Environmental Services Updates

Board of Public Utilities November 2, 2023



OUR FUTURE IN EVERY DROP

2023 Triennial Review of Water Quality Control Plan

- Proposed 3-year workplan for North Coast Region
- Proposes Total Maximum Daily Loads (TMDLs) in Laguna de Santa Rosa Watershed
 - Nutrient, Temperature, and Dissolved Oxygen
 - Contemplates using an Advanced Restoration Plan instead of traditional TMDLs
- Will review new "Beneficial Uses" for the waters of the region



Advanced Restoration Plan (ARP)

- Replaces the terminology of the "Alternative TMDL"
- Focus on defining restoration goals in advance of a TMDL
- Near-term plan with schedule and milestones
- Designed to be more immediately beneficial to restore water quality objectives
- EPA has approved 87 ARPs in 24 different states



Beneficial Uses

- In 1972 the State Water Board adopted a list of beneficial uses
- Once beneficial uses of a surface water are defined it helps develop water quality parameters to protect that waterbody
- Examples are: Municipal and Domestic Supply, Agricultural Supply, Hydropower Generation, Water Contact Recreation, Warm Freshwater Habitat, Cold Freshwater Habitat, etc.,
- These Beneficial Uses get assigned to different waterbodies by each Regional Water Quality Control Board



New Beneficial Uses (2017)

- **Tribal Tradition and Culture (CUL)** protects water bodies for traditional uses to support cultural, spiritual, ceremonial, or traditional rights of lifeways of California Native American Tribes
- Subsistence Fishing (SUB) and Tribal Subsistence Fishing (T-SUB) – protects uses of water involving the non-commercial catching or gathering of natural aquatic resources, including fish and shellfish for sustenance (Similar to existing beneficial use (FISH))



Phosphorus Update



OUR FUTURE IN EVERY DROP

Phosphorus Regulatory Requirements

- 2006 Permit: Nitrogen & Phosphorus Zero Net Loading
- 2008 RWB Approves Nutrient Offset Program (NOP)
- 2009-present: City implements NOP Projects
- 2013 Permit: Zero Net Loading for Phosphorus only
- 2018 RWB Adopts Water Quality Trading Framework – Includes Windsor Treatment Plant



3 Projects Providing Annual Credits

Project	Credits per year	Credit Life
Beretta Dairy	412	3 years
Pepperwood Preserve	337	In perpetuity
Laguna 1 and 2 Restoration	90	In perpetuity



OUR FUTURE IN EVERY DROP

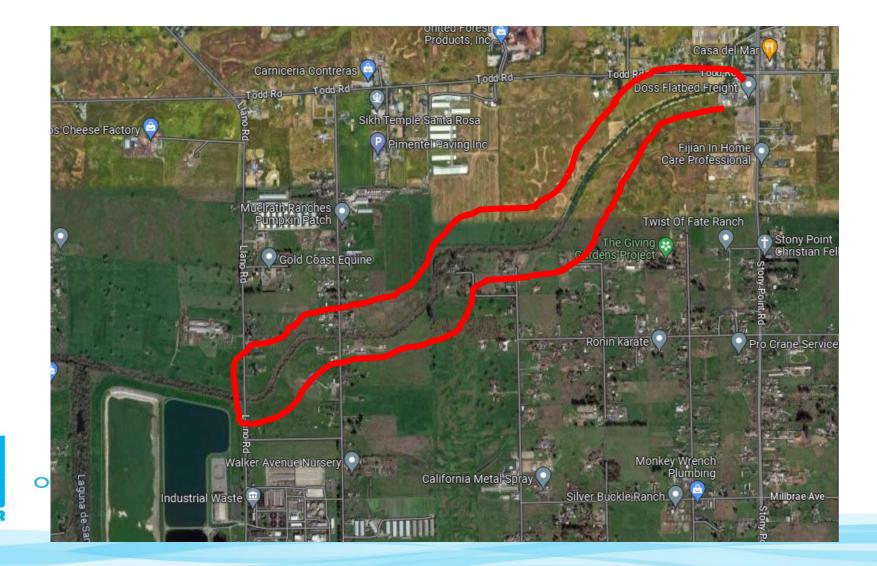
Credit Analysis

- Started 22/23 water year 15,630 credits (1 credit = 1 lb. discharged phosphorus)
- Earned 841 credits
- Discharged 10,277 pounds of phosphorus

- Sold 850 credits to Windsor
- Ended 22/23 with 5,344 credits
- Additional 839 credits 2023
- 6,189 credits w/out additional project



Colgan Restoration Project



Santa

WATEF





Phosphorus Credit Analysis

- Colgan project estimated 16,000-20,000 credits
- 3,000 credits for Windsor
- Credits expire in ten years
- City to net 13,000-17,000 credits once verified and validated





Questions