

Regional Biosolids Program

Feasibility Study (Phase I)

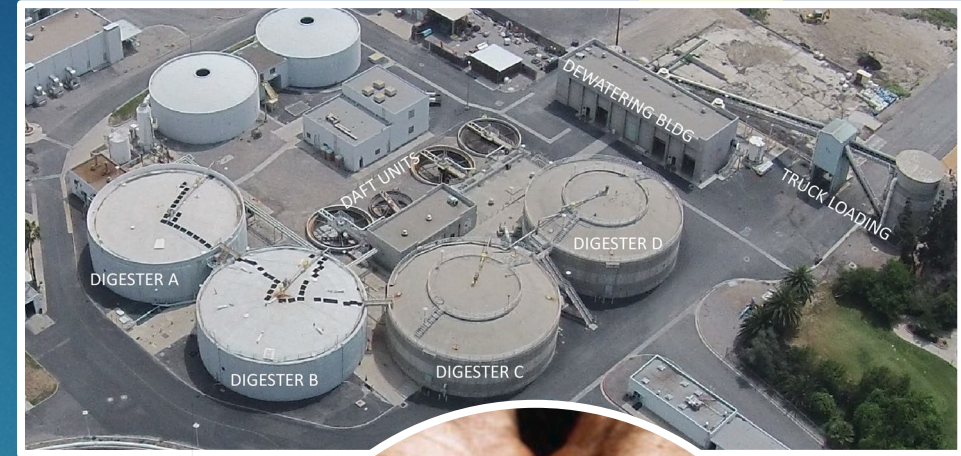
CLEAN WATER SOCAL – REGIONAL BIOSOLIDS CONSORTIUM

THURSDAY, MAY 15, 2025



What are biosolids?

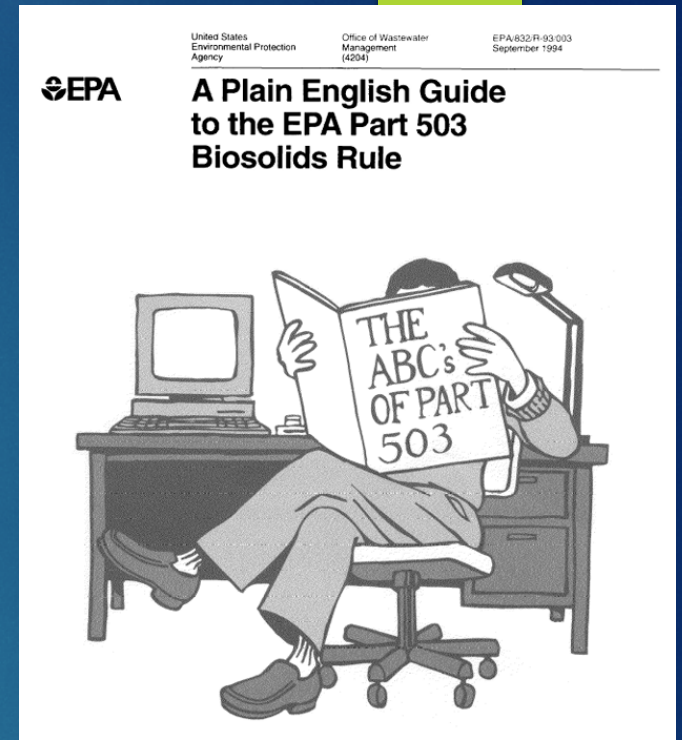
- Separated solids are treated to:
 - Reduce pathogens
 - Reduce pollutants
 - Reduce vector attraction
 - Reduce volatile solids (break down organic matter)
- **Beneficially-reusable renewable resource** that results:
 - Carbon-rich
 - Nutrient-rich
- Alternative to synthetic fertilizer



Minimum requirements: EPA 40 CFR Part 503

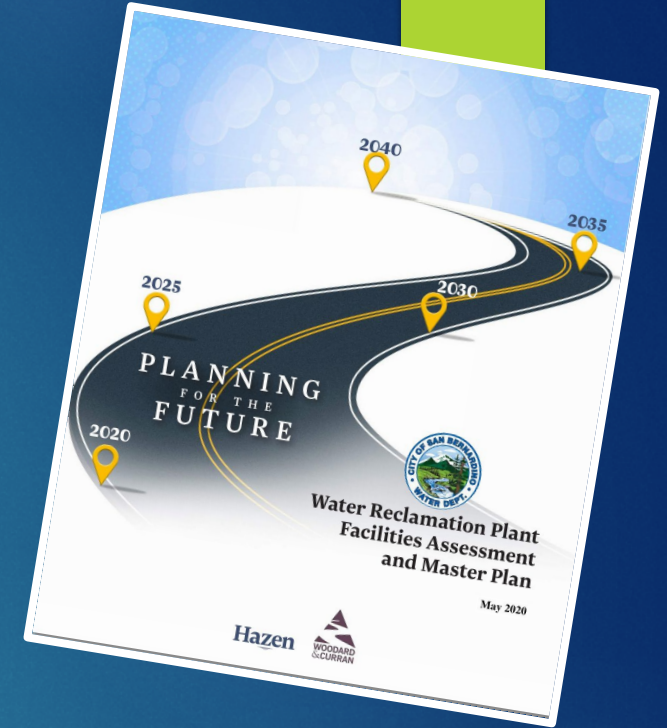
- “To protect public health and the environment from potential hazards associated with the **use or disposal** of biosolids”
- **Requirements:**
 - Pathogen reduction
 - Class A
 - Class B
 - Pollutant limits
 - Vector attraction reduction
- **Limited “Disposal” Options:**
 - Land application of biosolids
 - Surface disposal (landfilling)
 - Incineration

USE
VS
DISPOSAL



May 2020 WRP Master Plan

- Current biosolids program has served the Department well
- Need a biosolids program that is:
 - Reliable
 - Cost-effective
 - Sustainable
- Significant upcoming challenges warrant a thorough planning process:
 - Aging infrastructure with both Digesters A and B in poor condition
 - Reliance on a single private contractor with risk of sudden contract termination
 - An evolving regulatory environment with many unknowns related to biosolids management
- Recommended a Biosolids Strategic Plan



November 2021 Biosolids Strategic Plan



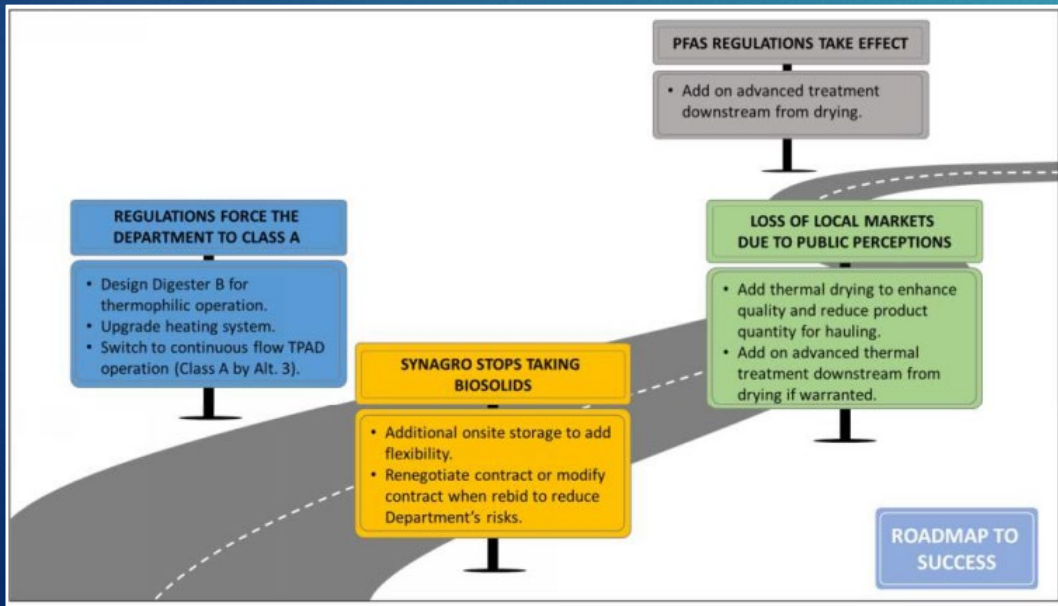
- Black and Veatch
- Evaluate current biosolids management program and infrastructure
- Goals:
 - Maximize value of investments in solids processing infrastructure
 - Maximize cost effectiveness of operating practices
- Identify management strategies to help w/ reliability and sustainability
- Highest priority: cost savings
- **November 2021 “Road Map”**



2022 & 2023 Simultaneous Roadblocks



- Disruption of contractor operations: temporary facility closure
- Labor, equipment, and supply chain issues: hauling challenges
- Reliability of privately-operated facilities: Chapter 11 filing
- Restrictive legislation:
 - Arizona House Bill 2669 – Very nearly prohibited Class B land application
 - Maine Legislative Document 1911 – Biosolids land application ban



- Can we effectively and efficiently handle all of the problems that arise at the speed with which they arise?
- Mitigating unforeseen circumstances is not inexpensive
- Mitigating unforeseen circumstances swallows staff availability

