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Program Manager,
Sr Water Resources Engineer

Mendocino Community Water System Feasibility Study

September 4, 2024

Welcome

Agenda

1. Project Background & Goals
2. Project Team & Scope
3. Source Water Study
4. Alternatives Analysis
5. SAFER Program Overview
6. Schedule
7. Questions



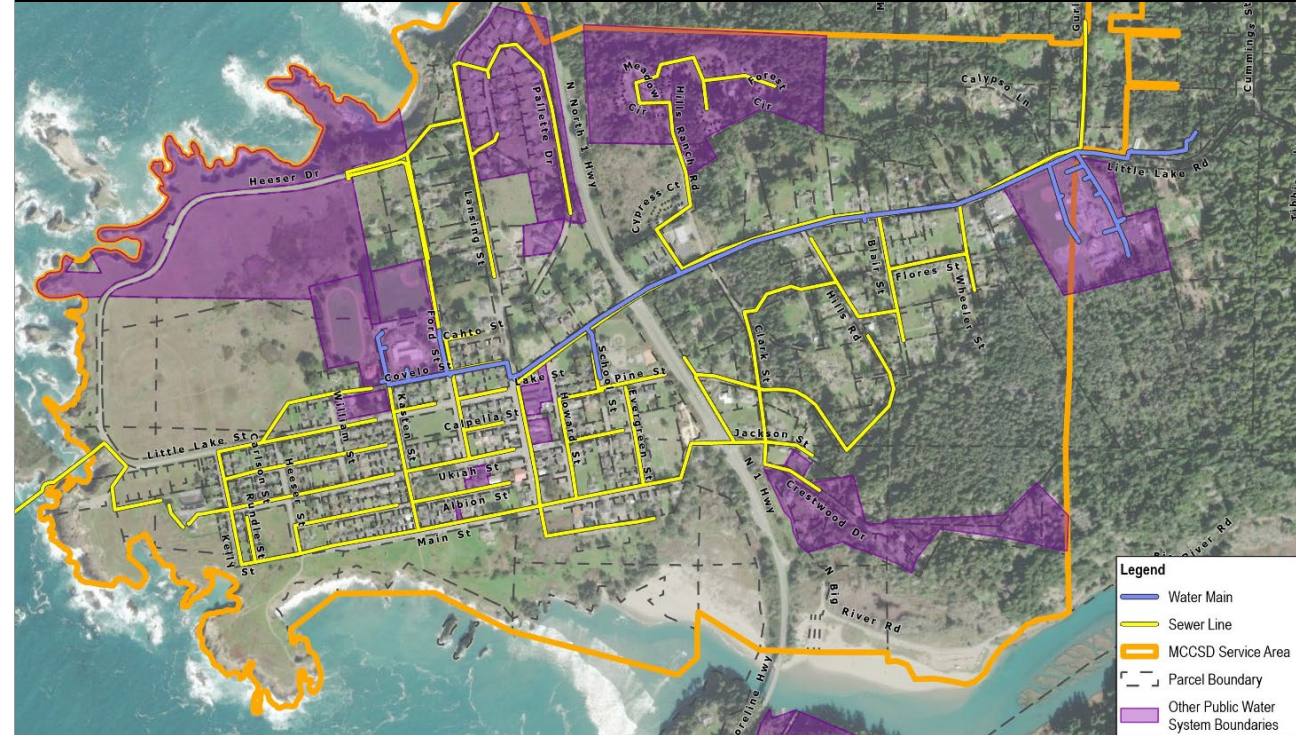
Project Background

MCCSD requested Technical Assistance to seek support in preparation of a feasibility study to identify water solutions for the community.

Goals

- Identify and describe existing water systems
- Identify water sources
- Develop alternative CWS conceptual designs and recommend an alternative.
- In a second phase, submit a DWSRF Construction Financing Application
- Finally, if granted state financing, install infrastructure and support legal agreements to establish a regional CWS for the Village of Mendocino

Provide the Community of Mendocino with a clean and reliable water supply.



GHD Project Team

Holly Ziegler, PE- Project Manager

Adam Rausch, PhD, PE – Program Manager

Ryan Crawford, PG - Hydrogeologist

Mary Anne Petrillo – West Business
Development Center, Community Outreach &
Engagement



Project Components

Source Water Study

1. Estimate study area demands
2. Identify source water options

How much water do we need and have?

Alternative Analysis Engineering Report

1. Identify and develop alternative water system conceptual designs

How do we best use it?

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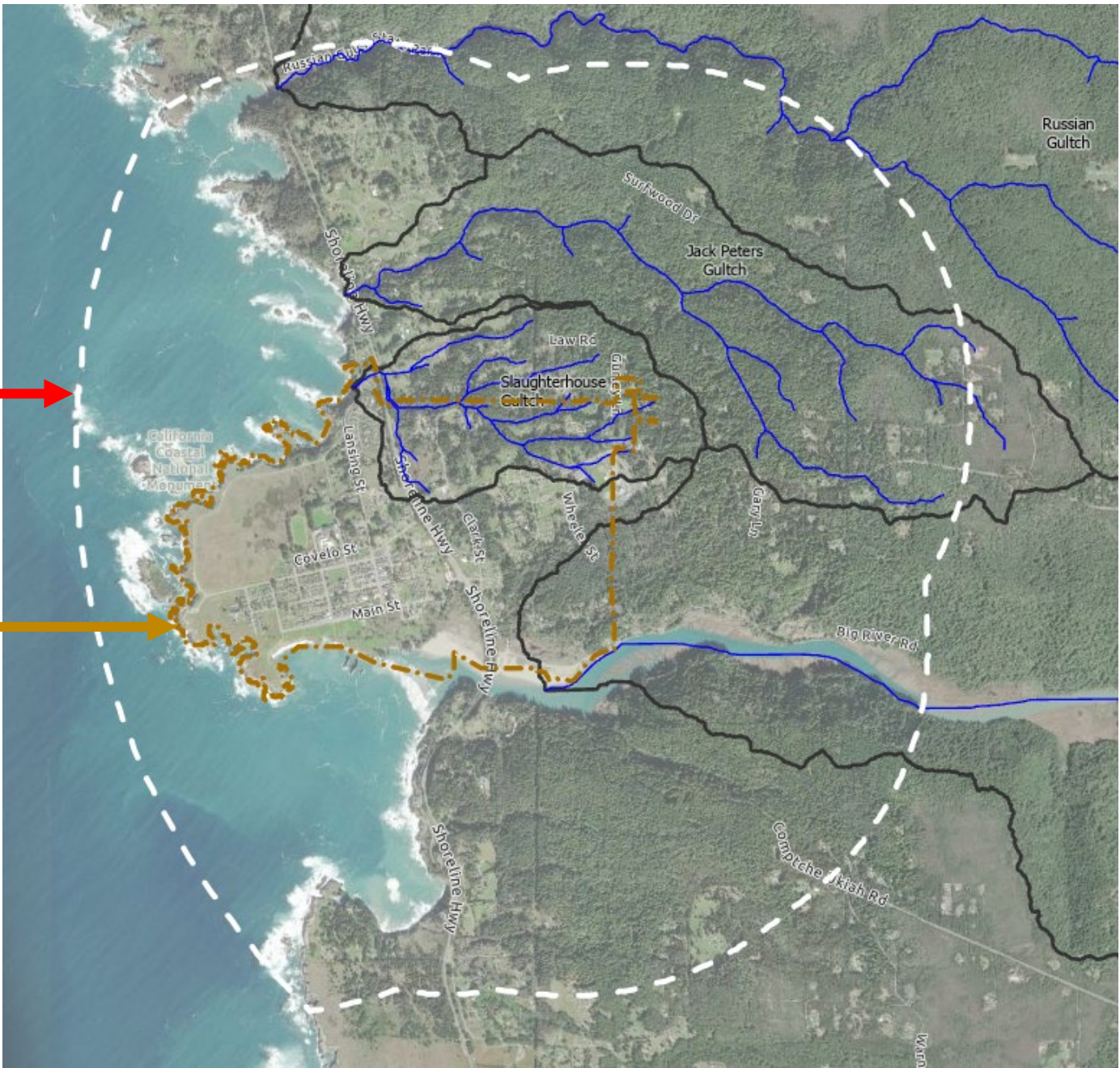
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Geography

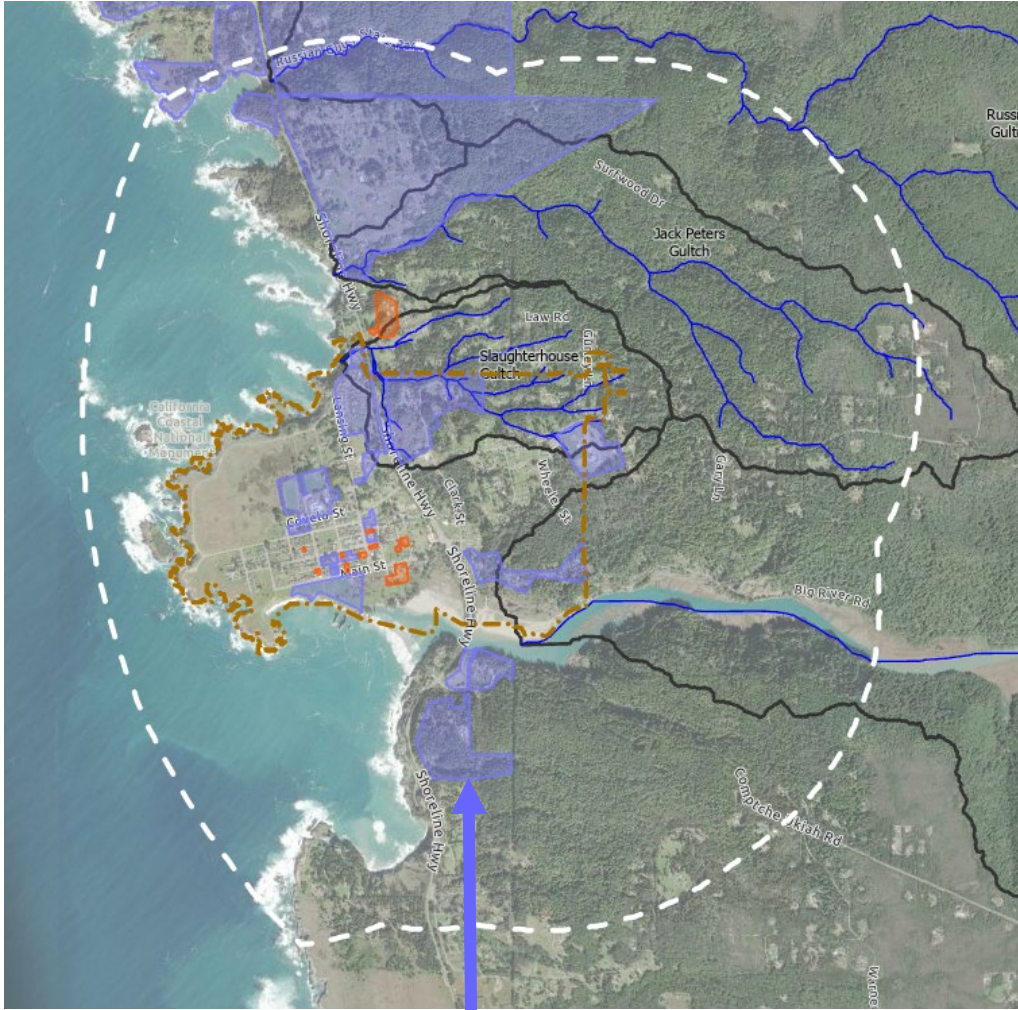
Study Area



MCCSD Boundary



Water Systems in Study Area



Water Systems

No.	Organization/Business	Service Connections	Population Served
1	Mendocino Presbyterian Church	3	90
2	Trillium Café and Inn	1	129
3	Luna Trattoria	2	120
4	Café Beaujolais	2	100
5	Frankies	7	100
6	Flow Restaurant	4	61
7	Fog Eaters	4	26
8	Mendo Market & Deli	3	26
9	Shell Building (Garden Bakery, Bay View Coffee, Gnar Bar)	1	25
10	Pattersons	1	160
11	Surfwood Mutual Water Corporation*	107	160
12	Hills Ranch Mutual Water Company*	48	79
13	Point of View Mutual Water Company*	31	56
14	Big River Vista Mutual Water Company	19	36
15	MUSD*	15	579
16	Green Real Estate Enterprises, LLC	5	108, 100 NT, 8 Residential
17	Mendocino Hotel	1	50
18	Harvest at Mendosas	3	45
19	CSP- Mendocino Headlands- Sea Arch-State Park Service	1	500
20	CSP-Mendocino Headlands- Ford House	2	275
21	Maccallum House Inn	1	200
22	Stanford Inn	6, 1 AG, 3 CM, 2 RS	153
23	Mendocino Art Center	12	108
24	Hill House, LLC	1	62
25	Searock	10 includes agate cove	54
26	CSP- Russian Gulch State Park	24	30
27	Mendocino Grove	2	27
28	Dick's Place	1	25

Source Water Study

Source Water Study

1. Summarize water supply assets & capacities in study area
2. Review available well logs & driller well completion reports
3. Estimate study area demands (in gallons or Acre-feet)
4. Identify all source water options
5. Develop construction rough cost estimates for source water options for order of magnitude comparisons and considerations.



Options Considered

- A. Groundwater
- B. Surface Water- many obstacles to use
- C. Desalination of Ocean or Brackish Water
- D. Conjunctive Use Sources:
 - Recycled Water - from Wastewater Treatment Plant (offset demands, *direct potable reuse not an option in California)
 - Stormwater Capture - could impact downstream resources such as, min. fish flows, wetlands and existing groundwater recharge
 - Aquifer Recharge - Recharge aquifer with wastewater effluent (Indirect Potable Reuse)

Alternatives Analysis

Alternatives Analysis Engineering Report

1. Gather information, previous studies, visit each community water system (CWS)
2. Existing CWS condition assessments
3. Develop 3 conceptual water system designs
4. Develop construction cost estimates



Develop 3 different conceptual water system designs.

Elements that will vary between alternatives:

- Sources
- Consolidation
- Service area
- Infrastructure

Understand interest of existing water systems

Alternatives Analysis

Water Infrastructure:

Source Infrastructure

Water Mains & Fire Hydrants

Treatment Systems

Tanks

Service Connections

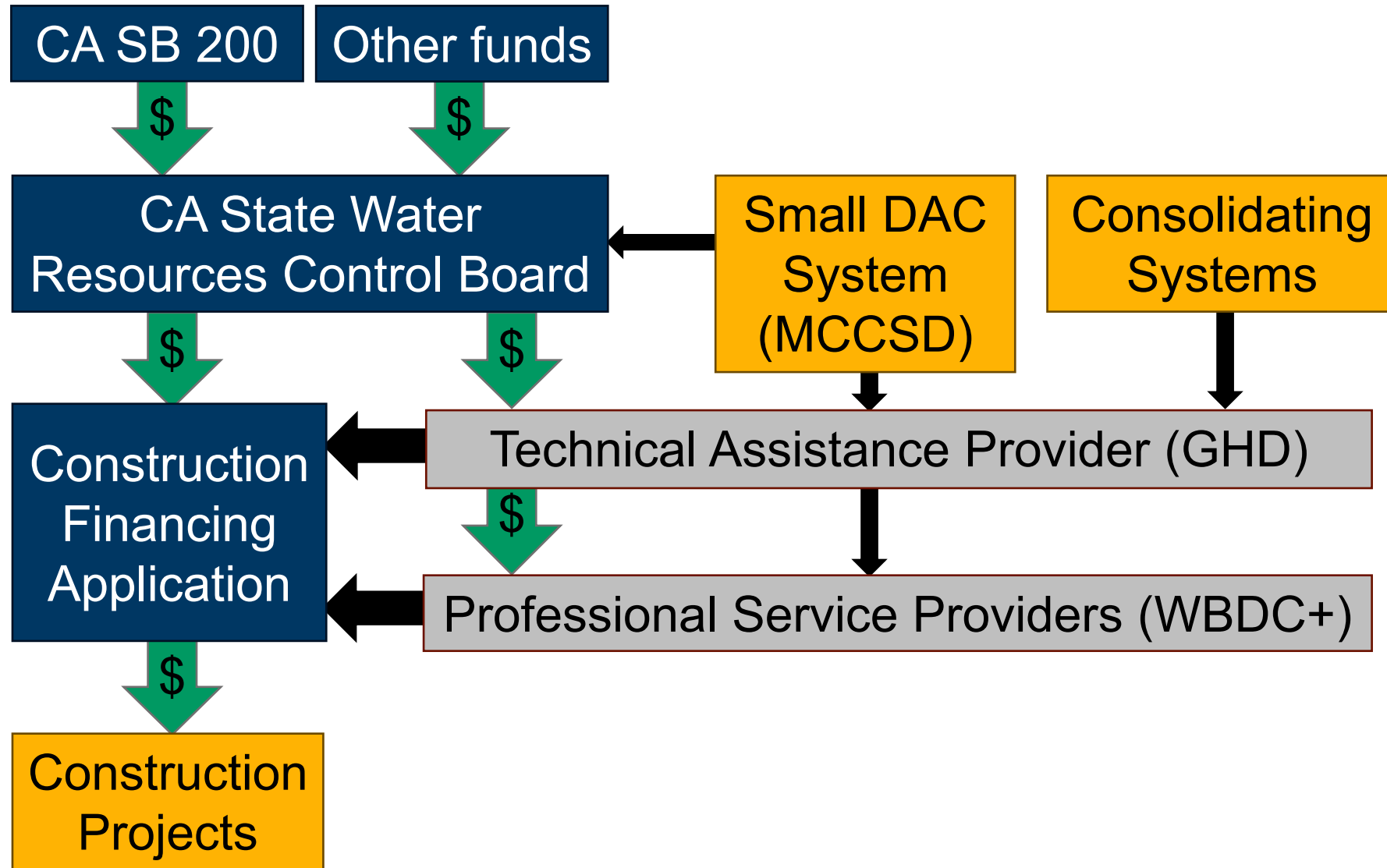
Pump Stations



Schedule

Item	Anticipated Completion Date
Focus Meeting #1	August 27, 2024 12PM
Focus Meeting #2	September 4, 2024 6PM
Draft Source Water Study	September 2024
Task 2- Community Meeting #1	October 2024
Draft Engineering Report	November 2024
Task 2- Community Meeting #2	TBD

What is the SAFER Program? TA Program?



State Priorities

- **Category A-C Projects:** high priority projects that address public health issues (waterborne disease, water exceeds primary standards or surface water is inadequately treated, insufficient source or water delivery capacity, etc.).
- **Category D Projects:** address inadequate reliability (community water systems with a single source and no backup supply, water meters, etc.).
- **Category E-F Projects:** other eligible projects (water exceeds secondary standards, violations of Waterworks Standards, etc.).
- **Incentive Project:** a drinking water construction project, often separate from a consolidation project, that solely benefits a Receiving Water System.
- **Receiving Water System:** takes in a new service area as part of a consolidation.

CONSTRUCTION GRANTS / PRINCIPAL FORGIVENESS (PF):

Type of Community	Residential Water Rates as a % of MHI	% of Total Eligible Project Cost	Max Amount Per Connection ¹
Category A – D and/or Consolidation Projects			
Small DAC; Eligible NTNC That Serves a Small DAC; Expanded Small DAC; or Small Non-DAC with MHI < 150% of Statewide MHI ²	N/A	up to 100%	\$60,000 ³
Category A – C and/or Consolidation Projects			
Medium DAC ²	N/A	up to 100%	\$60,000 ³
Category E - F Projects			
Small DAC or Eligible NTNC That Serves a Small DAC	N/A	up to 100%	\$45,000 ⁴
Expanded Small DAC	>=1.5%		
	<1.5%	Not Eligible for PF/Grant	
¹ The Deputy Director of the Division of Financial Assistance (DFA) may approve financing for construction projects with a total eligible project cost up to \$6 M regardless of the amount per connection.			
² Except for case-by-case exceptions, maximum of \$20 million per project for Medium DAC or Small Non-DAC.			



Questions?

Provide feedback and stay informed on our Website at:

<https://tinyurl.com/mendowaterstudy2024>



This Project

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*** Thank You**

→ [ghd.com](https://www.ghd.com)

