



NORTH BAY WATER REUSE PROGRAM
Water Supply Reliability through Regional Reuse

**BOARD OF DIRECTORS AND TECHNICAL ADVISORY COMMITTEE
 PHASE 2 SCOPING STUDY WORKSHOP #1**

AGENDA

**Monday, January 28, 2013
 9:30 – 11:00 A.M.**

Novato City Hall Council Chambers, 901 Sherman Avenue, Novato, CA 94945


- 1. Call to Order (1 minute)**
- 2. Roll Call (2 minutes)**
- 3. Public Comment (5 minutes)**
 (Any member of the public may address the Board at the commencement of the meeting on any matter within the jurisdiction of the Board. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Board limit their presentation to three minutes. Any member of the public desiring to provide comments to the Board on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom and are to be completed prior to speaking.)
- 4. Introductions (2 minutes)**
- 5. Workshop Topics (1 hour 20 minutes)**
 - Define objectives & criteria for Phase 2 projects
 - Present workplan; agency commitment to workplan
- 6. Adjournment (1 minute)**

**Next Board and TAC Phase 2 Workshop #2
 Monday, March 18, 2013, 9:30 A. M.**

(In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in a Board meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, please contact the Program Manager at (510) 410-5923. Notification of at least 48 hours prior to the meeting or time when services are needed will assist in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service. A copy of all the documents constituting the agenda packet is available for public inspection prior to the meeting at 500 Davidson Street, Novato, CA 94945. Any person may request that a copy of the agenda or the agenda packet be mailed to them for a fee of \$.10 per page plus actual mailing costs. If you wish to request such a mailing, please contact Chuck Weir, Weir Technical Services, 3026 Ferndale Court, Pleasanton, CA 94588, 510-410-5923, chuckweir@sbcglobal.net. The agenda and the agenda packet for each meeting are also available on-line at www.nbwra.com and will be available at the meeting.)



**North Bay Water Reuse Authority • c/o Novato Sanitary District • 500 Davidson Street, Novato, CA 94945
 707-235-8965 • NBWRA.org**

Las Gallinas Valley Sanitary District • Napa County • Napa Sanitation District • North Marin Water District
 Novato Sanitary District • Sonoma County Water Agency • Sonoma Valley County Sanitation District



NBWRP Phase 2 Scoping Study Workshop #1

January 28, 2013



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Study Objectives

Identify alternatives for inclusion in the Phase 2 "Feasibility Study"¹

- ◆ Define projects to meet multiple objectives of water supply for urban, agriculture, environmental benefits and integrated regional water management
- ◆ Develop storage options that support the Program's multiple objectives
- ◆ Apply decision process to support evaluation of projects


Different objectives:

- ◆ *Study objectives* must address future implementation opportunities & constraints to make project decisions
- ◆ *Program objectives* in the MOU can be less specific to meet agency objectives

1. Feasibility Study: a specific Federal planning document required to receive Phase 2 construction funds



Workshop 1 Objectives

- ◆ Present study work plan
 - Technical tasks
 - Workshops
 - Schedule
 - Decision points
 - End product
- ◆ Refine objectives & criteria for Phase 2 projects
 - Identify what is important
 - Initiate process to screen
- ◆ Confirm understanding of work plan & outcomes



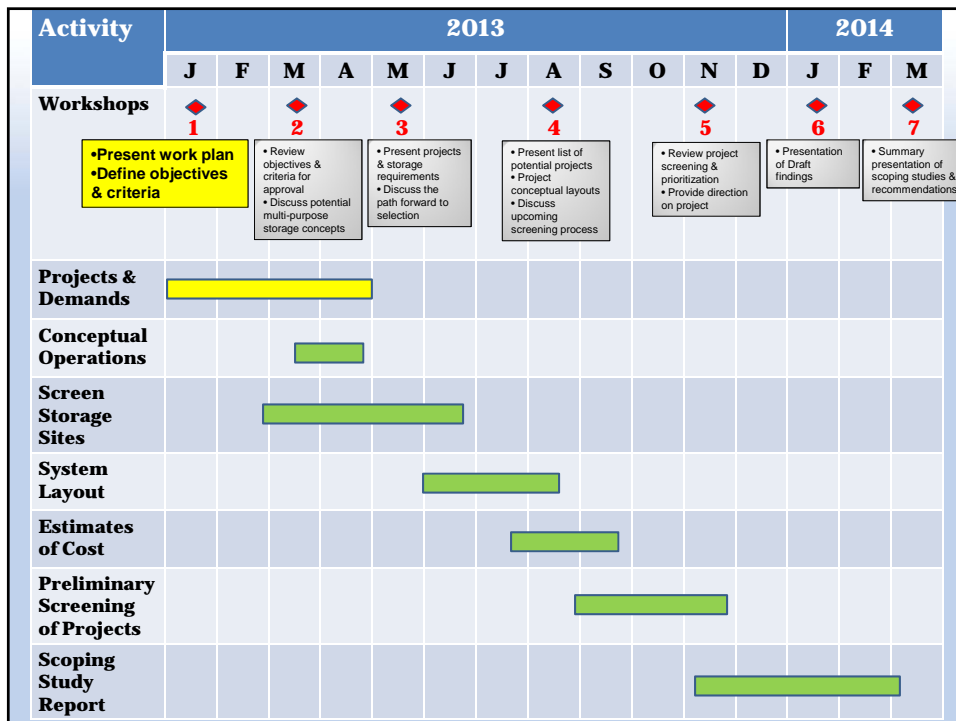
Work Plan


How we implement the study scope of work



Scoping Study Technical Tasks




- ◆ **Projects & demands (agency meetings)**
 - Refine identified projects & include new projects
- ◆ **Conceptual operations**
 - Given the supplies & demands, how much storage is needed (seasonal & annual)
- ◆ **Screen storage sites**
 - Opportunities & constraints
- ◆ **System layout**
- ◆ **Estimates of cost**
- ◆ **Preliminary screening of alternatives**
 - Agency and subregional projects
- ◆ **Scoping Study Report**






Phase 2 Objectives

How do we screen & prioritize projects?


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Why Focus on Objectives From the Start?

- ◆ Ultimately the objectives will provide insight to the Board & TAC as to what projects should proceed to feasibility study
- ◆ Objectives provide the framework on how we *formulate* alternatives
 - Keeps analysis focused on what is important
 - Guides how we combine opportunities for maximum benefit
- ◆ Objectives define how we *evaluate* the alternatives
 - Versus each other
 - Versus “avoided” alternatives (i.e., alternatives to recycling)
- ◆ Objectives must be clear & how success is measured must be defined

There are Many Potential Projects to Screen

- ◆ Started with list of projects from the Phase 2 Project Definition Study
- ◆ Additions and deletions since agency meetings have occurred
- ◆ List is being expanded & refined to include the broadest number of projects that will then be screened down
- ◆ The first action is to agree on the wide range of potential projects and concepts before we filter the list



Definitions

Objective

The goals that define the purposes in broad terms – *Why?*

Sub-Objective

Further define the meaning of the planning objectives, more specific

Performance Measures

Quantifiable indicators of how well an alternative meets the objectives – *How well?*



Phase 1 Study Objectives¹

- ◆ Offset urban and agricultural demands on potable water supplies
- ◆ Enhance local and regional ecosystems
- ◆ Improve local and regional water supply reliability
- ◆ Maintain and protect public health and safety
- ◆ Promote sustainable practices
- ◆ Give top priority to local needs for recycled water
- ◆ Implement recycled water facilities in an economically viable manner

¹ From Phase 1 EIR/EIS



Objectives From Other Perspectives

- ◆ What will make our program attractive to funding agencies?
 - U.S. Bureau of Reclamation funding criteria
 - California IRWMP ranking criteria
 - Potential new state and federal funding programs
- ◆ What will make our program reflective of community values & supported by elected officials?
- ◆ These “other perspectives” can significantly affect the ability to implement projects



Comparison of Objectives & Criteria

Phase 1 Study	Bureau of Reclamation	IRWMP
Offset urban and agricultural demands on potable water supplies	Increase water supplies and reduce demand on non-recycled water supplies	Address multiple goals
Improve local and regional water supply reliability	Address water supply sustainability	Integrate multiple resource management strategies
Give top priority to local needs for recycled water	Complete authorized Title XVI projects	Strategic considerations for IRWM Plan implementation (regionalism, partnerships and integration)
Enhance local and regional ecosystems	Promote projects that are ready to proceed	Project status
Maintain and protect public health and safety	Improve habitat and water quality	Technical feasibility
Promote sustainable practices	Incorporate use of renewable energy and promote energy efficiency	Benefits to disadvantaged community water issues
Implement recycled water facilities in an economically viable manner	Implement cost effective projects	Benefits to Native American tribal community water issues
	Meet legal and contractual water supply obligations	Environmental justice considerations
	Provide benefits to rural or economically disadvantaged communities	Project costs and financing
	Promote a watershed perspective/integrated resources management	Economic feasibility
		Climate change adaptation
		Reduce greenhouse gas emissions
		Reduce dependence on the Delta



Illustration of Future Activities & Process

Objective	Subobjective	Performance Measures
Offset urban and agricultural demands on potable water supplies	Reduce use of imported water	AF of imported water not used
	Reduce use of local groundwater	AF of groundwater not used
Improve local and regional water supply reliability	Meet peak period water demands	Meet peak month water demands
	Meet annual water needs	Improvement in water supply through all periods (i.e., wet, dry, average years)
Give top priority to local needs for recycled water		Serve local agency service area first
		Serve local county first
		Minimize effluent discharge to non-recovery water bodies
Enhance local and regional ecosystems	Improve riparian habitat	Acres of habitat
	Improve wetland habitat	Acres of habitat at critical lifecycle
	Improve anadromous fish	Instream flows at critical lifecycles
Maintain and protect public health and safety	Meet water quality standards to match use	Yes or no
Promote sustainable practices	Reduce energy usage	Alternative with lower kilowatt per AF of recycled water used
	Avoided energy usage	Most energy offset when not using alternative water supplies (e.g., Imported water pumping, groundwater pumping)
Implement recycled water facilities in an economically viable manner	Minimize agency cost	Lowest cost project per acre-foot to construct
	Maximize net benefit	Most cost effective project to meet water supply and effluent management as compared to alternative water supply and wastewater effluent management



Workshop 1 Discussion

Time for Your Input

- ◆ Do Phase 1 objectives meet Phase 2 study needs?
- ◆ Do we need to add new objectives to address program & funding criteria?
- ◆ Are there subobjectives that need to be defined?




Future Activities


What will we do at the next Workshop?



Activity	2013												2014		
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Workshops	◆ 1		◆ 2		◆ 3			◆ 4			◆ 5		◆ 6		◆ 7
	<ul style="list-style-type: none"> Present work plan Define objectives & criteria 		<ul style="list-style-type: none"> Review objectives & criteria for approval Discuss potential multi-purpose storage concepts 		<ul style="list-style-type: none"> Present projects & storage requirements Discuss the path forward to selection 			<ul style="list-style-type: none"> Present list of potential projects Project conceptual layouts Discuss upcoming screening process 			<ul style="list-style-type: none"> Review project screening & prioritization Provide direction on project 		<ul style="list-style-type: none"> Presentation of Draft findings 		<ul style="list-style-type: none"> Summary presentation of scoping studies & recommendations
Projects & Demands	[Yellow bar]														
Conceptual Operations			[Yellow bar]												
Screen Storage Sites			[Yellow bar]												
System Layout						[Green bar]									
Estimates of Cost							[Green bar]								
Preliminary Screening of Projects								[Green bar]							
Scoping Study Report											[Green bar]				



Questions & Discussion







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