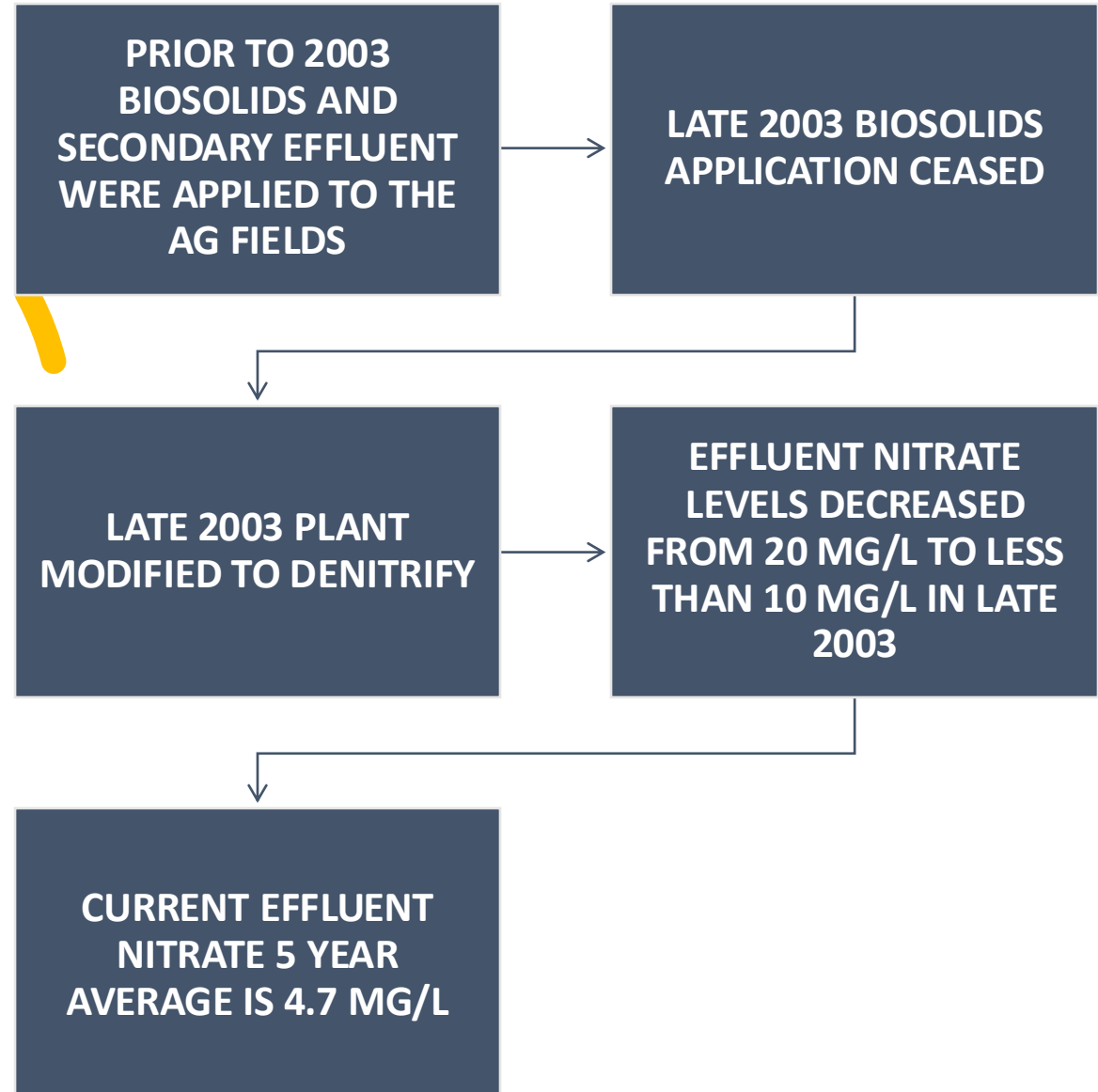
NITRATE CONTROL PROGRAM

PRIORITY 2

EASTERN SAN JOAQUIN BASIN



WASTEWATER LAND APPLICATION HISTORY





GROUNDWATER
MONITORING
WELL DATA

YEAR	MW-3 ANNUAL AVG MG/L	MW-5 ANNUAL AVG MG/L	MW-9W ANNUAL AVG MG/L	MW-11 ANNUAL AVG MG/L
2010	14.9	8.4	7.7	14.1
2024	10.6	2.8	6.7	10.7
2025 PARTIAL	3.9	1.8	4.5	12.4

QUESTION 2

What were the key considerations used to decide which pathway to take?

PATHWAY A – MAKING A DECISION

- Knowledge of discharge & groundwater quality
- Potential Path A Category
 - RW (land application) – Typically Cat. 1 & 2
 - Non-RW (ponds, basins, etc.) –
 - Facilities typically confident discharge is protective (Cat. 1 – 3), and/or...
 - Willingness to accept obligations of Cat. 4 & 5

	Categories 1 – 3	Category 4	Category 5
Discharge Impacts on Groundwater Nitrate	• No degradation or • Degradation below 7.5 mg/L trigger	Degradation above 7.5 mg/L trigger	Degradation above 10 mg/L trigger
Category Obligations	None	<u>Alternative Compliance Project</u>	• <u>Alternative Compliance Project</u> • <u>Provide drinking water within sphere of influence</u>

WHY PATHWAY B?

MANTECA'S TREATMENT PLANT WAS NEARING NITROGEN AND BOD CAPACITY NECESSITATING EXPANSION INTO AG LAND. FUNDING EXPANSION WAS THE MAIN PRIORITY.

CITY OF MANTECA'S REMAINING AG LAND IS SLATED FOR COMMERCIAL DEVELOPMENT IN THE NEXT FIVE OR SO YEARS.

LAND DISCHARGE WILL CEASE ONCE LAND IS DEVELOPED-EXIT STRATEGY FOR ONE OF THE PERMITS WHICH WOULD LEAVE JUST THE RECYCLED WATER PERMIT

MANTECA HAD LIMITED STAFF AND BUDGET TO PRODUCE THE DOCUMENTS REQUIRED FOR PATHWAY A (JUST ME AND MANTECA WAS GETTING READY TO INITIATE A WASTEWATER RATE STUDY SO FUNDING WAS GOING TO BE LIMITED FOR A COUPLE YEARS)



QUESTION 3

What was the process involved in applying for Pathway A or B and what expectations do you have moving forward?

PATHWAY A – PROCESS & NEXT STEPS

- Understand the permitted discharge – is the Notice to Comply applicable?
- Preliminary evaluation:
 - Discharge & GW monitoring data
 - Identify drinking water wells exceeding the MCL
 - Determine discharge category
- Initial Assessment Nitrate Report – follow RWQCB guidance document
- RWQCB
 - Discuss initial evaluation & category
 - Expect formal feedback within 1 year of application

PATHWAY B'S PROCESS

**FORMING A MANAGEMENT ZONE-REACHING OUT TO VALLEY WATER
COLLABORATIVE**

**COLLABORATING WITH OTHER STAKEHOLDERS IN OUR BASIN TO
DETERMINE EACH GROUP AND ITS RESPONSIBILITIES**

BRINGING THE WASTEWATER TREATMENT FACILITIES TOGETHER

**COMMITTING TO VALLEY WATER COLLABORATIVE AND THE
MANAGEMENT ZONE**

FILING THE NOTICE OF INTENT WITH THE REGIONAL BOARD

PAYING THE MANAGEMENT ZONE ANNUAL CONTRIBUTION



QUESTION 4

Can an agency change pathways?

QUESTION 5

What tips or advice would you give to others that are already in and interested in changing pathways or asked to comply with the Nitrate Control Program?

QUESTION 6

Is there anything you would like to add?

Thank you!

Heather Grove

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