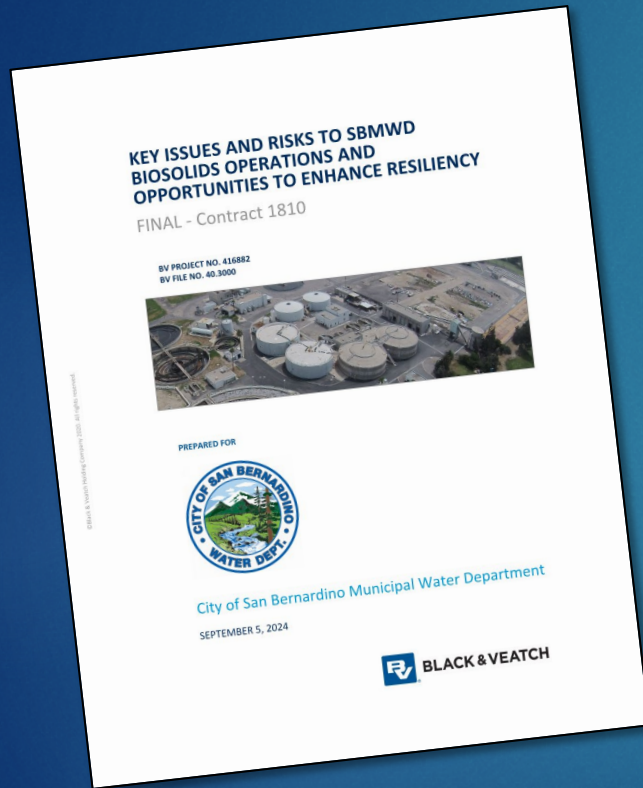




Think different.

1997 – 2002 Apple Advertising Slogan

2023 Update to Biosolids Strategic Plan



- Road blocks experienced:
 - Differently
 - More Dramatically
 - Sooner
 - Simultaneously
- Revisited Biosolids Strategic Plan
 - Must restore resiliency
 - Evaluate regionalization
 - Develop an MOU
 - Develop Feasibility Study Scope of Work
 - Conduct Feasibility Study
 - Develop an Implementation Strategy



Model Regional Partnerships

- **Existing:**

- Inland Empire Regional Composting Facility (IERCF) – IEUA & LA Co San Districts
- Solid Waste Authority of Palm Beach County (SWA) – Boca Raton, Palm Beach County, and 4 others
- Grand Valley Regional Biosolids Authority (GVRBA) – Grand Rapids and Wyoming, MI

- **Current:**

- Bay Area Biosolids Consortium – San Francisco
- Charleston Regional Resource Recovery Authority (CRRRA) – Charleston, N. Charleston, Mount Pleasant, SC
- Central Coast Biosolids – San Luis Obispo, Paso Robles, and many others
- Town of Windsor, CA
- West Central Wisconsin Biosolids Facility – Ellsworth, WI
- Portland, Maine Regional Biosolids
- Atlanta Regional Zero Waste Energy Recovery Program
- New England Regional Biosolids Program – Narragansett Bay Commission
- [Town of Hickory, NC – Regional Biosolids]?
- [Pinellas County, FL – Regional Biosolids]?



Example Phased Approach



Phase I
Feasibility Assessment

1st Off-Ramp

Phase II
Plan Development

2nd Off-Ramp

Phase III
Phased Implementation of Plan



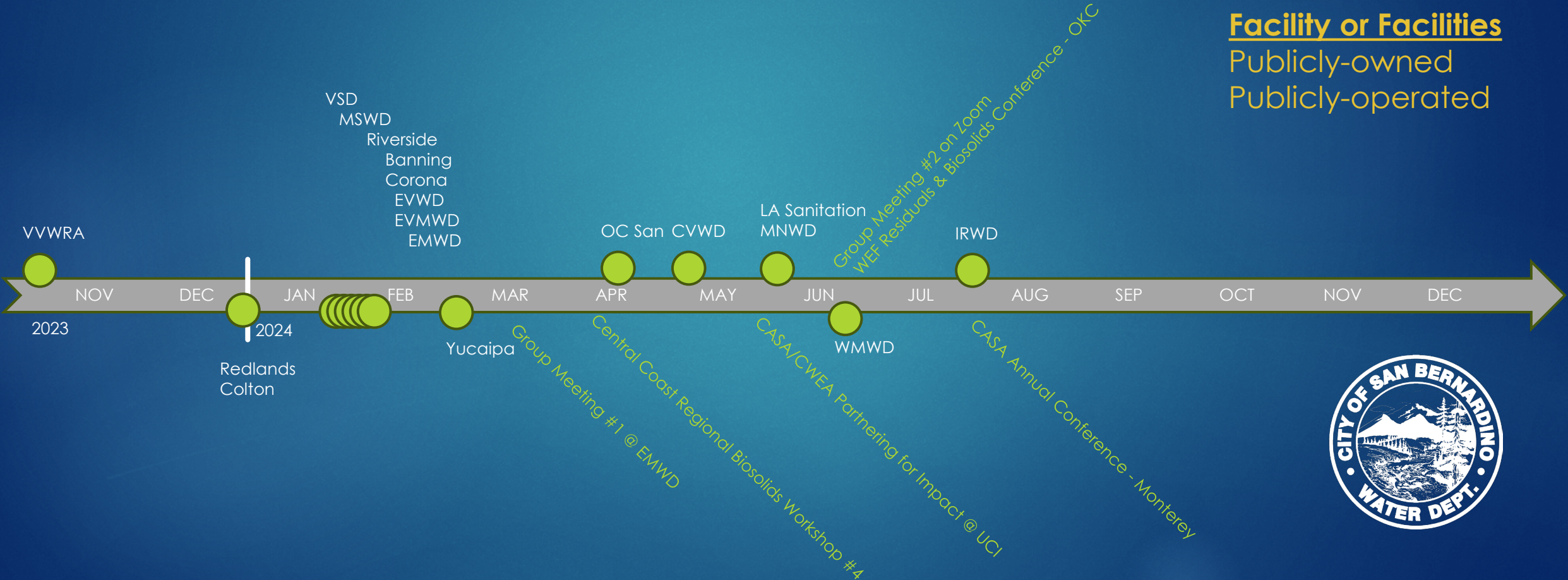
2023 WEF Biosolids Conference
Charlotte, SC
CRRRA Presentation



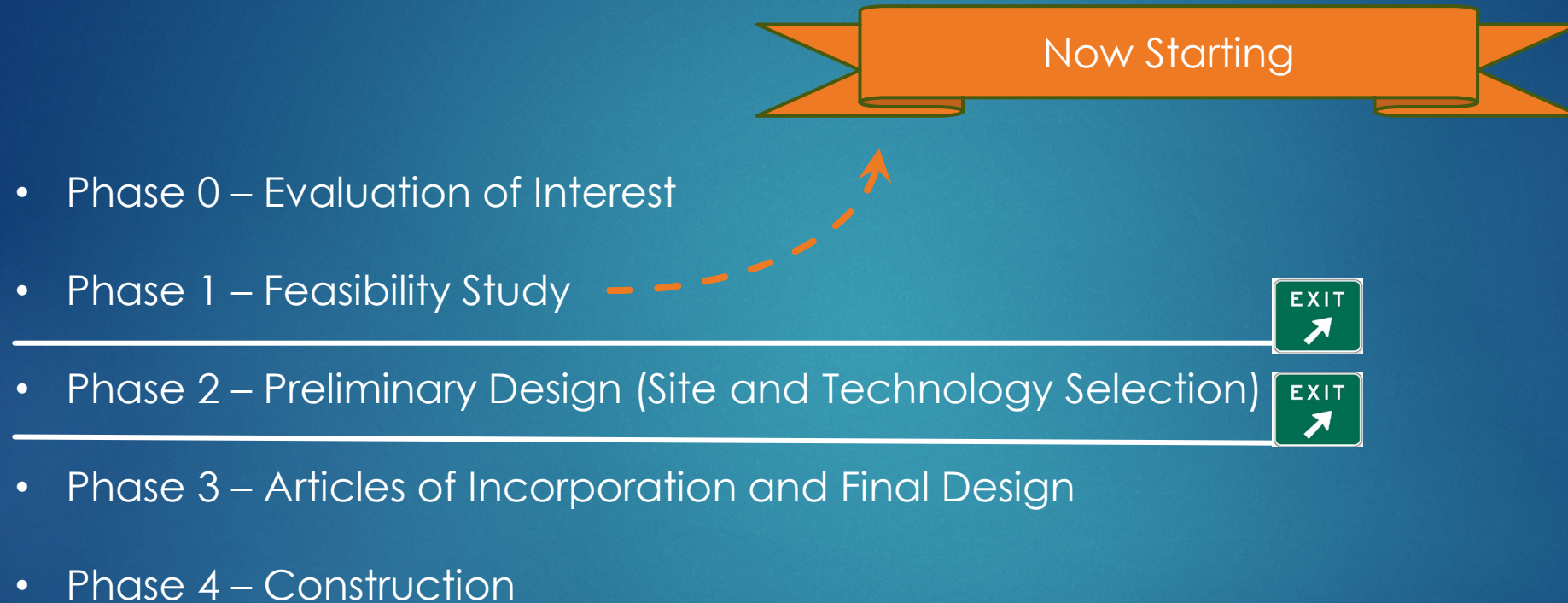
Gauging of Interest



Facility or Facilities
Publicly-owned
Publicly-operated



Phased Approach



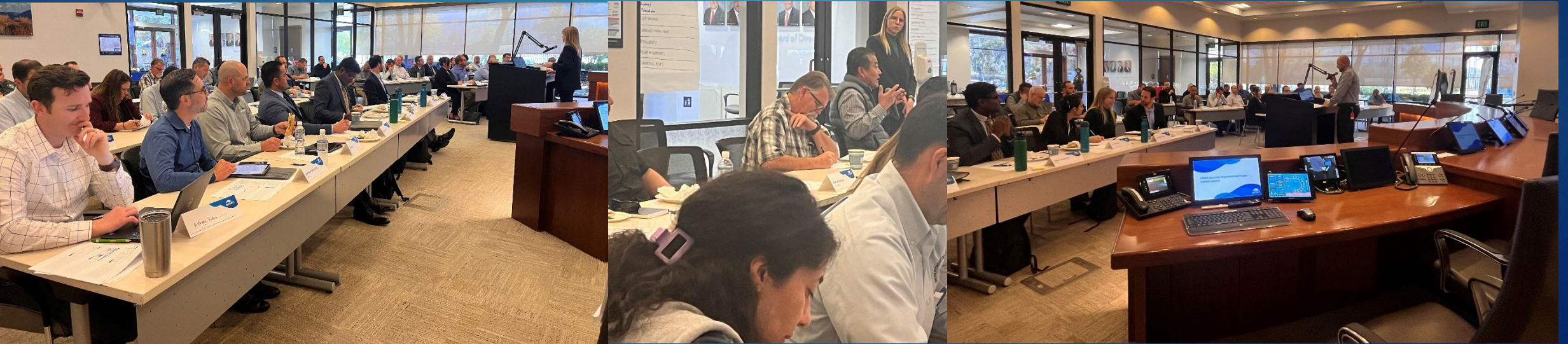


First Regional Meeting (March '24)



Overview

- Welcome
- Introductions
- Agenda
- EMWD Biosolids Masterplan
- CRRRA Successful Regionalization Project – Lessons Learned
- BC & Carollo Facilitated Discussion
- SBMWD Feasibility SOW




Second Regional Meeting (June '24)



Regional Biosolids Program

Workshop #2

Wednesday, June 12, 2024




Agenda

Presentations

• 10:30 – 10:35 Welcome	[Kevin Stewart, PE – SBMWD]
• 10:35 – 10:45 CRRRA Update	[Dave Jones, Hazen]
• 10:45 – 11:15 OCWD/OCSD GWRS Community Engagement History	[Gina Ayala – OCWD Jennifer Cabral – OCSD]
• 11:15 – 11:45 Central Coast Biosolids History	[Chris Lehman – San Luis Obispo Adam Spaulding, MPA – Paso Robles]

Regional Biosolids Program Feasibility Study (Phase I)

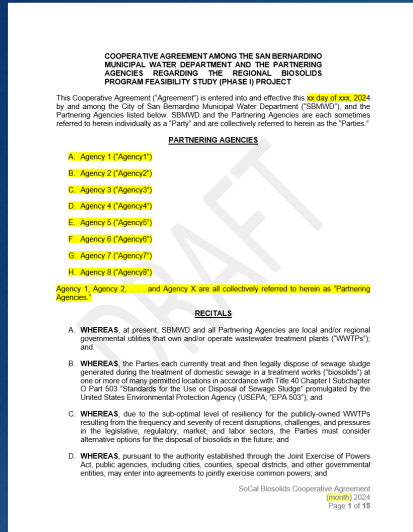
- Draft RFP and Cooperative Agreements
- Receive Response comments
- Final Draft Go/No-Go consideration
- Timelines
- Participation commitment



- 44 persons
- 17 local agencies
- 5 partner agencies
- 1 industry association
- 4 consulting firms



Cooperative Agreement

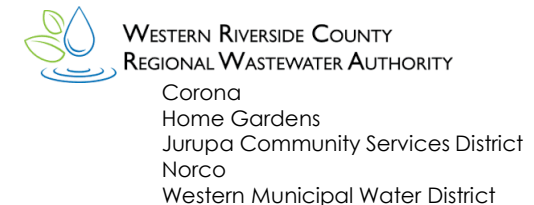


Key Points

1. **Primary driver:** improving sub-optimal level of resiliency
2. **Lead agency:** SBMWD
3. **Cost Sharing (Phase I):**
 - Equal shares
 - Actual cost & billing – Invoiced after Consultant selection (Net45)
 - Required commitment – None beyond Phase I
4. **Responsiveness:** Necessary to respond in a timely fashion to keep on schedule
5. **Meetings:** Monthly (some in person; most remote via Zoom)



Phase I: 15 Participating Agencies

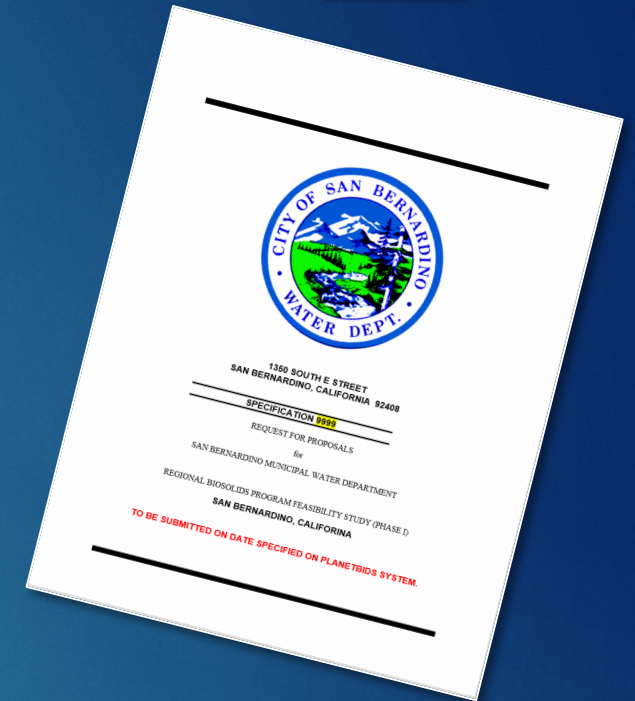


Executed: 12/04/24 to 01/28/25

Amended: 03/19/25 to 04/11/25

REQUEST FOR PROPOSALS

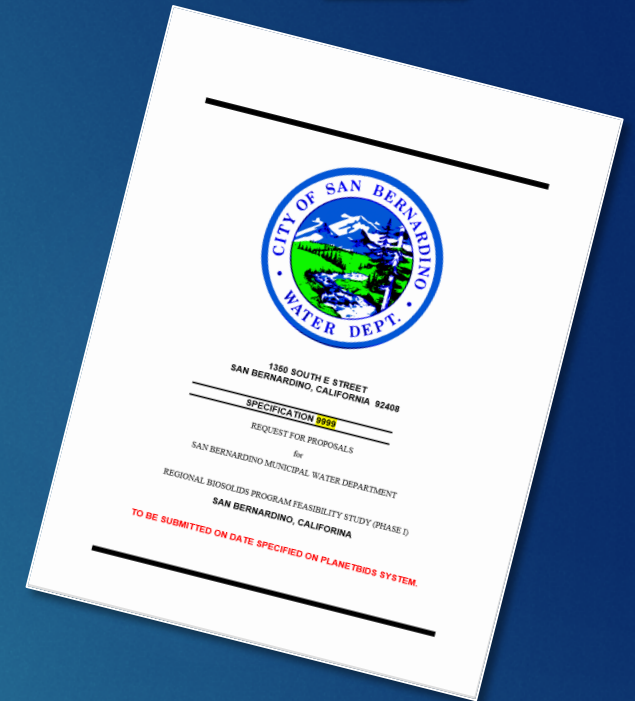
1. Professional Engineering Consultant
2. Detailed summary of the:
 - Agencies
 - Conditions
 - Drivers
3. Objectively & rationally analyze favorability for further development of:
 - Jointly and publicly owned
 - Publicly operated
 - Regional Facility or Facilities
4. Based upon clearly understood details, estimates, strengths, & weaknesses



SCOPE OF WORK

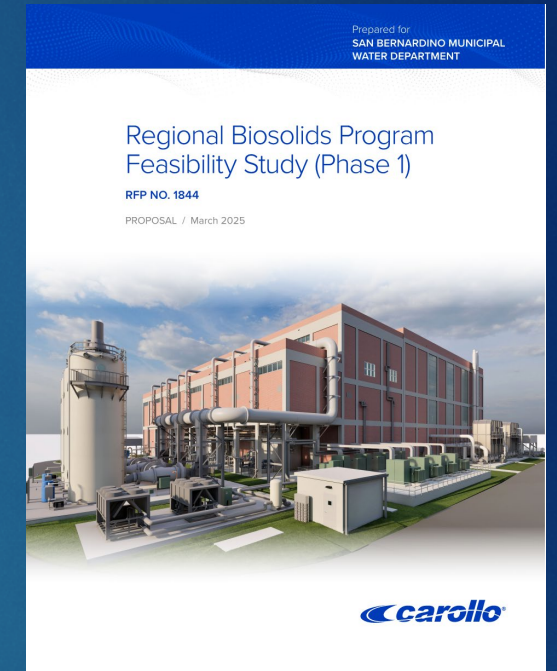
1. Task 1 – Current Practices and Needs
2. Task 2 – Current and Future Market & Regulatory Analysis
3. Task 3 – Preliminary Alternatives & Options Development
4. Task 4 – Final Phase I Feasibility Assessment

Goal: Develop just enough information for governing bodies of each Participating Agency to be able to decide whether to proceed with Phase II or Off-Ramp



CONSULTANT SELECTION

- January through April 2025 – Publicly-advertised Selection Process
- 2 Proposals received
- All 15 agencies + 2 industry associations reviewed the Proposals
- Both teams interviewed April 9, 2025
- SBMWD Water Board approved issuance of a Professional Service Agreement (PSA) to the team of:
 - Carollo Engineers with Brown and Caldwell
- PSA being executed at this time
- 7-month timeline



Herding the Cats / Thinking Differently

- **Review and approval processes**
 - Familiar iterative processes take too long
 - Recommend using: Comments + Go/No Go Process
- **Input vs Control**
 - Everyone should have the opportunity for input
 - Nobody should have the freedom to hold up the work ("the ship sails at 5:00, with or without you")
- **Need a Champion; Expect a LOT of work**
 - Someone needs to volunteer to be the champion
 - Consider whether there should be administrative costs built into the Cooperative Agreement
- **"I'm not used to this"**
 - Public agencies are used to the tried and true
 - 15 agencies with 15 different procedures & methods



Herding the Cats / Thinking Differently

- **State your intent; Follow what you said**
 - Think through your plan carefully
 - Communicate your intent carefully
 - Balance the frequency (not too frequent or infrequent)
 - Use multiple contact lists
 - Do what you said you would do
 - Stick to your schedule
 - Set deadlines and hold to them
- **Keep the momentum**
 - Don't allow the effort to stagnate.
 - Strike while the iron is hot.
- **Expect TL;DR**
 - No matter how many times you said it, many still will not have read or heard it.
 - Use a BLUF section in emails.



BLUF – Bottom Line Up Front

From: Kevin Stewart <Kevin.Stewart@sbmwd.org>

Sent: Tuesday, April 22, 2025 11:01 AM

To: Miguel Guerrero <Miguel.Guerrero@sbmwd.org>; Joseph Hanford <Joseph.Hanford@sbmwd.org>; Jamie Laureano <jamie.laureano@sbmwd.org>; dcharlton <DCharlton@cvwd.org>; Thomas West <TWest@cvwd.org>; Luis Torner <LTorner@cvwd.org>; coliphant@cvwd.org <coliphant@cvwd.org>; Armando Rodriguez <ARodriguez@cvwd.org>; Bassam Alzammar <balzammar@coltonca.gov>; Ovidiu Bostan <obostan@coltonca.gov>; Andrew Farah <andrew.farah@coronaca.gov>; Aftab Hussain <Aftab.Hussain@CoronaCA.gov>; kyle.delaney@coronaca.gov <kyle.delaney@coronaca.gov>; mauro.casas@coronaca.gov <mauro.casas@coronaca.gov>; Melissa Estrada-Maravilla <melissa.estrada-maravilla@coronaca.gov>; Fernando Mata <fmata@cityofredlands.org>; jpark@cityofredlands.org <jpark@cityofredlands.org>; kslordia@cityofredlands.org <kslordia@cityofredlands.org>; Nathan Carlson <ncarlson@eastvalley.org>; jnoelte@eastvalley.org <jnoelte@eastvalley.org>; mmoore@eastvalley.org <mmoore@eastvalley.org>; picazoa@emwd.org <picazoa@emwd.org>; budicina@emwd.org <budicina@emwd.org>; Tagney, Kenneth <tagneyk@emwd.org>; melendrm@emwd.org <melendrm@emwd.org>; Toland, Scott <tolands@emwd.org>; ganesh@evmwd.net <ganesh@evmwd.net>; Jase Warner <jwarner@evmwd.net>; Jessie Arellano <jarellano@evmwd.net>; Sudhir Mohleji <smohleji@evmwd.net>; Parag Kalaria <pkalaria@evmwd.net>; lhunter@evmwd.net <lhunter@evmwd.net>; Hutton, Matthew <matthewhutton@lacsdc.org>; Bao, Matt <MBao@lacsdc.org>; David Larsen <DLarsen@mnwd.com>; Jesus Garibay <JGaribay@mnwd.com>; Cabral, Jennifer <jcabral@ocsan.gov>; lwiborg@ocsan.gov <lwiborg@ocsan.gov>; Smith, Matt <msmith@ocsan.gov>; Meregillano, Tom <tmeregillano@ocsan.gov>; Choi, Samuel <schoi@ocsan.gov>; Erica Wolski <ewolski@rmwd.org>; jcortez@rmwd.org <jcortez@rmwd.org>; janderson@rmwd.org <janderson@rmwd.org>; Jim Burror <jburror@socwa.com>; Gary Miller <GMiller@wmwd.com>; Brian Noh <bnoh@wmwd.com>; prugge@wmwd.com <prugge@wmwd.com>; tbarr@wmwd.com <tbarr@wmwd.com>; tpollak@wmwd.com <tpollak@wmwd.com>; Jesse Pompa <jpompa@jcsd.us>; Matthew Abel <mabel@JCSD.US>

Cc: Maile Lono-Batura <mlono-batura@casaweb.org>; Steve Jepsen <sjeepsen@cleanwatersocal.org>

Subject: Regional Biosolids - 04/22/25 Update - Award; Kickoff Mtg; Invoice; Contact Lists

All,

BLUF:

- The Carollo Team (Carollo w/ Brown & Caldwell) was approved by the SBMWD Water Board; PSA pending this week.
- Doodle Poll incoming to schedule in-person Kickoff Meeting in Corona - PLEASE response promptly
- Invoice incoming for \$39,998.33 to the person in the CA as the Notifications To person. Net-45.
- I will be reaching out to confirm or request revisions to several contact lists for various use-cases. Please reply when this comes across.

Long-version:

1. Project Award

- a. We have reached a major milestone! This morning, the Water Board for the San Bernardino Municipal Water Department approved the award of a Professional Services Agreement (PSA) with the team of Carollo Engineers, Inc (Carollo) and Brown and Caldwell (B&C). I would also like to thank the team of Hazen, Stantec, and Rincon for the time, effort, and energy they put in as they did an outstanding job and presented a great offering. Here is the Agenda for any who wish to see it.
 - i. <https://www.sbmwd.org/AgendaCenter> > Click on today's Agenda > Agenda Item 8
 - or
 - ii. https://www.sbmwd.org/AgendaCenter/ViewFile/Agenda/_04222025-243
- b. An enormous thank you to the following for assisting us as Panelists for the Interviews as well as with the follow-up during negotiations. I appreciate the time, effort, and energy you put in to help us make this effort fair and transparent.
 - i. Luis Torner (CVWD)
 - ii. Bassam Alzammar (Colton)
 - iii. Steve Jepsen (Clean Water SoCal)
 - iv. Andrew Farah (Corona)
 - v. Scott Toland (EMWD)
 - vi. Matt Hutton (LA County San Districts)
 - vii. Sam Choi (OC San)
 - viii. Maile Lono-Batura (CASA; non-ranking panelist at their request)

2. Kickoff Meeting Scheduling

- a. Carollo is finalizing a list of potential dates/times for an in-person Kickoff Meeting to send to me.
- b. Once received, I will send out a Doodle Poll to the group. Please reply as soon as possible so that we can calendar this meeting to have the greatest quantity of attendees who wish to be present. Given the summertime schedules,
- c. Please send at least one person to the in-person Kickoff Meeting who can represent the interests of your agency. This will be a workshop format. You may send as many persons as you wish. Some of the important topics that may be covered:
 - i. Who's who (Carollo Team; Participating Agencies)
 - ii. Timeliness of replies and other communications matters
 - iii. Initial discussions on data requests
 - iii. Scope of Work review

- After you prepare the detailed information
- Select the most important elements
- Summarize in as few words as possible
- Assume that many will skip all the detail below



In-Person Kickoff Meeting



- Monday, June 2, 2025
- Corona, CA



PLANNING THROUGH UNCERTAINTY

- Expect the same frequency and severity of roadblocks to continue
 - EPA DRAFT Risk Assessment for PFAS in Biosolids directed no regulations based upon the data
 - Extensive list of states that have begun regulating based upon the data and in the absence of Federal direction
- Make assumptions carefully
- Document the assumptions clearly
- Schedule recurring reviews of the assumptions
 - It's better to revisit the need for change sooner than later
- Involve the other critical stakeholders (Finance, Regulatory Compliance, etc)
 - Don't move forward with a plan for Federal Grant Funding if your Finance Team doesn't have a backup plan in place in the event no Federal Funding is received.

COMMUNITY ENGAGEMENT

- Engineering and technology won't kill the project, but the community sure can
- Be intentional and proactive; don't be passive and reactive
- If we don't control the narrative, we must accept that it will control us
- The wastewater industry is outstanding at collecting, treating, and recovering resources.
- The wastewater industry is terrible at communicating to the community the importance of the public health benefits of us performing this function.
- **Public Engagement / “Proactively Addressing the Narrative”**
 - Public Engagement Professional
 - Phase I – Strategy production & oversight of program development
 - Phase II – Initial strategy implementation and limited public engagement
 - Phase III – Full strategy implementation and active/thorough public engagement

GOVERNANCE

- Feasibility Study will include a primer on governance that will help agencies towards future decisions that include:
 - Extent of each participating agency's authority and voting power
 - Who runs the facility?
 - What information has to be produced?
 - Permit-requirements for Asset Management Programs & Plans
 - Finance Records
 - Finance policies
 - How much private involvement can be allowed while recovering the resiliency?

OFF-RAMPING AND ON-RAMPING

- How are off-ramping agencies addressed?
- How are on-ramping agencies addressed?
 - Should any agency within a certain boundary be allowed to on-ramp?
 - Direct Reimbursement for Phase 1 Participating Agencies
 - Whether those Phase 1 Participating Agencies off-ramped or not
 - Reimbursement for the risk taken by Phase 1 Participating Agencies
 - Should off-ramped Phase 1 Participating Agencies be included in this
 - Means for on-ramping into Phase 1

FINANCIAL AND COMMUNICATION LOGISTICS

- **Accounting and Finance**

- Funds collected up front and utilized for progress payments or collected in installments or as-received
- Isolation of funds collected by the Lead Agency

- **Project Communications**

- What information should be shared and at what frequency?

Thank you!

