

Bird's eye view of manure N management in California

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Overview

Where we are

Where we're going

How we will get there



May 2007 General Waste Discharge Requirements

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

- Nitrogen Applied : Nitrogen Removed

$$\text{A:R} = 1.4$$

- CVDRMP created

- Monitoring wells installed

ORDER NO. R5-2007-0035

WASTE DISCHARGE REQUIREMENTS GENERAL ORDER

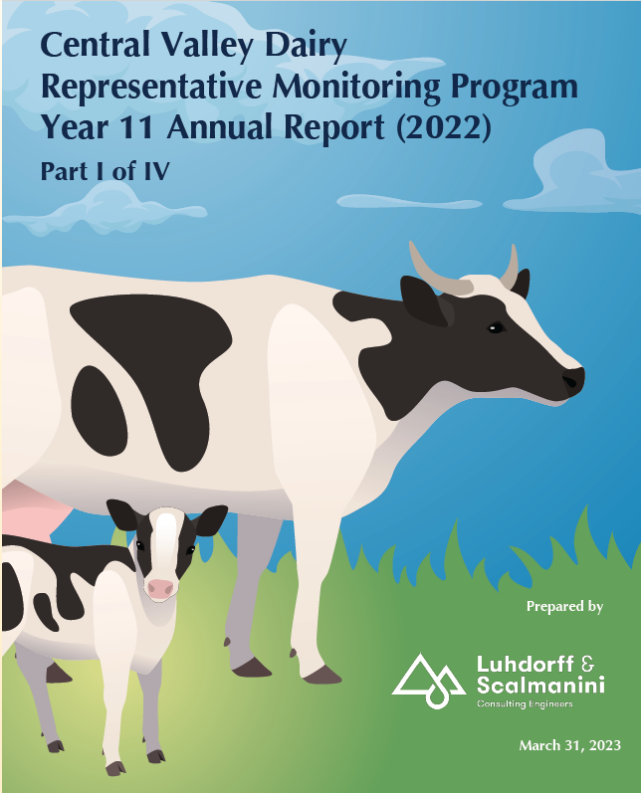
FOR

EXISTING MILK COW DAIRIES

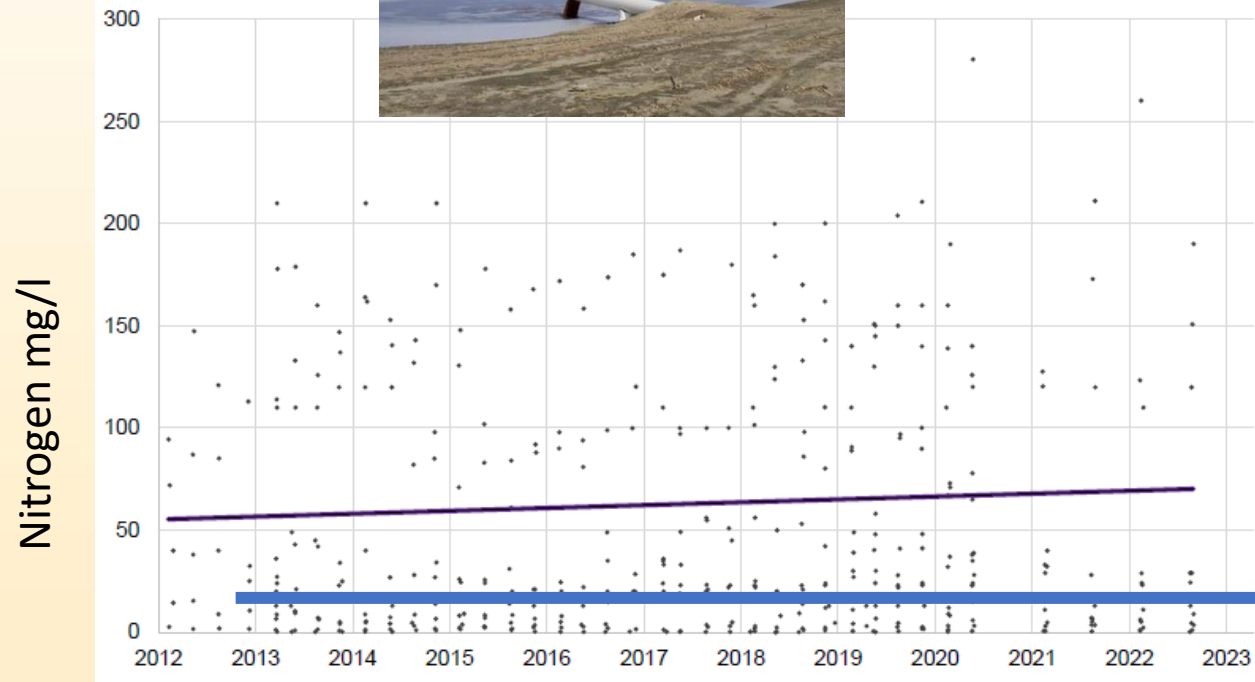
Monitoring wells



423 wells
10 years



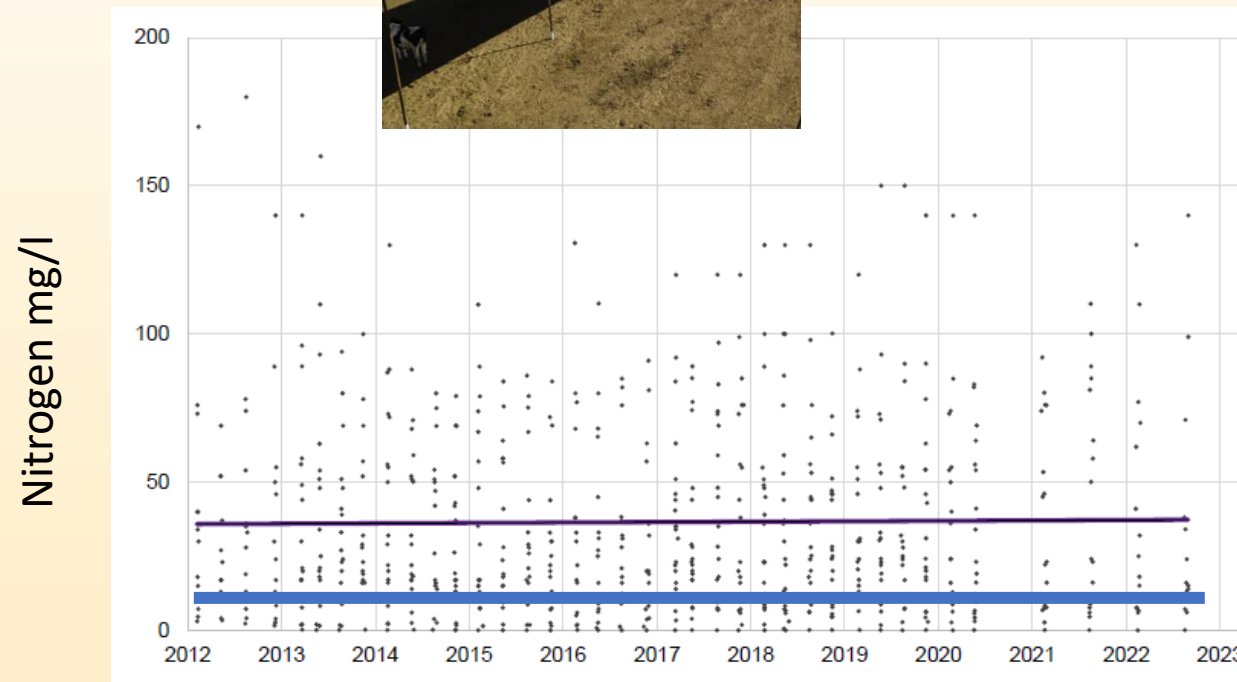
4.5 x standard



5,877 ac

1,045 lbs N/ac/yr

- Monitoring well trend
- Drinking water threshold

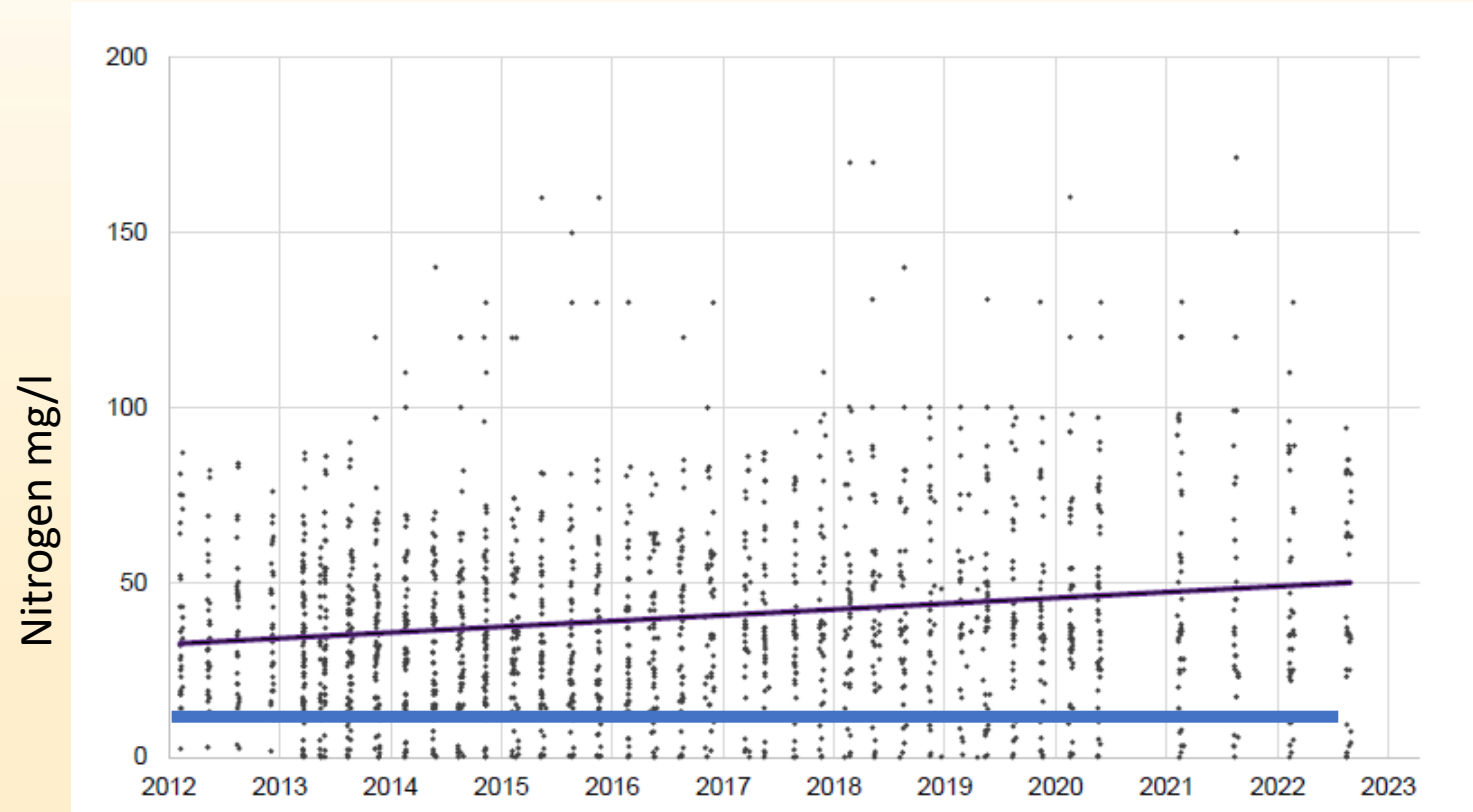


30,254 ac

121 lbs N/ac/yr



429,424 acres
368 lbs N/ac/year

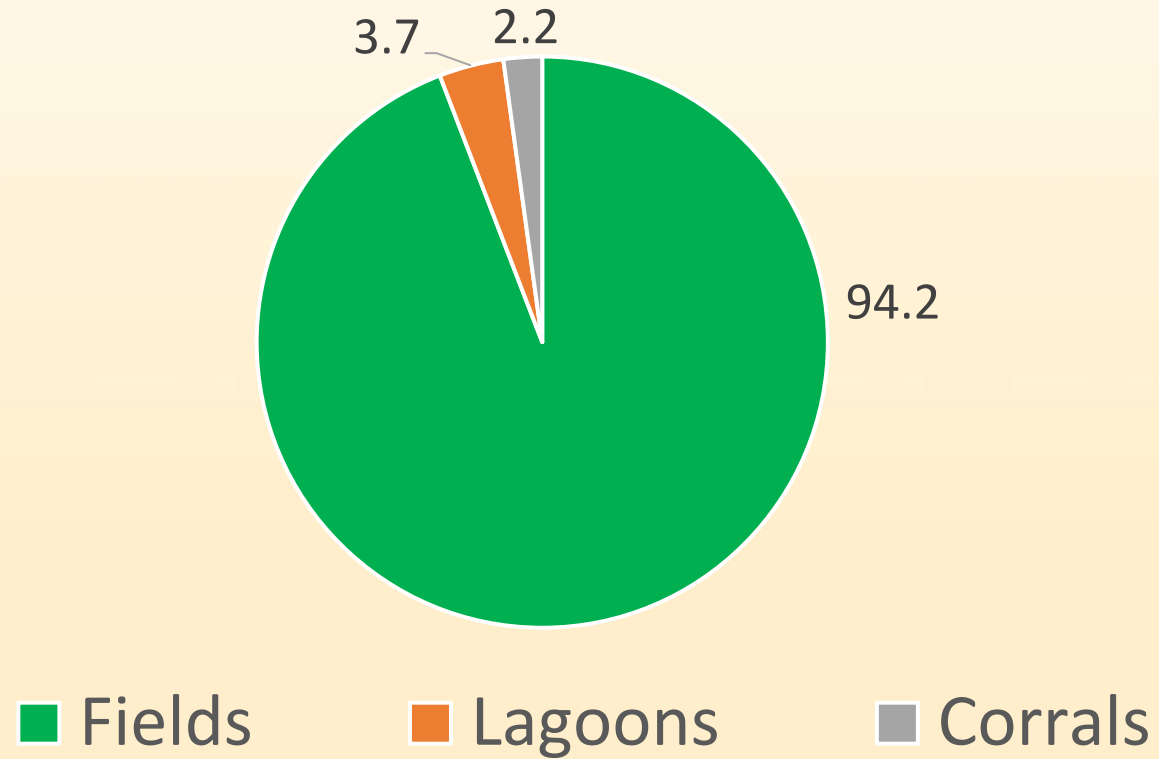


Graph source: Central Valley Dairy Representative Monitoring Program Year 11 Annual Report (2022) Part I of IV

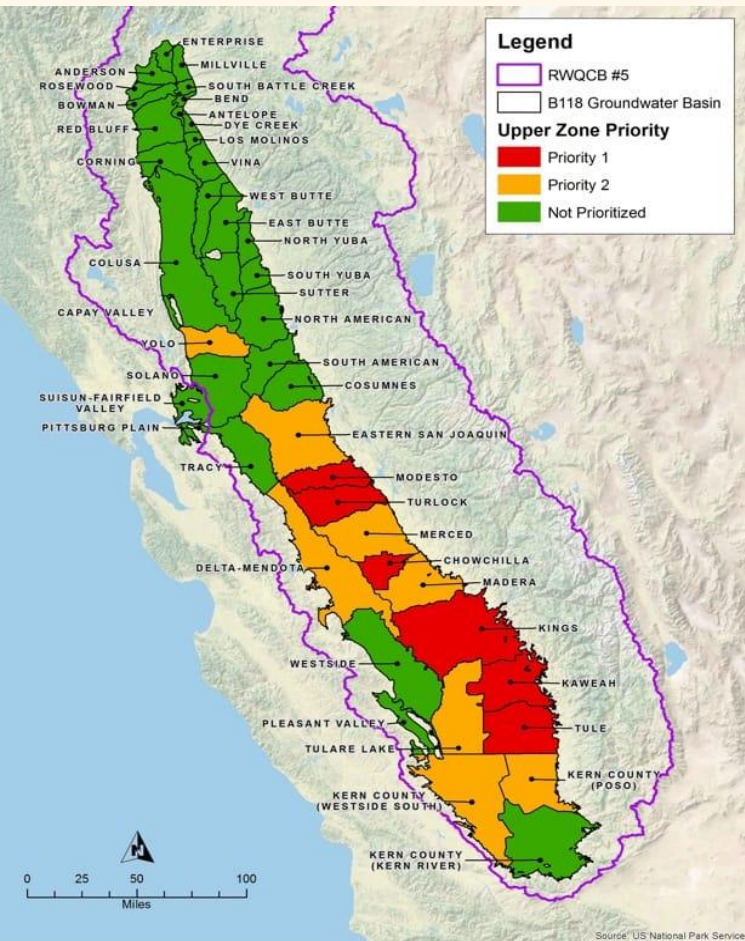
- Monitoring well trend
- Drinking water threshold

167M lbs N/yr

Percent nitrate contribution by source



Nitrate management

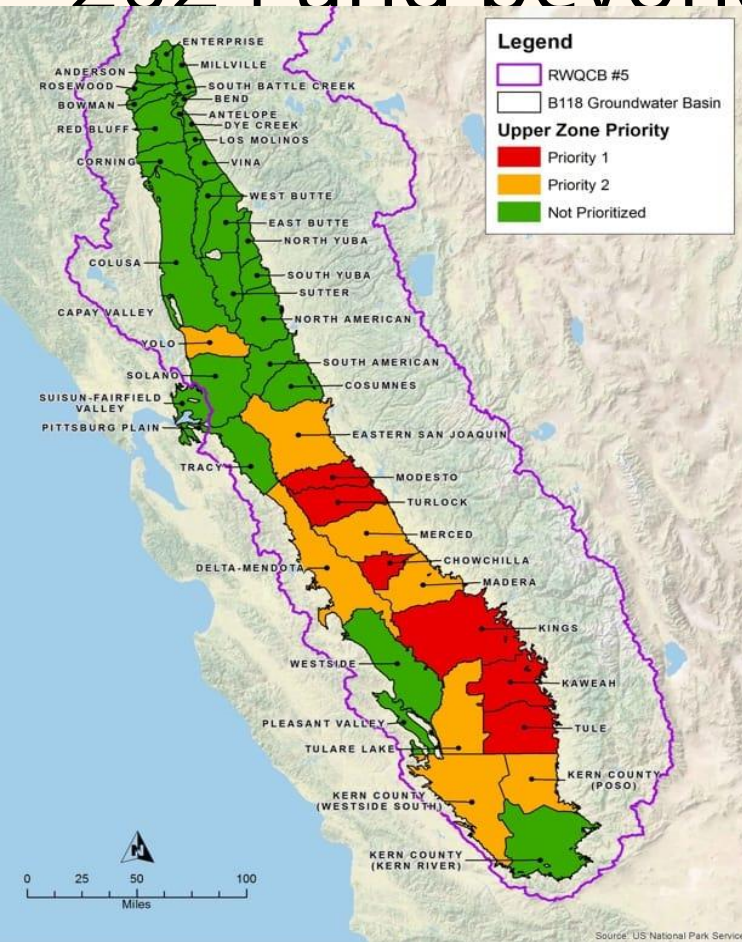


Join Nitrate Management Zone

Operate AND improve nitrogen management

Provide bottled water

2024 and beyond



Document progress toward interim milestones and improved water quality



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October 1, 2024

**STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DRAFT ORDER WQ 2024-00xx**

IN THE MATTER OF REVIEW OF
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO R5-2013-0122
FOR MILK COW DAIRIES IN THE CENTRAL VALLEY REGION
ISSUED BY THE CALIFORNIA REGIONAL WATER QUALITY BOARD,

Comments due 12/6 : **FILES A-2283(b)**

Nitrogen management

“...improve quantification of excretion rate, aid the partitioning of solid and liquid manure, improve samples for solid and liquid manure and improve estimates of the nitrogen in the harvest removed from fields. These measures are critical for dairies to develop more accurate accounting of the amount of nitrogen they are generating, as well as its fate.”

Precedential = statewide

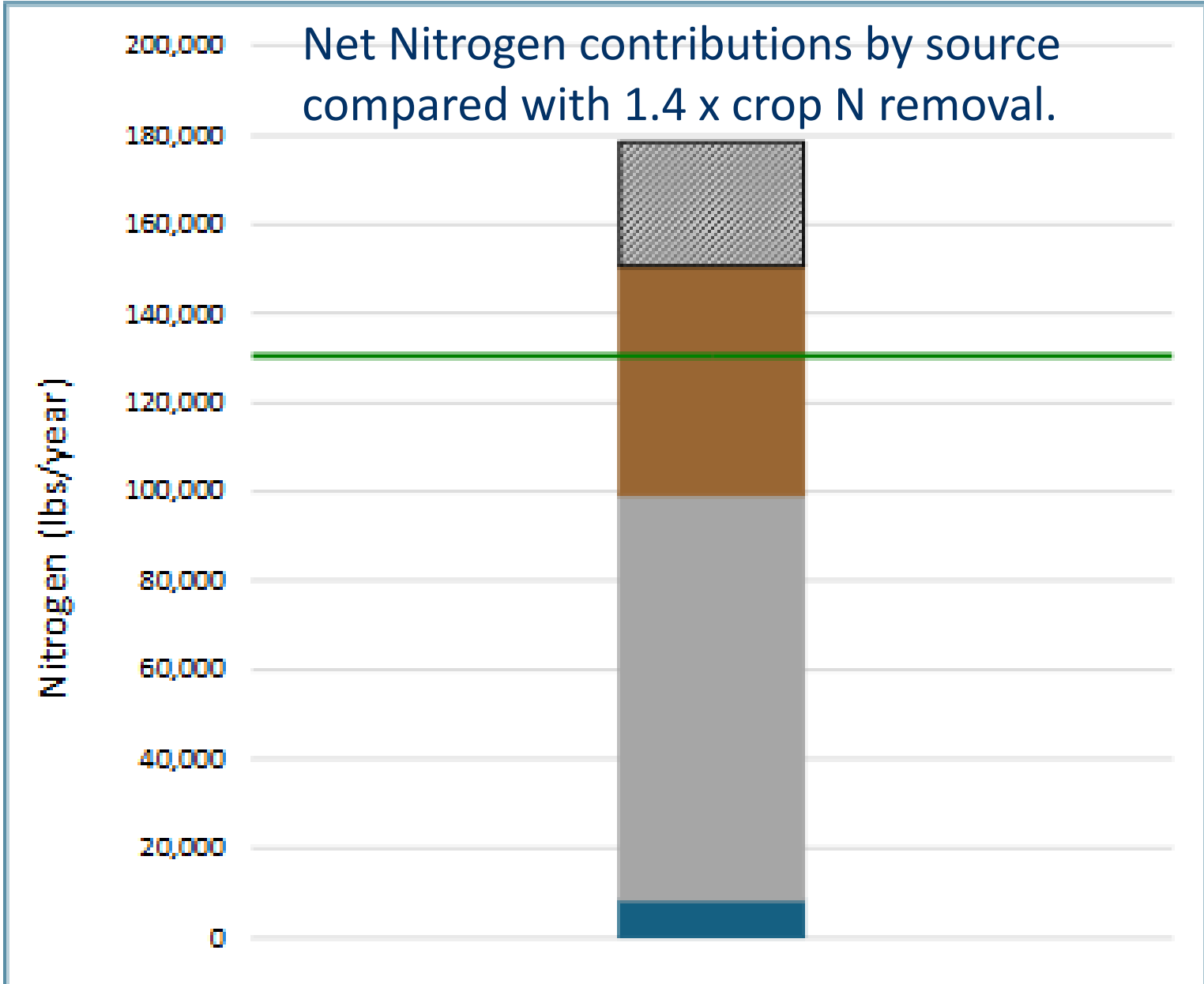
Overview






Where we are

Where we are going

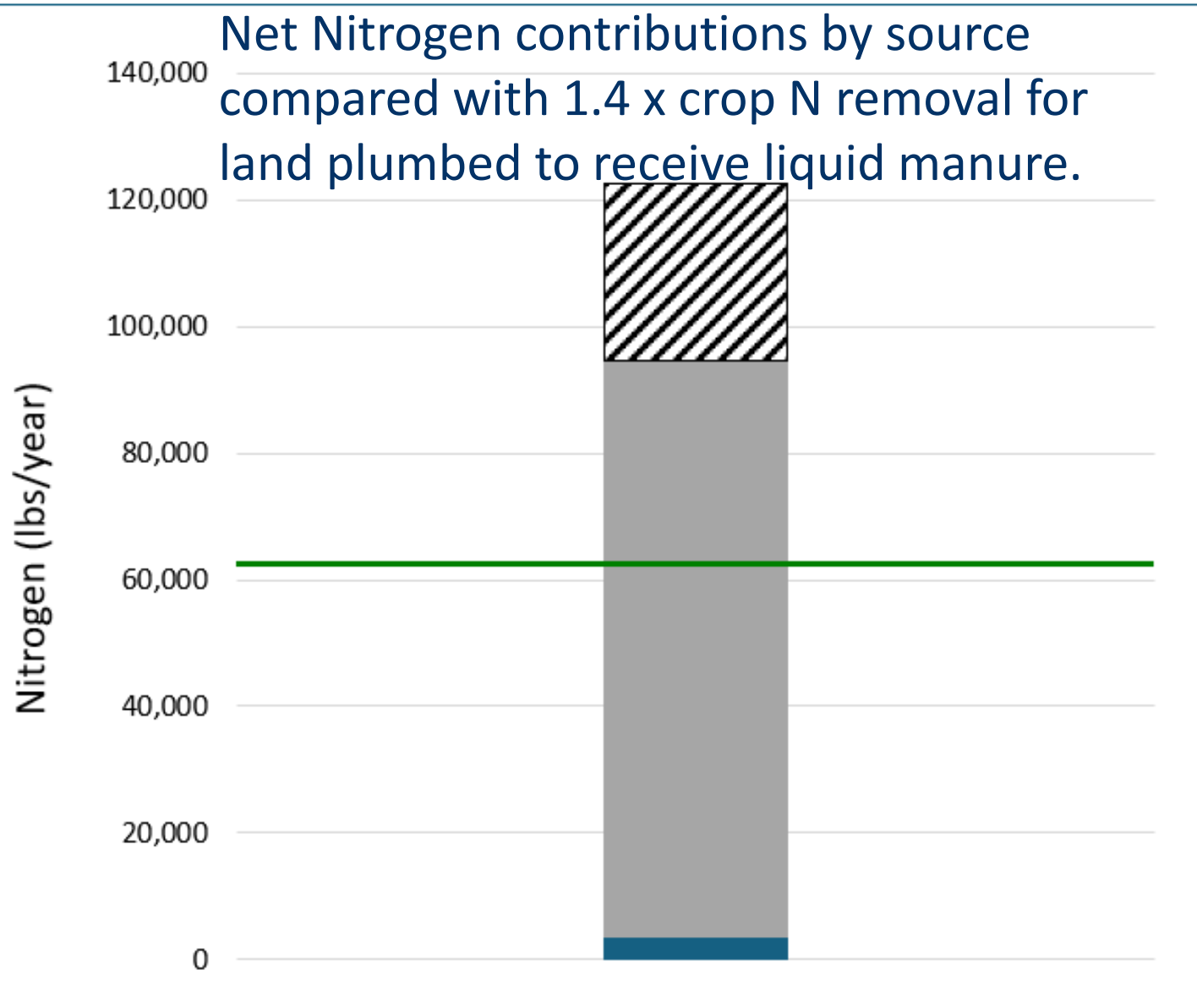
How we will get there



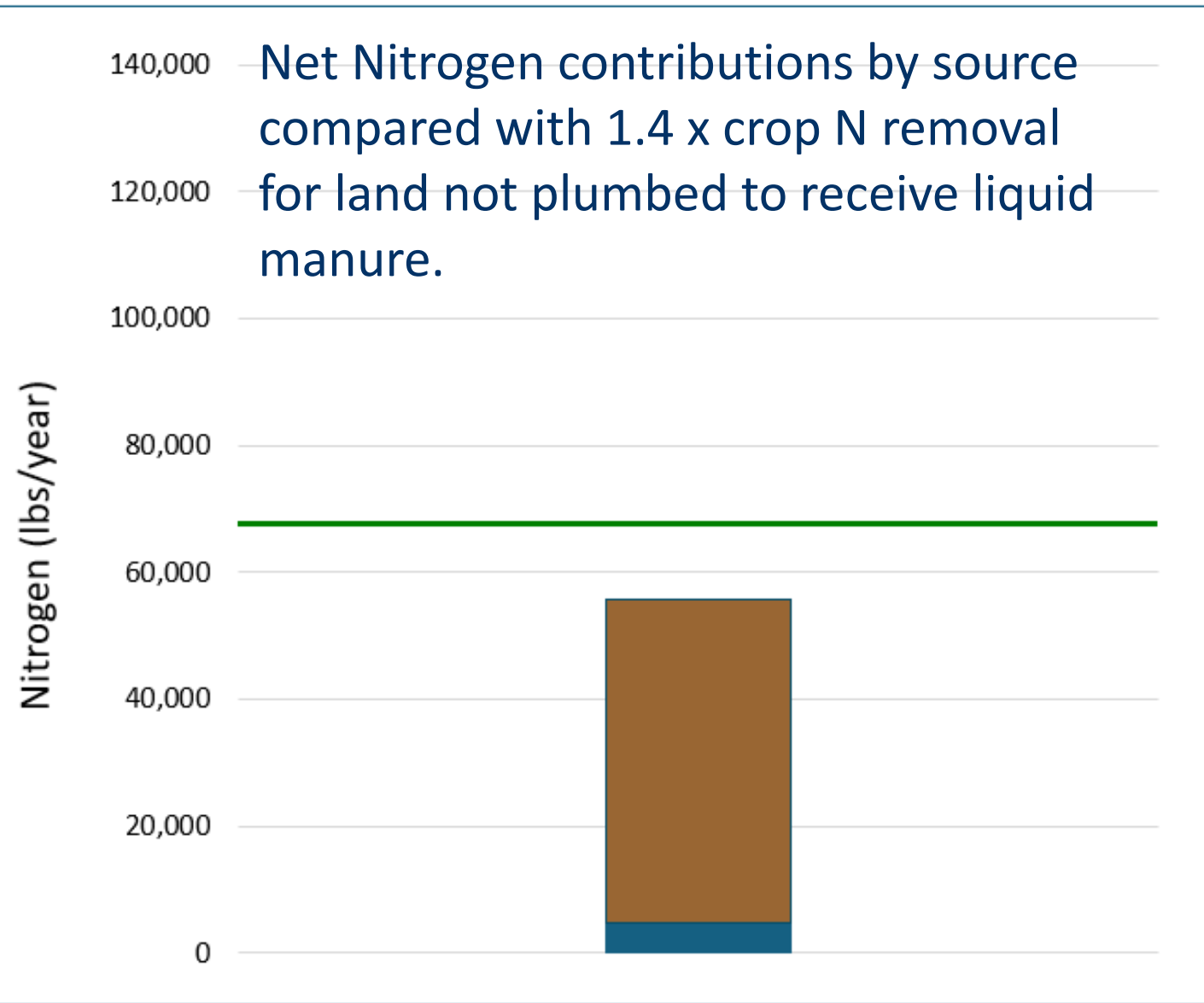


-  Synthetic Fertilizer N
-  Solid Manure N
-  Liquid Manure N
-  Irrigation Water N
-  1.4 x Crop N Removal

Net Nitrogen contributions by source compared with 1.4 x crop N removal for land plumbed to receive liquid manure.



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Read newsletters



MPC WEEKLY FRIDAY REPORT

