# LAS VIRGENES - TRIUNFO
# JOINT POWERS AUTHORITY
# AGENDA
# 4232 Las Virgenes Road, Calabasas, CA 91302

CLOSING TIME FOR AGENDA IS 8:30 A.M. ON THE TUESDAY PRECEDING THE MEETING. GOVERNMENT CODE SECTION 54954.2 PROHIBITS TAKING ACTION ON ITEMS NOT ON POSTED AGENDA UNLESS AN EMERGENCY, AS DEFINED IN GOVERNMENT CODE SECTION 54956.5 EXISTS OR UNLESS OTHER REQUIREMENTS OF GOVERNMENT CODE SECTION 54954.2(B) ARE MET.

5:00 PM April 6, 2015

PLEDGE OF ALLEGIANCE

## 1. CALL TO ORDER AND ROLL CALL

**A** The meeting was called to order at _____ p.m. by _____ in the Las Virgenes Municipal Water District headquarters, and the Clerk of the Board called the roll.

| **Las Virgenes Municipal Water District** | Present | Left | Absent |
|---|---|---|---|
| Glen Peterson, Vice Chair | _____ | _____ | _____ |
| Charles Caspary | _____ | _____ | _____ |
| Jay Lewitt | _____ | _____ | _____ |
| Leonard Polan | _____ | _____ | _____ |
| Lee Renger | _____ | _____ | _____ |
| **Triunfo Sanitation District** | | | |
| Steven Iceland | _____ | _____ | _____ |
| Michael McReynolds | _____ | _____ | _____ |
| Janna Orkney | _____ | _____ | _____ |
| Michael Paule | _____ | _____ | _____ |
| James Wall, Chair | _____ | _____ | _____ |

## 2. APPROVAL OF AGENDA

## 3. PUBLIC COMMENTS

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

## 4. CONSENT CALENDAR

**A Minutes: Special JPA Meeting of January 29, 2015; Regular JPA Meeting of February 2, 2015; and Special JPA Meetings of February 11 and March 18,**

**2015 (Pg.3)** Approve

## 5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

**A Fiscal Year 2015-15 JPA Budget Workshop (Pg.18)**

## 6. ACTION ITEMS

**A Recycled Water Seasonal Storage Plan of Action (Pg.19 )**

Consider stakeholder feedback on six conceptual scenarios for management of the JPA's water resources, including addressing the need for seasonal storage of recycled water; discuss the merits of the scenarios considering the criteria established by the stakeholders; and identify a primary and secondary scenario to serve as the basis for a plan of action to move forward.

## 7. BOARD COMMENTS

## 8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

## 9. FUTURE AGENDA ITEMS

## 10. INFORMATION ITEMS

**A Replacement of Submersible Chopper Pumps: Award (Pg.36)**

**B Residential Recycled Water Fill Station (Pg.38)**

**C Reservoir No. 2 Improvements: Ratification of Change Order No. 1 and Emergency Purchase Order for Silt and Sediment Removal Activities (Pg.58)**

## 11. PUBLIC COMMENTS

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

## 12. CLOSED SESSION

**A Conference with District Counsel – Existing Litigation (Government Code Section 54956.9(a)):**

Las Virgenes - Triunfo Joint Powers Authority v. United States Environmental Protection Agency and Heal the Bay, Inc. v. Lisa P. Jackson

## 13. ADJOURNMENT

**LAS VIRGENES – TRIUNFO**
**JOINT POWERS AUTHORITY**
**MINUTES**
**SPECIAL MEETING OF JANUARY 29, 2015**
**RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP NO. 1**

4:00 PM January 29, 2015

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Chairman Peterson.

## 1. CALL TO ORDER AND ROLL CALL

**A** Call to order and roll call

The meeting was called to order at **4:00 p.m.** by Chairman Peterson in the Board Room at Las Virgenes Municipal Water District at 4232 Las Virgenes Road, Calabasas, CA. Daryl Betancur, Clerk of the Board conducted the roll call.

Present: Director(s): Caspary, Lewitt, Polan, Renger, Board Chairman Peterson, McReynolds, Paule, and Wall

Absent: Director(s): Iceland and Orkney

Representatives from the following organizations attended:

Supervisor Sheila Kuehl (Timothy Lippman), Heal the Bay (Sarah Abramson Sikich), Los Angeles Department of Water and Power (Mario Acevedo, Yoshi Tsunehara), Montgomery Watson Harza (Steve Weber, Bob Armstrong, Jim Borchardt, Sarah Munger, Oliver Slosser), Los Angeles Waterkeeper (Liz Crosson), City of Calabasas (Alex Farassati), California State Parks (Suzanne Goode), National Park Service (John Chisum), City of Thousand Oaks (Santos Marquez), Calleguas Municipal Water District (Kristine McCaffrey), Mountains Restoration Trust (Debbie Sharpton), Santa Monica Mountains Conservancy (Rorie Skei), and Resource Conservation District (Clark Stevens)

## 2. APPROVAL OFAGENDA

**A** Approval of agenda

The agenda was approved by unanimous consent.

## 3. PUBLIC COMMENTS

There were no public comments.

## 4. RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP

Administering Agent/General Manager Pedersen provided a brief summary as to the nature, scope and goal of the workshops. Dr. Steve Weber, representative of Montgomery Watson Harza, further briefed the participants on what they could expect from the sessions; provided an introduction to the workshop and stated that this was a comprehensive water resource strategy endeavor; that this was not an engineering or design study, but a facilitated exercise in communication and thought leadership.

Dr. Joseph Jacangelo provided a presentation on water reuse, which was followed by a Political Economic Social Technical Legal Environmental (PESTLE) exercise lead by Dr. Weber and Bob Armstrong of MWH.

## 5. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **7:55 p.m.**

James Wall, Chair

ATTEST:

Glen Peterson, Vice Chair

**LAS VIRGENES – TRIUNFO**
**JOINT POWERS AUTHORITY**
**MINUTES**

5:00 PM February 2, 2015

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Chairman Wall.

## 1. CALL TO ORDER AND ROLL CALL

**A** Call to order and roll call

The meeting was called to order at **5:00 p.m.** by Chairman Wall in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road in Calabasas. Daryl Betancur, Clerk of the Board, conducted the roll call.

| | | |
|---|---|---|
| Present: | Director(s): | Caspary, Lewitt, Polan, Renger (arrived at **5:43 p.m.** after roll call), Vice Chairman Peterson, McReynolds, Orkney, Paule, and Chairman Wall |
| Absent: | Director(s): | Iceland |

## 2. APPROVAL OFAGENDA

**A** Approval of agenda

On a motion by Director Caspary, seconded by Director Paule, the Board voted unanimously to approve the agenda as presented.

## 3. PUBLIC COMMENTS

There were no public comments.

## 4. CONSENT CALENDAR

**A Minutes: Special JPA Meeting of December 8, 2014 and Regular JPA Meeting of January 5, 2015.**

Director Peterson moved to approve the minutes of Special JPA Meeting of December 8, 2014 and Regular JPA Meeting of January 5, 2015 with amendments to clarify Director McReynolds' comments in relation to Item 9D on January 5, 2015. Motion seconded by Director Lewitt. Motion carried unanimously.

## 5. ILLUSTRATIVE AND/OR VERBAL PRESENTAION AGENDA ITEMS

**A Proclamation in Recognition of Employee Retirement: Randal Orton**

Chairman Wall, members of the JPA Board and the Administering Agent/General Manager congratulated Dr. Orton for his 22 years of dedicated service to the District, the support given to the JPA Board and his invaluable technical contributions on the watershed.

## 6. ACTION ITEMS

### A Agoura Road Recycled Water Main Extension: Reconsideration of Award

**Approve an appropriation of $1,209,988 for the Agoura Road Recycled Water Main Extension; request that the City of Agoura Hills award the work to C.A. Rasmussen, Inc., for construction in conjunction with its Agoura Road Widening Project; and authorize the Administering Agent/General Manager to reimburse the City of Agoura Hills, in an amount not to exceed $1,182,426, for the portion of its progress payments to the contractor for the recycled water main.**

Administering Agent/General Manager Pedersen stated that this item was for the Board to reconsider proceeding with the Agoura Road Recycled Water Main Extension; Mr. Pedersen further stated that at the December 8, 2014 meeting, the JPA Board had opted not to proceed with this project because of the high cost; stated that since the Board's decision, the JPA had received a letter from the Mayor of Agoura Hills urging the JPA Board to reconsider its prior decision for a couple of reasons: 1) importance of the use of recycled water; and 2) the current drought and need for conservation.

Administering Agent/General Manager Pedersen briefly spoke about the meeting held recently with the City Manager and the Mayor of Agoura Hills and former JPA Chair Peterson. He stated that at this meeting, alternatives were discussed to make this project work as a cooperative project between the City of Agoura Hills and the JPA, including a discussion of financial support by the City of Agoura Hills in the amount of $328,574, which in essence would reduce the JPA cost to $1,182,426; spoke about the 20% cost savings to build the project in partnership with the City of Agoura Hills as compared to building it separately at a later date; stated that the question before the JPA Board was whether or not to proceed with constructing the project in conjunction with the City; highlighted some of the benefits associated with the construction of this project in a partnership agreement.

Illece Buckley-Weber, Mayor of Agoura Hills, addressed the JPA Board urging them to reconsider extending the recycled water main to close the gap in the recycled water system between Lady Face Court and Lewis Road in Agoura Hills. Mayor Buckley-Weber spoke about her interest in working with the JPA and water district and the importance of recycled water to the City.

There were several comments and questions from the Board directed to Mayor Buckley-Weber and her staff including a question about the City's plans for the other side of Agoura Road east of Lewis Road; Director Paule took exception with communications in the media and editorials criticizing the JPA Board for its decision regarding this project; Director Paule commented on the cost sensitivity when approving a project with ratepayer funds as opposed to Measure R funds, which are generated from sales tax revenue; other comments included questions about the bidding process and whether or not this project could have been bid out on its own versus a combined bid with the City as presented; and whether or not the project could have been constructed within the JPA's original cost estimates.

Director Orkney expressed concern about the benefits and who receives more direct benefits from the project; there were comments and concerns about the issue of revenue equity and having to pay for a project where there are intangible benefits. Other directors were generally in support, commenting on the need for the use of more recycled water; vision for the future; and the willingness of the City of Agoura Hills to provide some level of financial support. There were questions about the expected water demands for drought-tolerant plants included in the City's landscaping plan and the need for a 20% allowance to cover soft costs for the project.

Chairman Wall commented that his support for this project was predicated on the JPA Board also supporting future recycled water projects in Ventura County, which cannot be built for financial

resources; he stated that he would hope and have faith that if any Ventura County projects were to come before the Board, that these too would receive the same consideration and financial support.

After a substantial discussion on the subject, Director Peterson moved to adopt the recommendation. Motion seconded by Director Caspary. Motion failed (7-2), lacking three affirmative votes from each partner agency.

| | | |
|---|---|---|
| AYES: | Director(s): | Caspary, Lewitt, Polan, Renger, Peterson, McReynolds, and Chair Wall |
| NOES: | Director(s): | Orkney and Paule |
| ABSTAIN: | Director(s): | None |

**B Woodland Hills Country Club Recycled Water System Extension: Pricing Policy**

**Approve the pricing policy concept for sale of wholesale recycled water to the Los Angeles Department of Water and Power via the Woodland Hills Country Club Recycled Water System Extension.**

Administering Agent/General Manager Pedersen provided a brief summary of the pricing policy discussions that have taken place before the Board and stated that the goal was to receive concurrence and approval on a conceptual proposal for pricing recycled water that the District would sell to the Woodland Hills Country Club. Mr. Pedersen, through a PowerPoint presentation, explained the proposed rate structure and demonstrated how to arrive at the cost for the recycled water.

Mr. Pedersen also stated that staff had met with LADWP recently to discuss two issues: 1) the status of the cooperative agreement for preliminary design and environmental review of the pipeline; and 2) the recycled water pricing policy. He stated that he had received feedback from LADWP on key issues surrounding the project, which included that DWP needed to see a nexus between cost and price for this proposal to be viable; that LADWP is open to considering in-lieu arrangements; that LADWP is willing to purchase recycled water for the cost of the service provided there is not intent to accrue a profit; that LADWP needs to justify any type of financial arrangement to the Board of Commissioners and that negotiations are currently underway for recycled water purchases from other agencies.

Administering Agent/General Manager Pedersen spoke about the project terms in relation to the capital costs; the capital cost of the project for a 4.6-mile pipeline with one mile in the JPA's service area and the remainder in the City of Los Angeles' service area; he commented that the total cost to build 4.6 miles of pipeline was about $13 million with the City agreeing to pay 100% of that capital cost including payment for the portion of the pipeline that will be JPA owned; moreover, LADWP would also dedicate that pipeline, which would have a value of about $2.5 million to the JPA free of charge; and, additionally, LADWP is proposing to pay for the design costs and all of the environmental documentation plus a 10% administrative cost for the portion of the work that was in the City's service area or 3.6 miles of pipeline.

Mr. Pedersen spoke about the demand profile as a starting point for any pricing policy; stated that the price was proposed to be based on cost of service with components for wholesale recycled water and potable supplement; commented that annual adjustments would be made to reflect figures for the two components as reflected in the adopted JPA budget; spoke about 5-year re-openers to verify cost recovery and economic justification; and in-lieu return of potable supplement during times of shortage (MWD allocation years); spoke about how applying this pricing concept to figures for Fiscal Year 2014-15, the rate would be $857/AF.

After a lengthy discussion, Director Paule moved to approve the recommendation. Motion seconded by Director Renger. Motion carried by the following vote:

| | | |
|---|---|---|
| AYES: | Director(s): | Caspary, Lewitt, Polan, Renger, Peterson, McReynolds, Paule and Chair Wall |

NOES: Director(s): Orkney
ABSTAIN: Director(s): None

**C Financial Review: Second Quarter of Fiscal Year 2014-15**

**Receive and File.**

Don Patterson, Director of Finance and Administration presented the second quarter financial report and highlighted some of the key elements of the financial review. There were comments relative to the need to follow up on the large difference between the year to date budget and actual for "recycled water pump station" ($732,469 v. $828,152); several questions arose as to why it was so much higher and the influence of the solar facility on the amount; positive feedback provided on the presentation of the Capital Improvement Project (CIP) report.

Director Paule moved to receive and file. Motion seconded by Director Caspary. Motion carried unanimously.

**D Heal the Bay's "Bring Back the Beach" Awards Gala: Attendance**

**Authorize one Board Member from each agency and the Administering Agent/General Manager to attend the Heal the Bay "Bringing Back the Beach" Awards Gala at a cost of $500.00 per person.**

Administering Agent/General Manager Pedersen stated that for a number of years the Board has participated in this annual fundraising event, which will be held on May 14th at the Jonathan Club in Santa Monica.

Board Member Caspary was proposed to attend on behalf of Las Virgenes Municipal Water District and Chairman Wall was proposed to attend on behalf of Triunfo Sanitation District, along with Administering Agent/General Manager Pedersen.

Director Orkney moved to approve the recommendation. Motion seconded by Director Peterson. Motion carried unanimously.

**E Location of Future JPA Board Meetings**

**Determine whether or not to hold all future JPA Board meetings at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road, Calabasas.**

Administering Agent/General Manager Pedersen stated that this item was a request for a future agenda item by Director Orkney to have the Board consider holding all future JPA meetings at Las Virgenes Municipal Water District headquarters.

After a brief discussed, the Board concurred that all future JPA Board meetings would be held at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road in Calabasas, with the exception of the March and September meetings of each year, which are to be held at the Oak Park Library conference room in Oak Park to enable ratepayers in that portion of the community to more conveniently attend the JPA meetings.

Director Paule move to hold all future JPA meetings at Las Virgenes Municipal Water District, except the March and September meetings of each year, which are to be held at Oak Park Library. Motion seconded by Director Orkney. Motion carried by the following vote:

AYES: Director(s): Caspary, Polan, Renger, Peterson, McReynolds, Paule, Orkney and Chair Wall
NOES: Director(s): Lewitt

ABSTAIN: Director(s): None

## 7. BOARD COMMENTS

Director Polan commented that he would like to encourage stronger conservation efforts.

Director Paule expressed an interest in a potential JPA Recycled Water Fill Station similar to the one by Dublin-San Ramon Services District. He also noted that the city of Thousand Oaks had gone to 100% self-generated power for its Hill Canyon WWTP and suggested that the JPA may want to consider exploring something similar.

## 8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager Pedersen reported that the next meeting will be at Oak Park Library; spoke about upcoming events such as the resident tour hosted by Directors Renger and Paule; commented on the upcoming February 11th recycled water workshop.

## 9. FUTURE AGENDA ITEMS

None.

## 10. INFORMATION ITEMS

**A California Water Commission: Proposed Workplan and Activities for Water Storage Investment Program**

**B Rancho Las Virgenes Digester Gas Line Leak: Emergency Declaration**

**C Board Meeting Follow-up Items**

## 11. PUBLIC COMMENTS

None.

## 12. CLOSED SESSION

The Board recessed to closed session at **7:03 p.m.** and reconvened to open session at **7:40 p.m.**

**A. Conference with District Counsel- Existing Litigation pursuant to Government Code Section 54956.9 (a).**

1. Las Virgenes – Triunfo Joint Powers Authority v. United States Environmental Protection Agency and Heal the Bay, Inc. v. Lisa P. Jackson

There were no reportable actions taken in closed session.

## 13. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **7:41 p.m.**

James Wall, Chair

ATTEST:

Glen Peterson, Vice Chair

**LAS VIRGENES – TRIUNFO**
**JOINT POWERS AUTHORITY**
**MINUTES**
**SPECIAL MEETING OF FEBRUARY 11, 2015**
**RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP NO. 2**

4:00 PM February 11, 2015

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Chairman Wall.

## 1. CALL TO ORDER AND ROLL CALL

**A** Call to order and roll call

The meeting was called to order at **4:00 p.m.** by Chairman Wall in the Board Room at Las Virgenes Municipal Water District at 4232 Las Virgenes Road, Calabasas. David Pedersen, General Manager conducted the roll call.

Present: Director(s): Caspary, Lewitt, Polan, Renger, Board Chairman Peterson, McReynolds, Paule, and Wall

Absent: Director(s): Iceland and Orkney

Representatives from the following organizations attended:

Supervisor Sheila Kuehl (Susan Nissman, Timothy Lippman), Heal the Bay (Peter Shellenbarger), Los Angeles Department of Water and Power (Mario Acevedo, Yoshi Tsunehara), Montgomery Watson Harza (Steve Weber, Bob Armstrong, Jim Borchardt, Sarah Munger, Oliver Slosser), Los Angeles Waterkeeper (Liz Crosson), City of Calabasas (Alex Farassati), Malibu Creek MS4 Watershed Management Committee (Joe Bellomo), California State Parks (Craig Sap), National Park Service (John Chisum), City of Thousand Oaks (Santos Marquez), Mountains Restoration Trust (Debbie Sharpton), and Santa Monica Mountains Conservancy (Rorie Skei).

## 2. APPROVAL OFAGENDA

The agenda was approved by unanimous consent.

## 3. PUBLIC COMMENTS

There were no public comments.

## 4. RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP

Administering Agent/General Manager Pedersen made brief remarks relative to the previous workshop and thanked the participants for their feedback and participation.

Dr. Steve Weber welcomed the participants and provided a brief recap of the previous workshop.

Administering Agent/General Manager Pedersen presented on the Malibu Creek Watershed and water quality. Additionally, a technical presentation on seasonal storage was provided by James Borchardt of MWH. Following the presentations, Dr. Weber and Bob Armstrong of MWH facilitated a process to prioritize the various items developed in the PESTLE exercise conducted on January 29, 2015.

## 5. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **7:45 p.m.**

James Wall, Chair

ATTEST:

Glen Peterson, Vice Chair

**LAS VIRGENES – TRIUNFO**
**JOINT POWERS AUTHORITY**
**MINUTES**
**SPECIAL MEETING OF MARCH 18, 2015**
**RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP NO. 3**

4:00 PM March 18, 2015

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Chairman Wall.

## 1. CALL TO ORDER AND ROLL CALL

**A** Call to order and roll call

The meeting was called to order at **4:00 p.m.** by Chairman Wall in the Board Room at Las Virgenes Municipal Water District at 4232 Las Virgenes Road, Calabasas. Daryl Betancur, Clerk of the Board conducted the roll call.

Present: Director(s): Caspary, Lewitt, Polan, Renger, Board Vice Chairman Peterson, Iceland, McReynolds, Orkney, Paule, and Chairman Wall

Absent: Director(s): None

Representatives from the following organizations attended:

California Senator Fran Pavley (Dusty Russell), Supervisor Sheila Kuehl (Timothy Lippman), Heal the Bay (Peter Shellenbarger), Los Angeles Department of Water and Power (Yoshi Tsunehara), Metropolitan Water District of Southern California (Ray Mokhtari), Montgomery Watson Harza (Steve Weber, Ron Gastelum, Jim Borchardt, Sarah Munger, Oliver Slosser), City of Calabasas (Joel Ortiz), Malibu Creek MS4 Watershed Management Committee (Joe Bellomo), California State Parks (Suzanne Goode), National Park Service (John Chisum), City of Thousand Oaks (Santos Marquez), Mountains Restoration Trust (Debbie Sharpton), Santa Monica Mountains Conservancy (Rorie Skei), Santa Monica Mountains Fund (Dennis Washburn), and Resource Conservation District (Clark Stevens)

## 2. APPROVAL OFAGENDA

Approval of agenda

The agenda was approved by unanimous consent.

## 3. PUBLIC COMMENTS

There were no public comments.

## 4. RECYCLED WATER SEASONAL STORAGE ACTION PLAN: WORKSHOP

Administering Agent/General Manager David Pedersen and members of the consulting team from Montgomery Watson Harza (MWH) provided a brief recap of the events leading up to this point. Dr. Steve Weber briefly discussed the agenda for the meeting and what can be expected with respect to the process and the exercises to be conducted.

Jim Borchardt of MWH made a thorough presentation referencing six potential conceptual scenarios. After a brief question and answer period, the participants were divided into six groups and asked to review and comment on scenario display boards that were placed at various locations in the room. This process was referred to as the "art critic" exercise. Upon conclusion of the exercise, a representative of each group presented its key observations.

## 5. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **7:59 p.m.**

James Wall, Chair

ATTEST:

Glen Peterson, Vice Chair

**April 6, 2015 JPA Board Meeting**

TO: JPA Board of Directors

FROM: Finance & Administration

**Subject: Fiscal Year 2015-15 JPA Budget Workshop**

**SUMMARY:**

Staff will present an overview of the key factors that are anticipated to affect the Fiscal Year (FY) 2015-16 JPA Budget. Among the important factors is the anticipated reduction in recycled water sales resulting from conservation efforts associated with the on-going statewide drought.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**DISCUSSION:**

The preliminary budget process includes establishing the FY 2015-16 wholesale recycled water rate in accordance with criteria previously approved by the JPA Board. The preliminary projected rate for FY 2015-16 is $433 per acre foot, as compared to the current rate of $373.72 per acre foot. The rate increase is driven by a projected 8.5% decrease in recycled water sales from last year's budgeted sales.

A joint meeting of LVMWD and TSD staff will be held in early April to review the details of the preliminary JPA budget. The meeting will offer TSD staff an opportunity to provide valuable input in the budget process, request any revisions to the preliminary budget, and assist with establishing accurate estimates of revenues and expenditures. The JPA Board will be presented with a draft budget at its May meeting.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared By: Joseph Lillio, Finance Manager

**April 6, 2015 JPA Board Meeting**

TO: JPA Board of Directors

FROM: Facilities & Operations

**Subject: Recycled Water Seasonal Storage Plan of Action (Pg. )**

**SUMMARY:**

On November 3, 2014, the Board approved a proposal from MWH Global (MWH) to prepare a recycled water seasonal storage plan of action. The approach to develop the plan of action centered around conducting individual interviews with JPA Board Members and engaging a broad cross-section of stakeholders in three public workshops. Materials from the workshops are available on the LVMWD website at http://www.lvmwd.com/your-water/recycled-water/recycled-water-seasonal-storage.

Representatives of the following organizations actively participated in the workshops: Senator Fran Pavley's Office, Supervisor Sheila Kuehl's Office, Heal the Bay, Los Angeles Waterkeeper, National Park Service, California State Parks, cities of Calabasas and Thousand Oaks, Malibu Creek MS4 Watershed Management Committee, Mountains Restoration Trust, Santa Monica Mountains Conservancy, Resource Conservation District of the Santa Monica Mountains, Santa Monica Mountains Fund, Los Angeles Department of Water and Power, and Calleguas Municipal Water District.

The JPA Board Member interviews and workshops have been completed. However, before detailed work on the plan of action can be completed, staff requests feedback from the Board on six scenarios that were reviewed by the stakeholder group at the last workshop. Ideally, a primary and secondary scenario would emerge from discussion at the Board meeting and would be the focus of staff's efforts moving forward.

**RECOMMENDATION(S):**

Consider stakeholder feedback on six conceptual scenarios for management of the JPA's water resources, including addressing the need for seasonal storage of recycled water; discuss the merits of the scenarios considering the criteria established by the stakeholders; and identify a primary and secondary scenario to serve as the basis for a plan of action to move forward.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**FINANCIAL IMPACT:**

This action in itself will not result in a significant financial impact to the JPA. However, the future approval of the plan of action and its ensuing implementation will result in a significant financial impact to the JPA.

**DISCUSSION:**

Background:

The JPA first started developing the recycled water system in the 1970s. Since the initial installation of the Las Virgenes Valley system, the recycled water system has grown to provide service in both Los Angeles and Ventura counties. Of the 10,000 acre-feet (AF) of recycled water produced at the Tapia Water Reclamation Facility each year, approximately 60% or 6,000 AF is beneficially reused. Approximately 4,500 AF is used in the Las Virgenes service area, accounting for 17% of total demand. Approximately 1,500 AF is delivered to Triunfo Sanitation District with 828 AF being used in the Oak Park Water Service's area, accounting for 26% of its total annual demands. The remaining 4,000 AF is disposed of either by

discharging it to Malibu Creek and/or the Los Angeles River or via spray fields at Rancho. By 2035, wastewater flows are estimated to increase to 12 million gallons per day at Tapia. If there is little or only modest growth in recycled water demands, the volume of recycled water disposal will increase to 7,500 AF.

Recycled Water Seasonal Storage:

Seasonal storage of recycled water has been considered in many planning documents, beginning with the 1973 Recycled Water Master Plan. In the simplest terms, the concept is to store excess recycled water produced in the winter for use in the summer when demands are the highest and exceed production. This approach requires not only seasonal storage but also increased demands. Seasonal storage has little or no value unless it is matched with demands to empty the reservoir in the summer to make room for winter excess. The approach would significantly reduce the need to discharge but cannot eliminate discharges altogether because of high flows into Tapia during rain events and a shrinking market for traditional “purple pipe” recycled water use. However, non-traditional uses such as residential use or the emerging concept of indirect or direct potable reuse may expand the potential demand for recycled water, leveraging the value of seasonal storage.

Guiding Principles and Stakeholder Process:

On June 2, 2014, the Board approved the attached guiding principles creating a framework for next steps in developing seasonal storage of recycled water for maximum beneficial reuse. Because of the complexity of the project, having a clear road map or plan of action was deemed necessary for the Board and staff. The plan of action would allow the JPA to make incremental steps towards maximizing beneficial reuse. To this end, a Request for Proposals was sent out and MWH was selected as the most qualified firm. MWH’s approach was to develop a plan of action centered around conducting individual interviews with JPA Board Members and engaging a broad cross-section of stakeholders in three public workshops. The approach recognized the value of soliciting input from key stakeholders early in the process.

JPA Board Member Interviews:

MWH first conducted individual interviews with JPA Board Members. The key words and phrases from the interviews help to frame the context of the workshops that followed. Key words and phrases from the interviews were:

- Customers
- Cost effectiveness
- Using the most of existing resources
- Malibu Creek
- Expanding recycled water use
- Innovative forms of reuse
- Outreach

Stakeholder Workshops:

Workshop No. 1 consisted of developing context for the problem by using a broad scanning technique known as "PESTLE". P-E-S-T-L-E stands for political, economic, social, technical, legal and environmental, and is used as a means to categorize complex issues into “buckets” that can be ranked and prioritized by the participants. The group identified 26 issues in the political category, 45 in the economic category, 52 in the social category, 56 in the technical category, 13 in the legal category and 60 in the environmental category. These issues were then used in the second workshop.

Workshop No. 2 involved developing "convergence" on the issues using an assessment tool known as "BPAT" or blink prioritization assessment tool. BPAT relies on participants' first impressions and initial reactions to prioritize the issues through break-out groups and polling. The result was consensus on three primary issues for each of the PESTLE categories. These issues were then used in the third workshop.

Workshop No. 3 started the process of "affirmation". Six conceptual scenarios ranging from TMDL compliance with advanced nutrient removal to re-purposing an existing reservoir for indirect potable reuse were evaluated based on the PESTLE and BPAT assessments, construction costs and implementation schedules. The participants evaluated and commented on each scenario. Attached for reference are illustrative schematics of the six conceptual scenarios along with the comments provided by the workshop participants.

Next Steps:

To complete the process of affirmation and allow for completion of the plan of action, the Board should consider the PESTLE and BPAT assessments and the participants' comments on the six conceptual scenarios. The participants were encouraged to attend the Board meeting to share their observations on the process and any further thoughts on the conceptual scenarios. Ideally, after considering the stakeholder feedback, the Board would identify a primary and secondary scenario to serve as the basis for the plan of action to move forward.

**GOALS:**

Lead in Sanitation and Recycled Water Services Focusing on Maximum Reuse

Prepared By: David R. Lippman, Director, Facilities & Operations

**ATTACHMENTS:**

Guiding Principles

Illustrative Scematics of Conceptual Scenarios with Stakeholder Comments

**Recycled Water Seasonal Storage Project Guiding Principles**

The Las Virgenes-Triunfo Joint Powers Authority (JPA) considers recycled water a valuable resource to be beneficially reused. The JPA produces recycled water at its Tapia Water Reclamation Facility (Tapia) by treating wastewater flows from its service area to meet strict state and federal water quality standards. The amount of recycled water produced at Tapia is relatively constant throughout the year. However, customers' needs or "demands" for recycled water fluctuate significantly during the year. Demands are very high during the hot summer months, exceeding the supply from Tapia, and can drop to near zero during periods of rainfall during the winter.

As a result, the JPA is challenged to balance the constant supply of recycled water with fluctuating demands throughout the year. During the summer months, potable water must be added to the recycled water system to meet the high demands. Conversely, during the winter months, excess recycled water must be released to Malibu Creek and the Los Angeles River or applied to the JPA's sprayfields. Releases to Malibu Creek are subject to ever increasing regulatory requirements, which will likely be cost-prohibitive to meet in the near future.

A seasonal storage reservoir for recycled water would allow the JPA to balance supply and demands. Excess recycled water could be placed in the reservoir during the winter months for use during the high demand summer period. Additional demands for recycled water would need to be developed to ensure that the reservoir could be drawn down each year, making room for needed storage in the wintertime. A seasonal storage reservoir has been envisioned since the first Recycled Water Master Plan was completed in the 1970s. In 2012, the JPA completed a Recycled Water Seasonal Storage Feasibility Study. This study evaluated the technical and economic feasibility of three alternatives for the reservoir.

The JPA desires to fully and beneficially reuse its recycled water by moving forward with investigation of seasonal storage. This investigation will be guided by the following principles.

1. ***Maximize Beneficial Reuse by:***
   - 1.1. Being an environmental steward
   - 1.2. Reducing existing potable water use
   - 1.3. Reducing discharge to Malibu Creek and Los Angeles River
   - 1.4. Encouraging infill use in both service areas
   - 1.5. Providing regional benefits
   - 1.6. Creating water supply reliability

2. ***Seek Cost Effective Solutions by:***
   - 2.1. Seeking funding from grants, matching funds and partnerships
   - 2.2. Engaging permitting and regulatory agencies early and often
   - 2.3. Each partner sharing in outside funding
   - 2.4. Each partner funding their share
   - 2.5. Being on time, on schedule and within budget
   - 2.6. Analyzing impacts and benefits of the project from each partners perspective

***3. Seek Partnerships beyond the JPA by:***

3.1. Considering multiple uses such as;

3.1.1. Recreation

3.1.2. Education

3.1.3. Creation of open space

3.2. Engaging stakeholders early and often

3.3. Considering additional partners that will purchase recycled water

***4. Gain Community Support by:***

4.1. Engaging and educating the public and stakeholders

4.2. Being transparent

4.3. Establishing public safety as a top priority

***5. Govern with a Partnership by:***

5.1. Using the JPA Agreement as a guiding document

5.2. Communicating openly and frequently

5.3. Being committed to the project

5.4. Equitably allocating costs and sharing benefits from both partners perspective

***6. Be Forward Thinking by considering the possibilities of:***

6.1. Expanding the recycled water system beyond the JPA service area

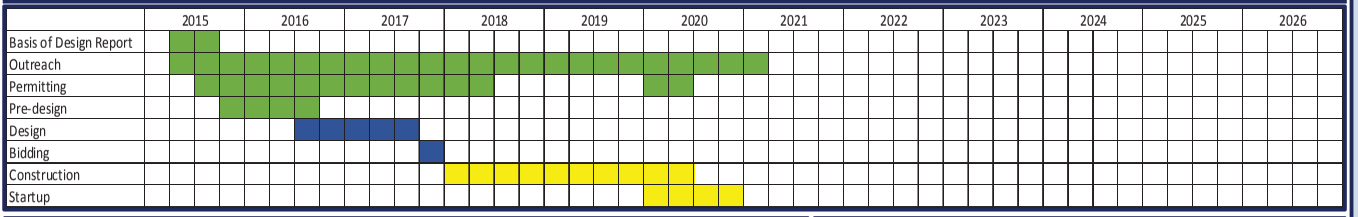
6.2. Exterior residential reuse

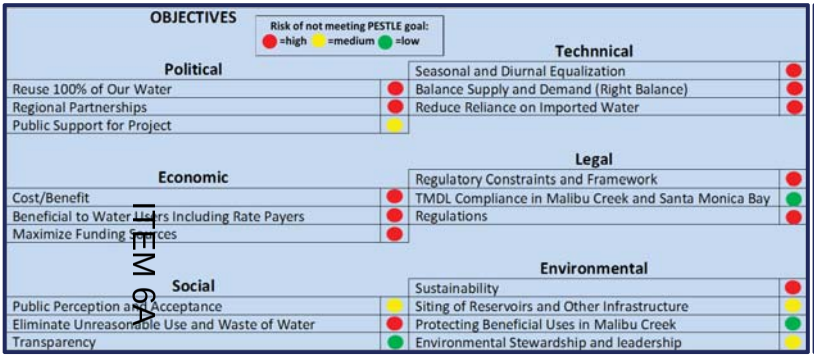
6.3. Exterior and interior use for new and remodeled commercial projects

6.4. Indirect potable reuse

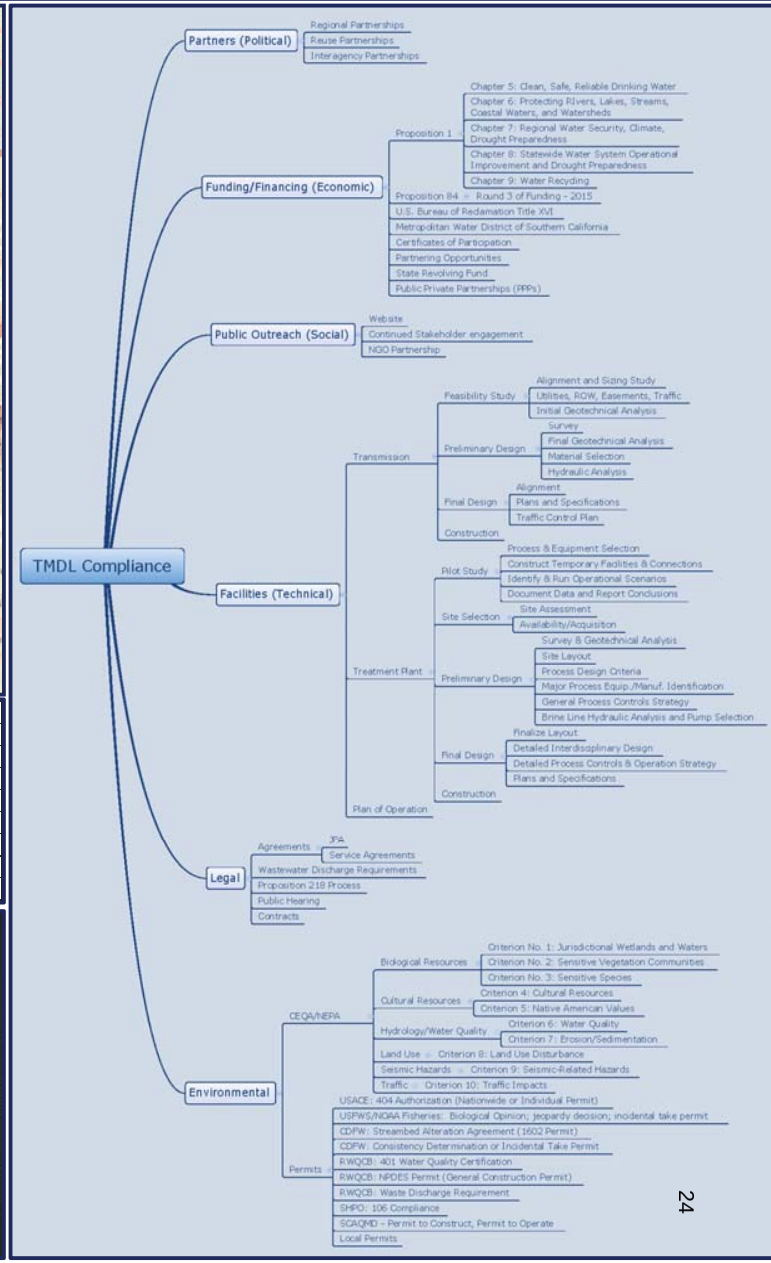
6.5. Direct potable reuse

# Scenario 1: TMDL Compliance with Advanced Nutrient Removal

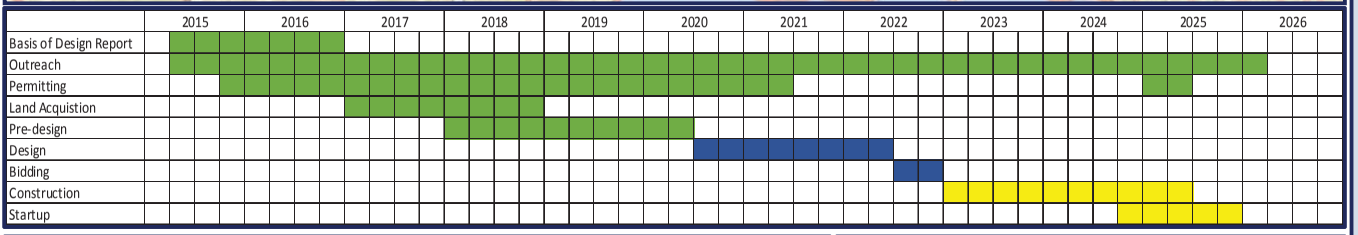




## Scenario 1 - TMDL Compliance with Advanced Nutrient Removal

| Pros | Cons |
|---|---|
| Fewest environmental permits required | A lot of problems |
| Low risk of failure and unexpected cost | RO water going into creek and wasted |
| | $100 million to dump back into creek |
| | No MWD-LRP funding |
| | May not qualify for Prop 1 or any grants |
| | This is the “No Project” alternative (will lose EPA lawsuit) |
| | Not a chance |
| | No beneficial re-use |
| | No Multi-benefit |
| | Still Expensive |
| | Fails to meet TMDL & Groups objective |
| | Water still in the creek from Facility |
| | Possible cost of using Brine line (x3) |
| | Seasonal discharge? Fish flow? |
| | How to supply water reliability cost effectively with minimal environmental impact (highest best use) |
| | Single benefit |
| | High Cost of O&M |
| | No reuse |
| | Benefits none |
| | Schedule looks aggressive |
| | No beneficial use of water |
| | No income |
| | Purpose of proposal is to get out of creek |
| | Still has uncertainty about future of Malibu Creek regulations, future facilities may be required |
| | No funding source |
| | Fewest environmental permits required |
| | If recycled water is cut back may need to enhance the treatment plant |
| | No outside support from other agencies |
| | Need support to take brine line |
| | Worst option |
| | No: political partners economic partners, offsetting benefits |
| | Meets perceived environmental benefit without looking at water system |
| | Lost resource, no income from resource |
| | Need to import same amount of water from MET |
| | |

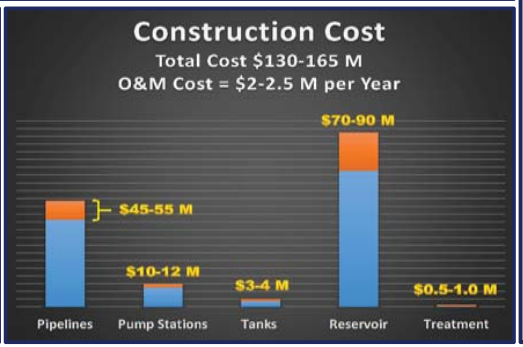
# Scenario 2: New Seasonal Storage Reservoir and Reuse Partner

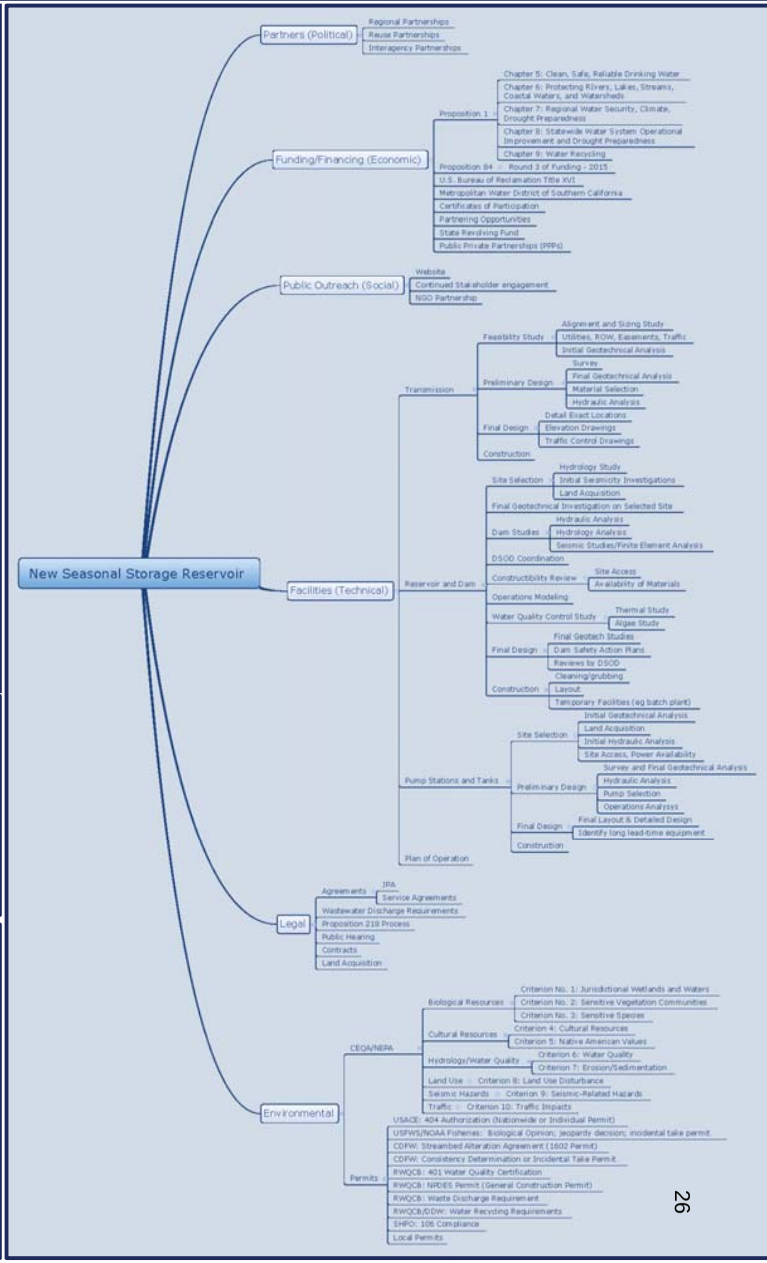




**OBJECTIVES**

Risk of not meeting PESTLE goal: =high =medium =low

| | | | |
|---|---|---|---|
| **Political** | | **Technnical** | |
| Reuse 100% of Our Water | | Seasonal and Diurnal Equalization | |
| Regional Partnerships | | Balance Supply and Demand (Right Balance) | |
| Public Support for Project | | Reduce Reliance on Imported Water | |
| **Economic** | | **Legal** | |
| Cost/Benefit | | Regulatory Constraints and Framework | |
| Beneficial to Water Users Including Rate Payers | | TMDL Compliance in Malibu Creek and Santa Monica Bay | |
| Maximize Funding Sources | | Regulations | |
| **Social** | | **Environmental** | |
| Public Perception and Acceptance | | Sustainability | |
| Eliminate Unreasonable Use and Waste of Water | | Siting of Reservoirs and Other Infrastructure | |
| Transparency | | Protecting Beneficial Uses in Malibu Creek | |
| | | Environmental Stewardship and leadership | |



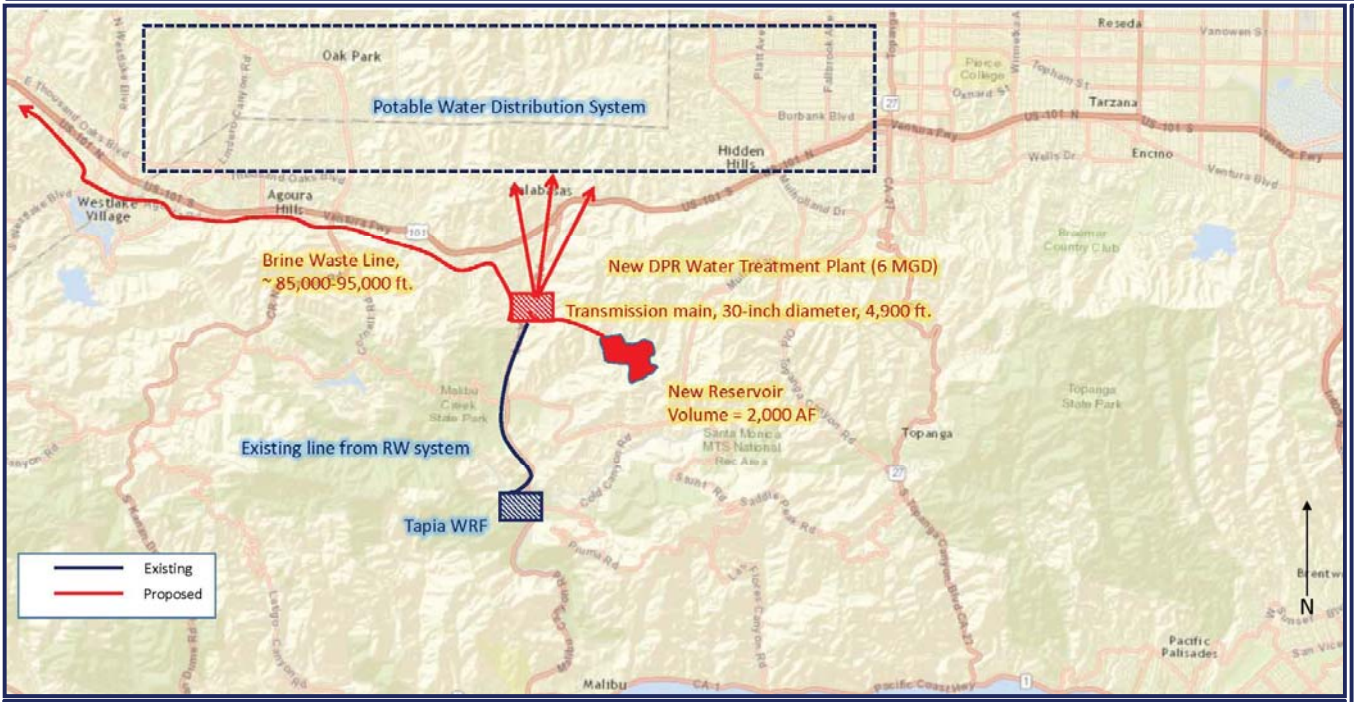



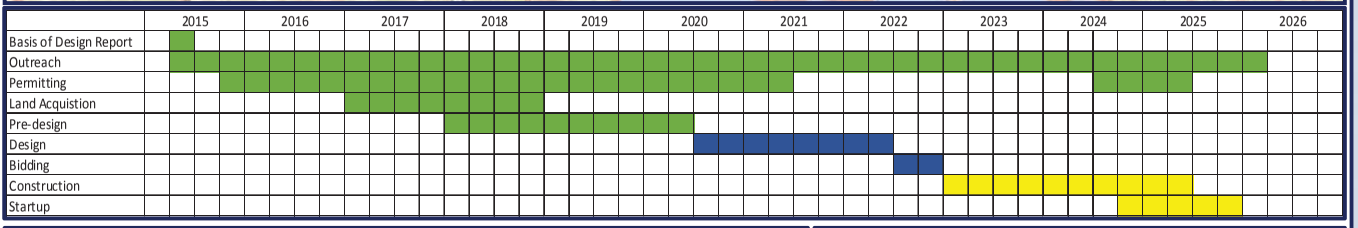

ITEM 6A

## Scenario 2 - New Seasonal Storage Reservoir and Reuse Partner

| Pros | Cons |
|---|---|
| No Prime | 100% Recycle ( purple) |
| No treatment plant | Not enough cost – effective users (V.G. …. |
| No discharge to creek | New Reservoir in wildlife corridor |
| Why is public support for project red? | Regulatory challenge (to say the least) |
| Get way out of the creek | Puts money down the drain (No local district use benefit |
| Recreational reservoir | Prohibitive cost |
| Possible partner is Ventura agriculture, do to restricted pumping of ground water | Key components not addressed (red dots) |
| More partnering opportunities | Issues with users |
| | Two users instead of one |
| | LADWP will not build pipeline to Braemar Country Club (less users than Encino option) |
| | Most of cost is reservoir |
| | No identified place for reservoir |
| | Too long to construct |
| | Reservoir concerns |
| | High cost to benefit ratio |
| | No potable reuse |
| | Unknown on Partnership |
| | Long lead time |
| | Cost is high & questionable |
| | Difficulty in buying a new site |
| | New reservoir is problematic without a specific site |
| | What's the upper L.A. River Watershed Masters position? |
| | HEPA permitting issues |
| | 11 year time frame |
| | Massive cost is hard to sell |
| | Can we get support from public? |
| | Legally challenging considering – EIR, R/W right of way, public support for reservoir |
| | EIR is expensive |
| | Messaging to lots of different constituents |
| | Water does not benefit producers of it. |
| | (L.A. Benefits LV does not) |
| | Special treatment to reuse water, was this cost estimate? |
| | High Risk of failure |
| | 10 years at least to Malibu Creek compliance |

# Scenario 3: New Seasonal Reservoir Storage and DPR

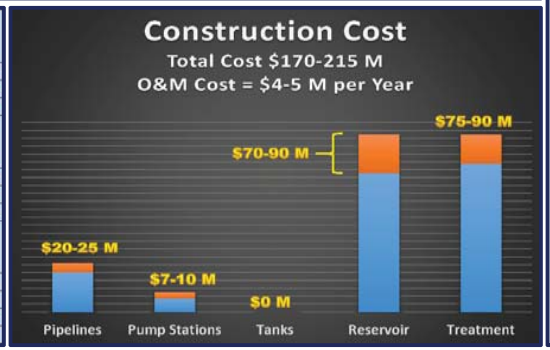


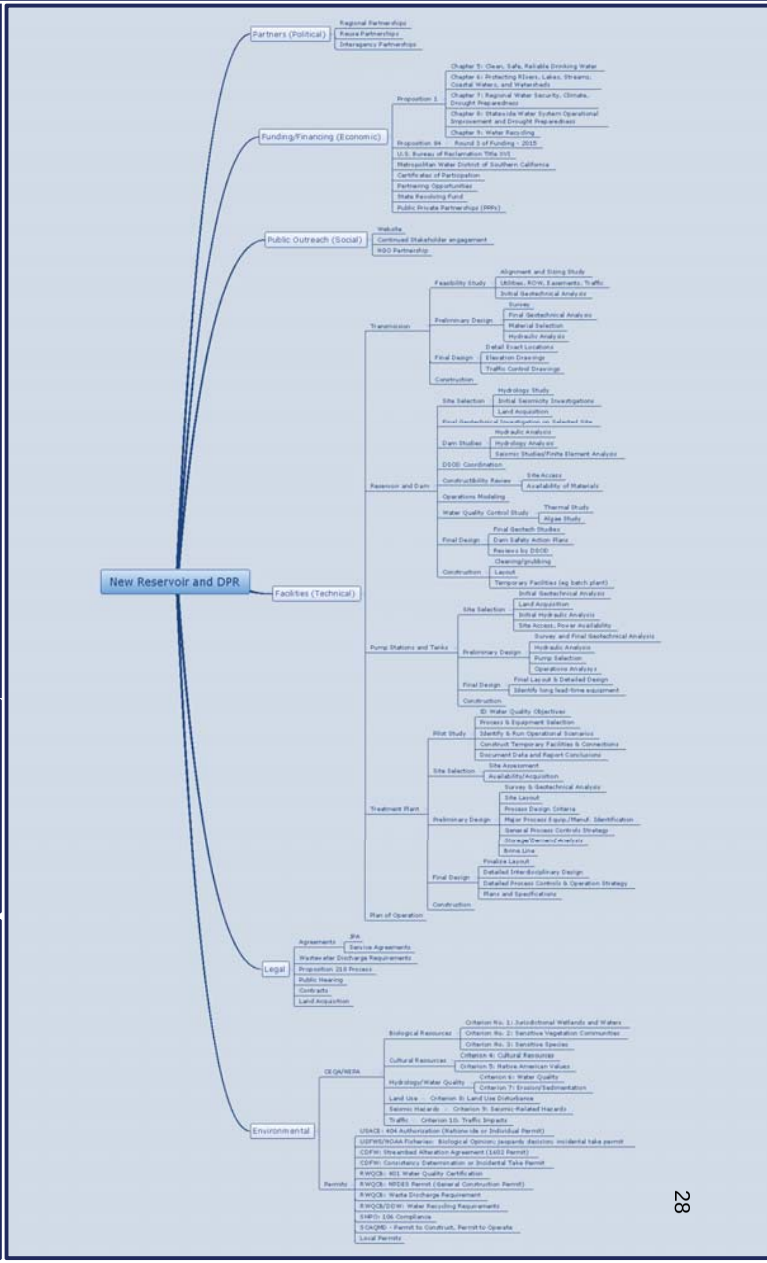




**OBJECTIVES**

Risk of not meeting PESTLE goal: =high =medium =low

| | | | |
|---|---|---|---|
| **Political** | | **Technnical** | |
| Reuse 100% of Our Water | | Seasonal and Diurnal Equalization | |
| Regional Partnerships | | Balance Supply and Demand (Right Balance) | |
| Public Support for Project | | Reduce Reliance on Imported Water | |
| **Economic** | | **Legal** | |
| Cost/Benefit | | Regulatory Constraints and Framework | |
| Beneficial to Water Users Including Rate Payers | | TMDL Compliance in Malibu Creek and Santa Monica Bay | |
| Maximize Funding Sources | | Regulations | |
| **Social** | | **Environmental** | |
| Public Perception and Acceptance | | Sustainability | |
| Eliminate Unreasonable Use and Waste of Water | | Siting of Reservoirs and Other Infrastructure | |
| Transparency | | Protecting Beneficial Uses in Malibu Creek | |
| | | Environmental Stewardship and leadership | |




ITEM 6A

## Scenario 3 - New Seasonal Storage Reservoir and DPR

| Pros | Cons |
|---|---|
| Retains all water within the service area district | Highest cost approach |
| Reduces reliance on imported water (x2) | Brine line costly and uncertain alignment |
| Shorter pipeline | Highest potable water |
| Best long term solution | Highest gross revenue |
| Upside to a drought - pass regulation easier like DPR | Good water reduction scenario |
| DPR could start as IPR & as regs change, could switch to all DPR | Will people |
| Goal long term, cost benefit | Same issues with new reservoir as 2 |
| Does the scenario include the income from selling potable H20? | More rate payer pain (low probability of continued public assistance or financing) |
| We use our own water | Doubles the rates |
| Will reduce imported water from Delta | Too long |
| Need to think about phasing, can DPR be built sooner? | Red dots |
| | More expensive |
| | DPR unknown when and what will be required |
| | Brine line |
| | New reservoir |
| | High cost of construction O&M |
| | Not approved system yet- uncertainty |
| | Environmental concerns on reservoir |
| | Brine disposal |
| | Expensive |
| | Uncertainty |
| | Longer implementation project has execution risk |
| | 11 year time frame |
| | Direct portable reuse is most difficult public challenge |
| | Cost is huge challenge |
| | All problems with dam from previous page: safety, R/W, dam safety, public support |
| | Is 2 year cost schedule correct? |
| | Can we mitigate all reservoir issues |
| | Noise |
| | Equipment work etc. |
| | No benefit or compliance of Malibu Creek |
| | High risk of failure or unexpected costs |
| | Is 12 year cost correct? |
| | |
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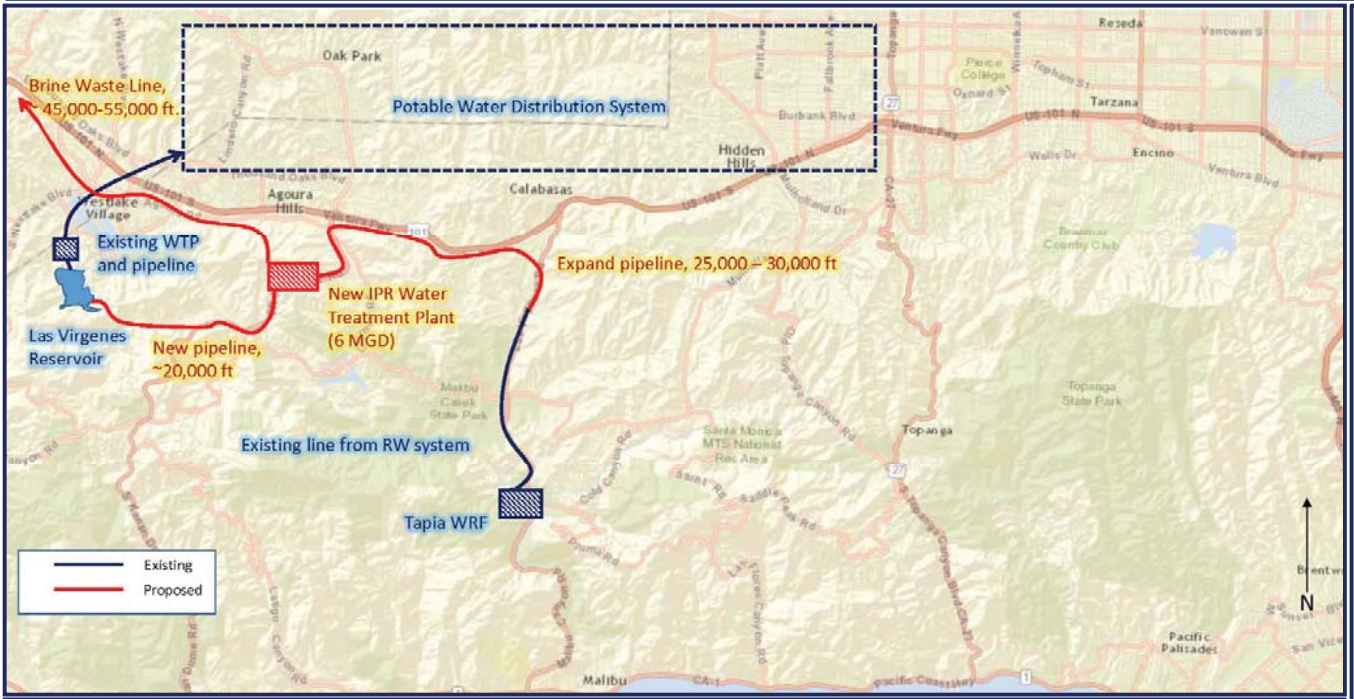
# Scenario 4: Las Virgenes Reservoir (IPR)

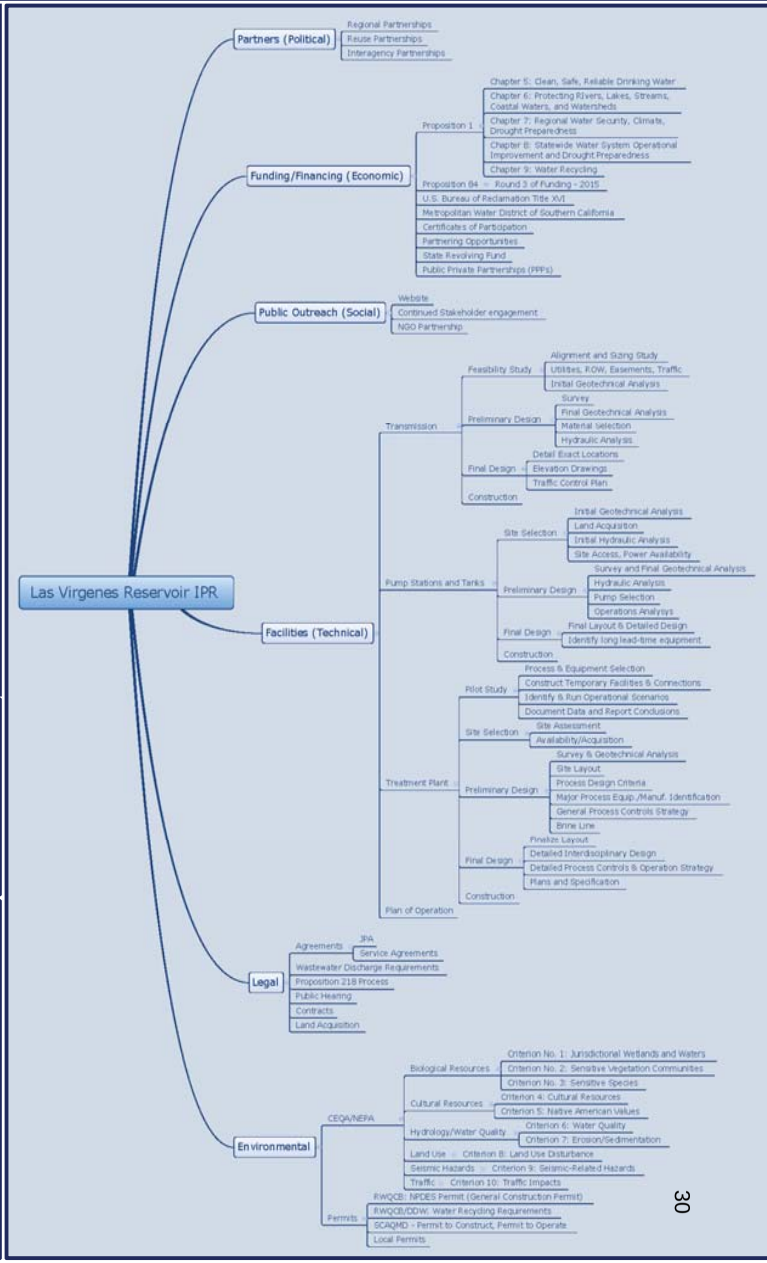



| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Basis of Design Report | | | | | | | | | | | | |
| Outreach | | | | | | | | | | | | |
| Permitting | | | | | | | | | | | | |
| Pre-design | | | | | | | | | | | | |
| Design | | | | | | | | | | | | |
| Bidding | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | |
| Startup | | | | | | | | | | | | |

**OBJECTIVES**

Risk of not meeting PESTLE goal: ●=high ●=medium ●=low

| | | | |
|---|---|---|---|
| **Political** | | **Technnical** | |
| Reuse 100% of Our Water | ● | Seasonal and Diurnal Equalization | ● |
| Regional Partnerships | ● | Balance Supply and Demand (Right Balance) | ● |
| Public Support for Project | ● | Reduce Reliance on Imported Water | ● |
| **Economic** | | **Legal** | |
| Cost/Benefit | ● | Regulatory Constraints and Framework | ● |
| Beneficial to Water Users Including Rate Payers | ● | TMDL Compliance in Malibu Creek and Santa Monica Bay Regulations | ● |
| Maximize Funding Sources | ● | | |
| **Social** | | **Environmental** | |
| Public Perception and Acceptance | ● | Sustainability | ● |
| Eliminate Unreasonable Use and Waste of Water | ● | Siting of Reservoirs and Other Infrastructure | ● |
| Transparency | ● | Protecting Beneficial Uses in Malibu Creek | ● |
| | | Environmental Stewardship and leadership | ● |


ITEM 6A

**Scenario 4 - Las Virgenes Reservoir (IPR)**

| Pros | Cons |
|---|---|
| Water Supply benefit ( reduces import to district) (x4) | Brine disposal challenge- 2 concerns |
| 1 plant, not 2 | Could take years to get IPR permit |
| Plant already being upgraded | Uncertainty |
| Low cost | Schedule looks aggressive |
| Lower risk of unexpected cost and environmental supports | Not phase able? |
| Get water | