BACWA support for compliance with 2024 Nutrient Watershed Permit

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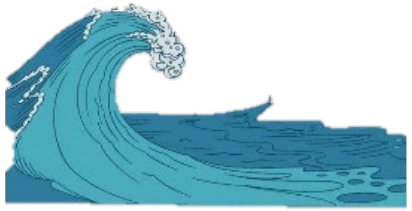
May 2, 2025

BACWA Annual Meeting

The SF Bay has historically been resilient to nutrients

1. High turbidity blocks the light phytoplankton needs to grow

2. Strong tidal mixing reduces nutrient concentrations



3. Filter-feeding clams reduces phytoplankton concentrations

San Francisco Chronicle

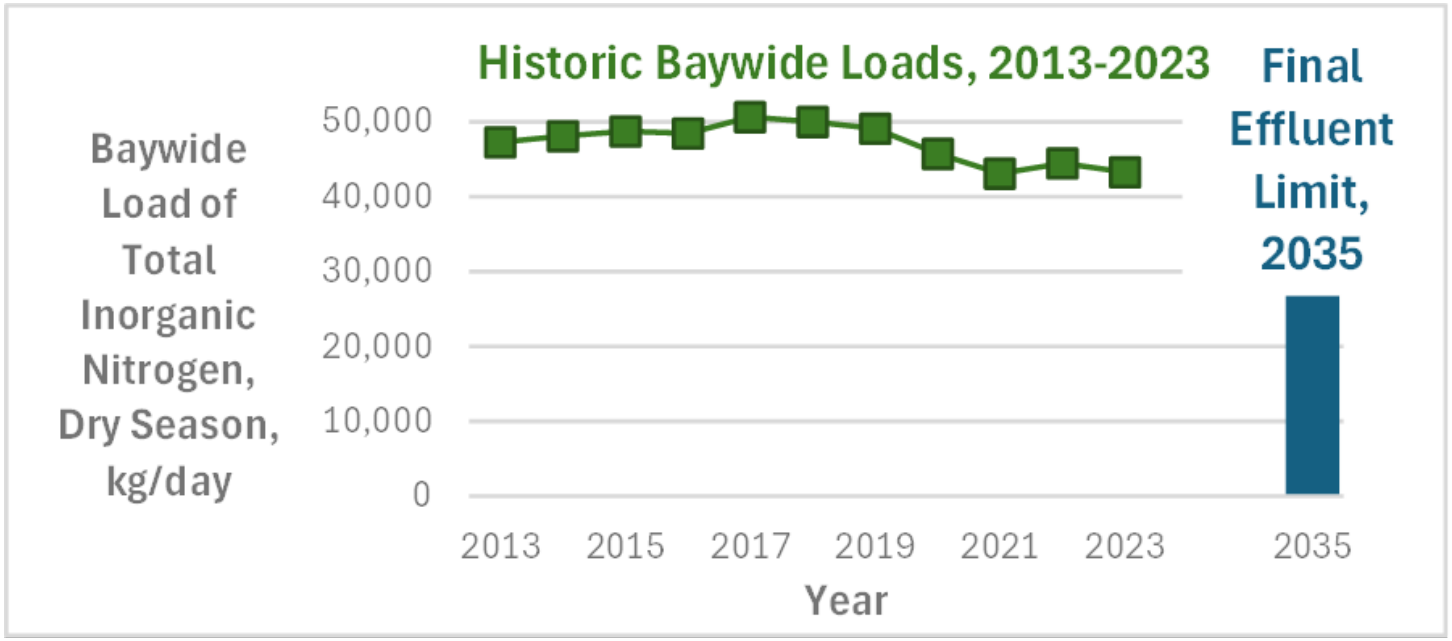
Poop and pee cause algae blooms in S.F. Bay. Water agencies will spend $11 billion to fix the problem

History of the Nutrient Watershed Permit

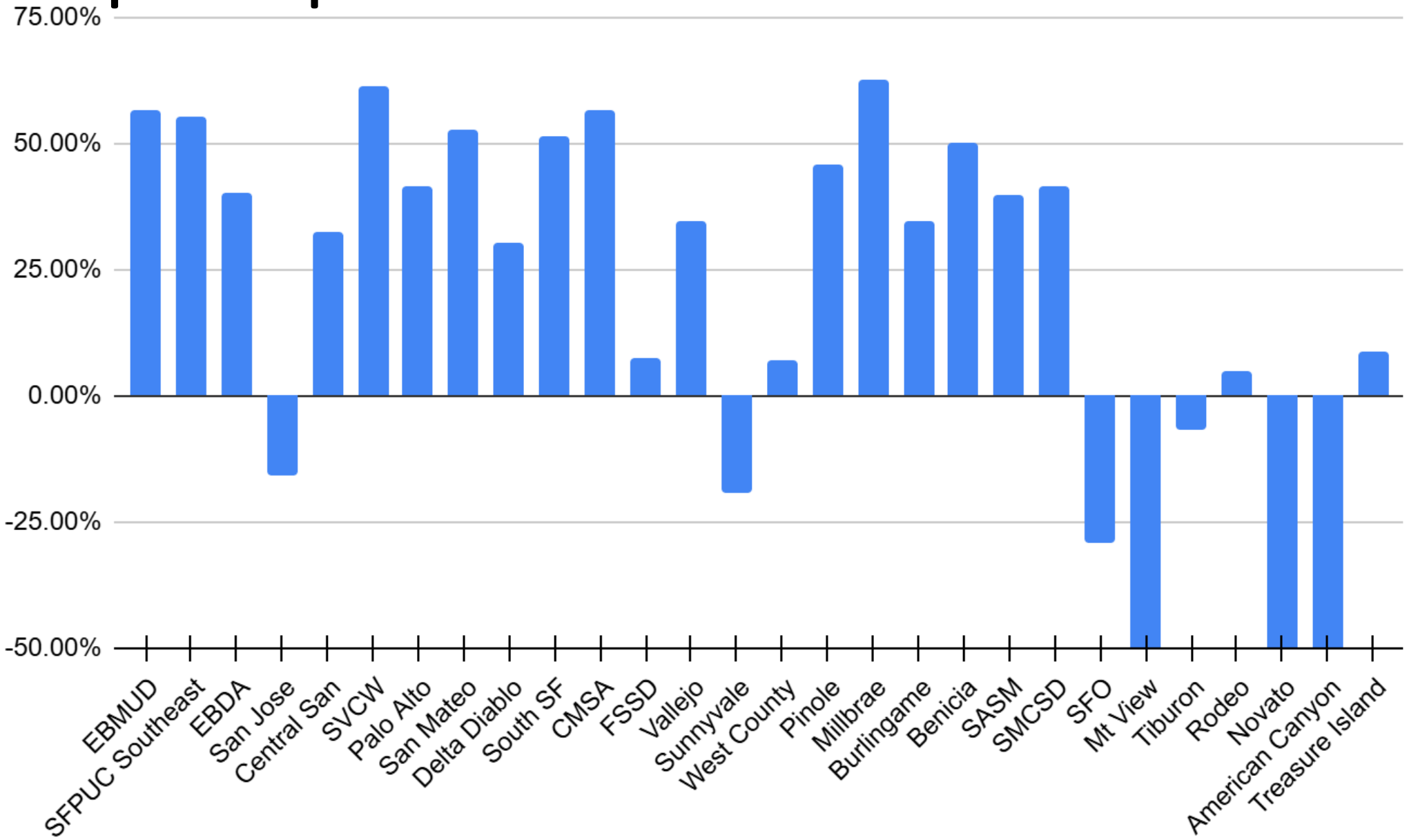
#1: **2014**	#2: **2019**	#3: **2024**
• Monitoring and Reporting • Support for Science • **Nutrient Reduction via Optimization and Upgrade Study**	• Monitoring and Reporting • Support for Science • **Nutrient Reduction via Recycled Water and NBS Studies**	• Monitoring and Reporting • Support for Science • **Load Limitations** • **Compliance Milestone Reporting** • **Regional Planning**

Third Watershed Permit adopted July 10, 2024

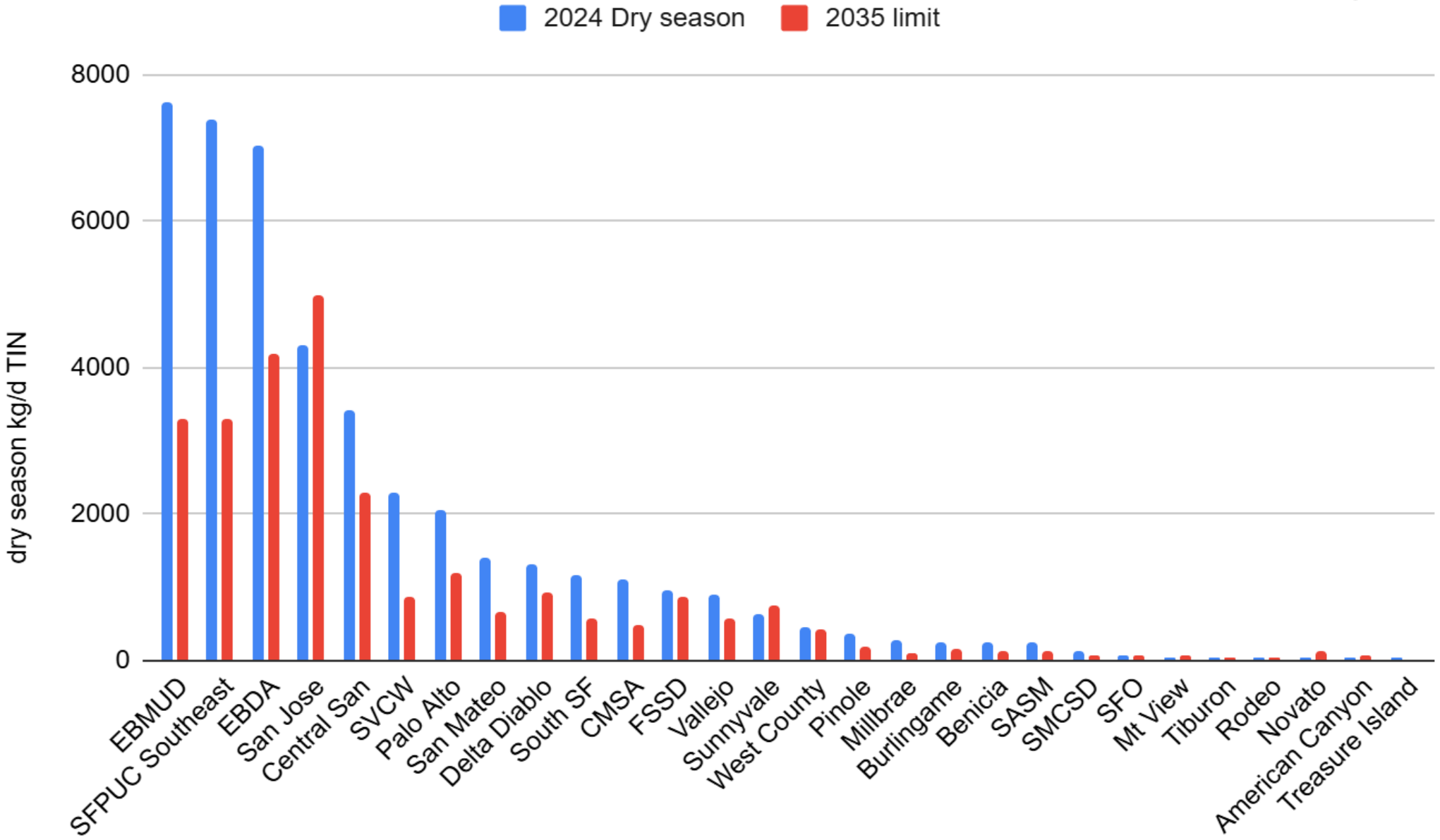
- Requires **40% aggregate dry season** load reduction
- Apportioned based on current performance – load limits calculated by multiplying effluent flow by **20.5 mg/L** TIN
- **10-year** compliance schedule
- Recognition that early actors, projects with multiple benefits and others will need more time – **Water Board working on a Basin Plan Amendment to provide extended compliance schedules for some projects**
- Allows nitrogen trading



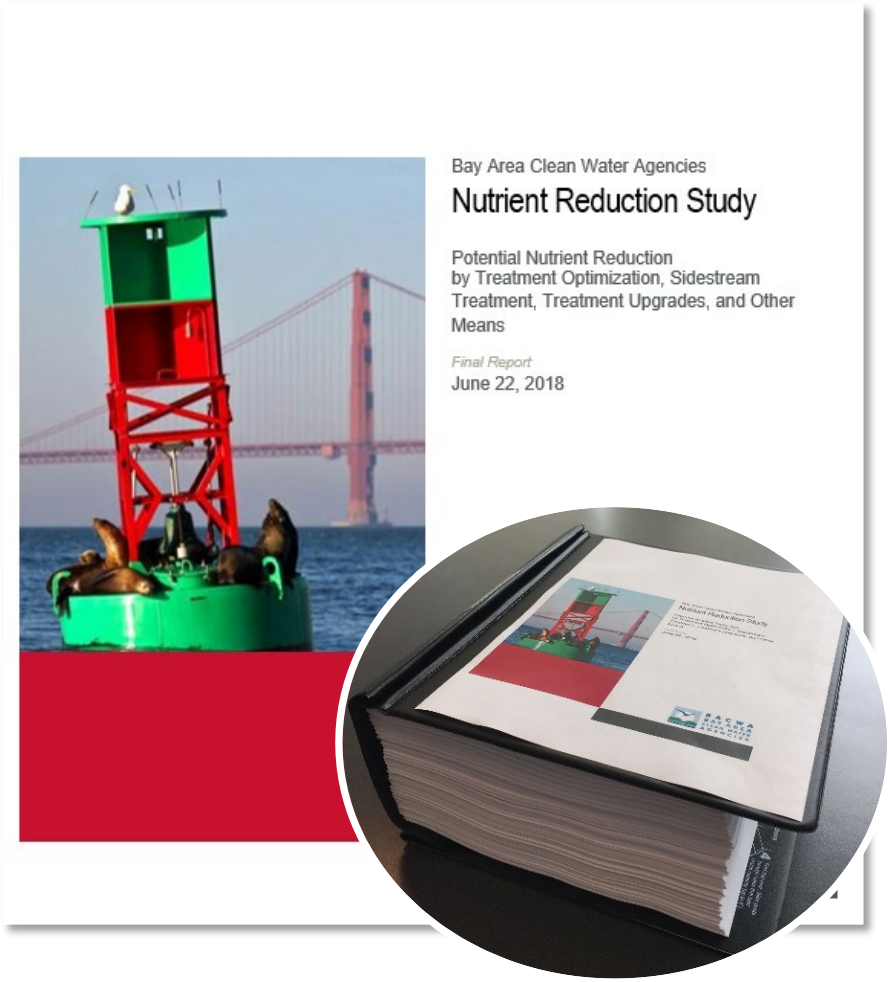
Required percent reduction from 2024 loads



Permit load reduction allocation across agencies

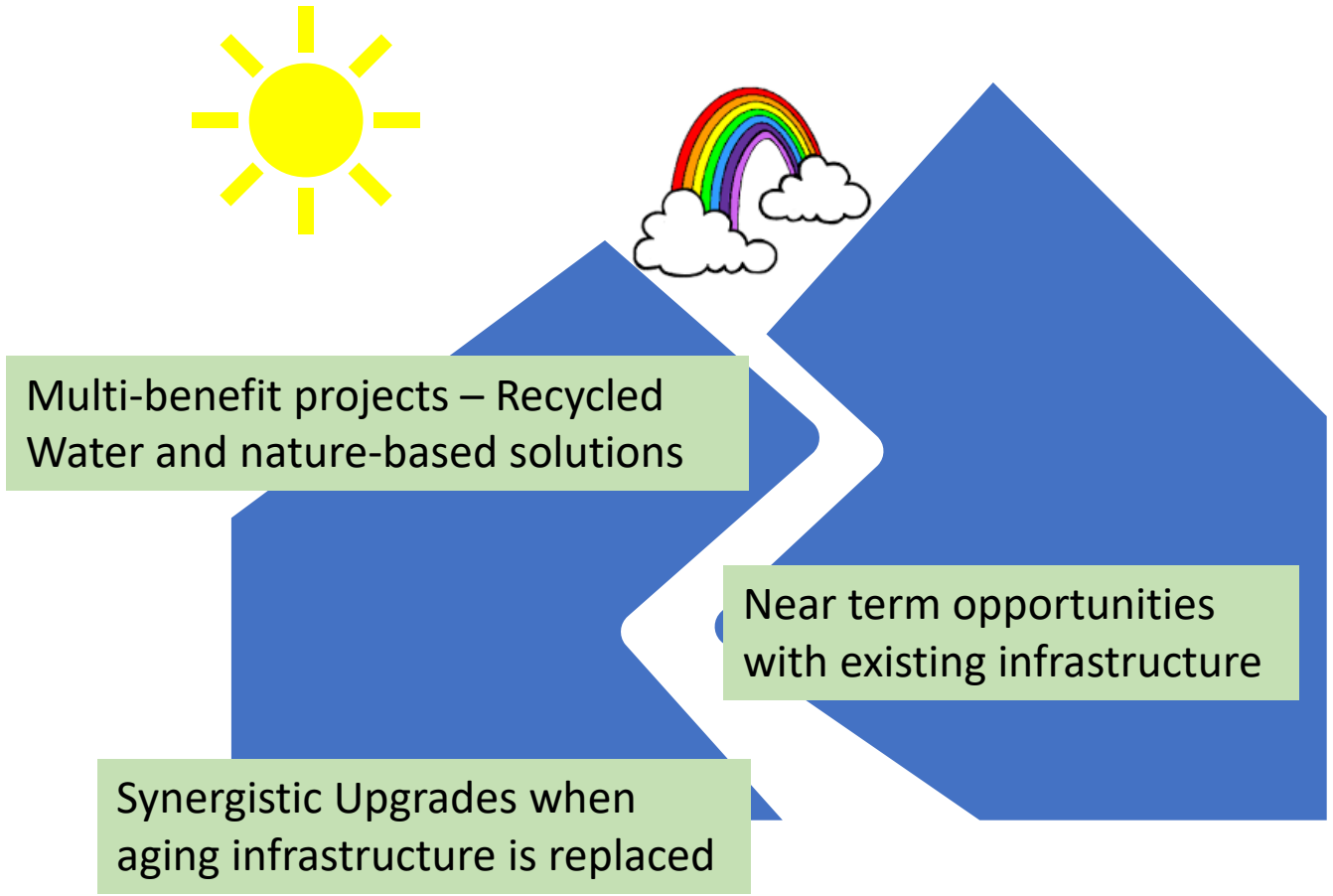


Cost estimates for regional nutrient reduction from 1st Watershed Permit



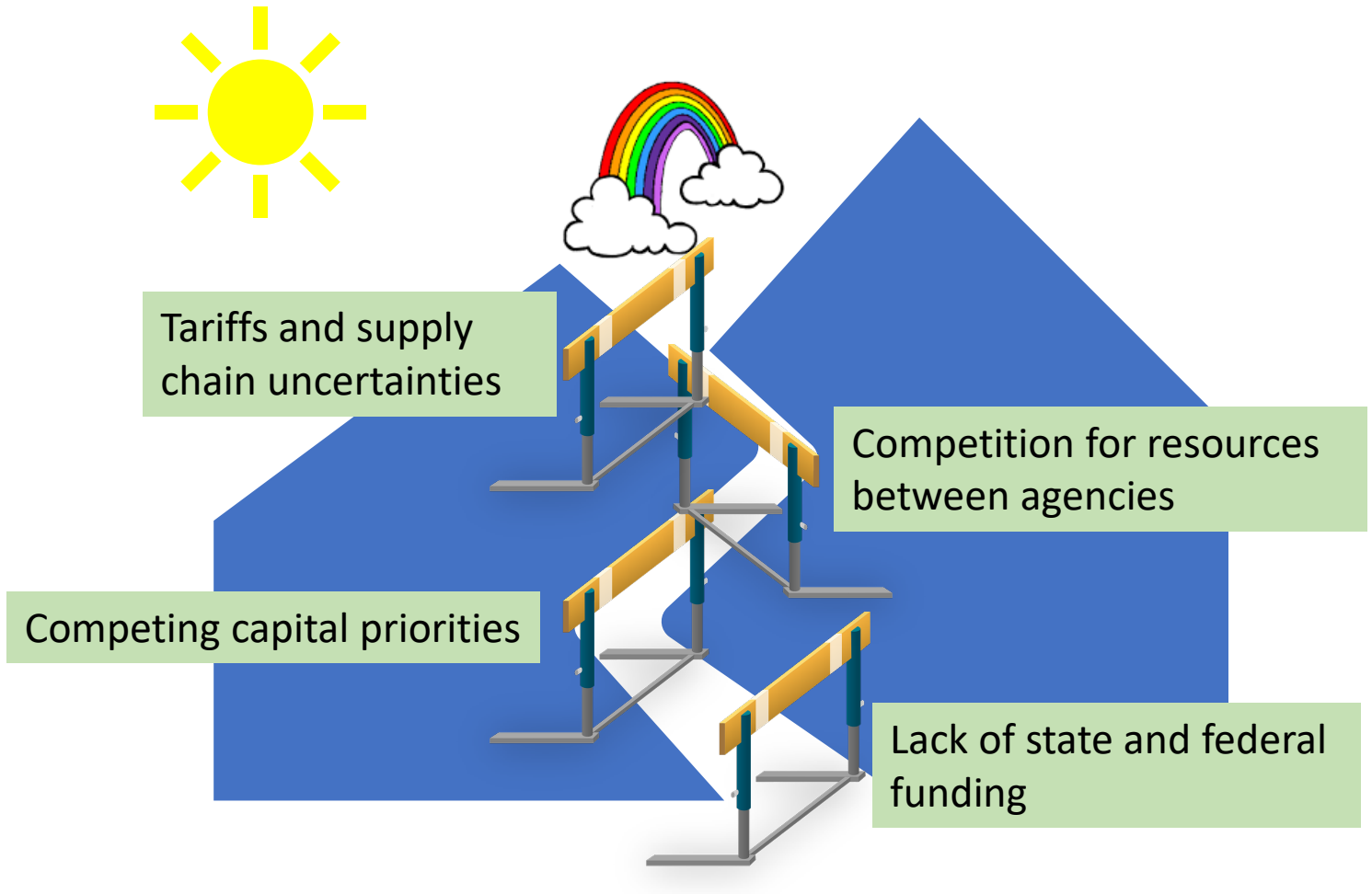
Strategy	Total N Load Reduction to the Bay	Total Present Value for Total N Load Reduction to the Bay ($ Mil in 2023)
Optimization	**7%**	**$200 M**
Sidestream Treatment	**19%**	**$870 M**
Upgrade Level 2 (15 mg N/L)	**57%**	**$10.8 B**
Upgrade Level 3 (6 mg N/L)	**82%**	**$13.0 B**

BACWA's members are planning a mixed approach to nutrient reduction …



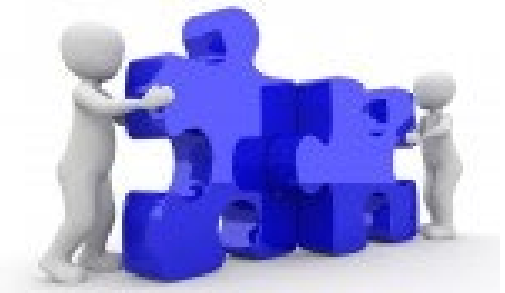
Identification of alternatives for each agency were submitted to the Water Board on April 1, 2025.

…But there are anticipated hurdles



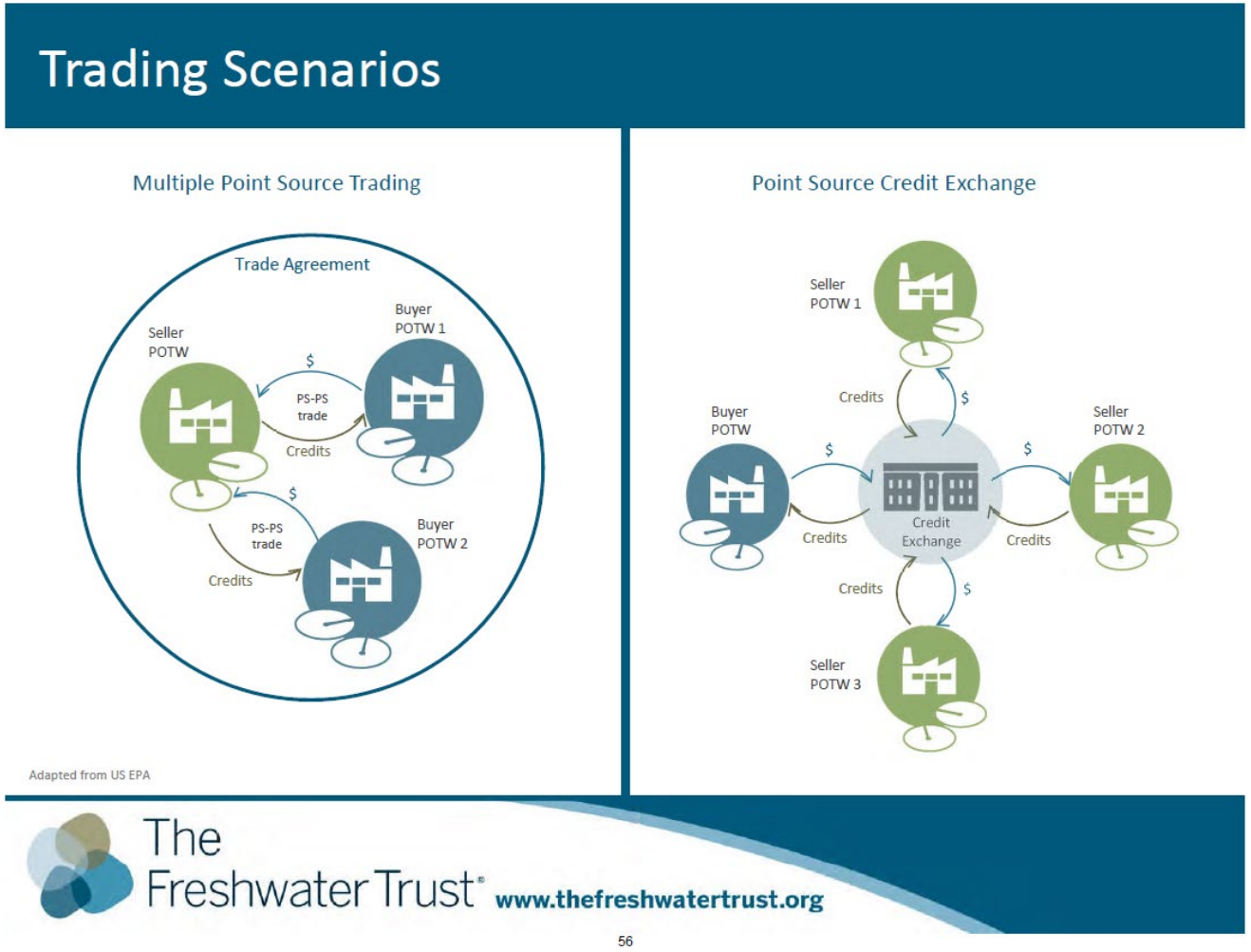
Regional planning provides a narrative to support agency efforts

- Forecast regional projects to chart path to Baywide compliance and to identify opportunities to collaborate
- Lay out construction schedules to inform industry
- Communicate about costs and rate/affordability impacts
- Compile information to support Water Board's Basin Plan Amendment to provide extended compliance schedules
- Inform Bay Area Air District to allow them to allocate permitting resources
- Develop information to support trading framework



How can trading benefit our region?

- Allow agencies to fill in the gap between planned projects and TIN limits, or to defer projects
- Additional revenue stream for agencies decreasing TIN below limits
- Tool for providing a value for TIN removal to use in interagency agreements (e.g. recycled water)



Next steps:

Trading feasibility study to give agencies more certainty on trading as a compliance option

BACWA's and your agency's responsibilities

Your Agency

- **Plan and implement your agency's compliance strategy**
- Continue monitoring and reporting nutrient data to CIWQS
- Respond to RFIs as requested
- Fund nutrient compliance work and science through Nutrient Surcharge
- Participate in Nutrient Strategy Team

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- Develop and submit Group Annual Report
- Submit Compliance Milestone reports
- Give agencies plenty of warning and support for RFIs
- Develop Regional Plan
- Take steps to develop trading framework
- Support Nutrient Management Strategy Science Program

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BAY AREA
CLEAN WATER
AGENCIES

More info:

https://bacwa.org/nutrients-2/

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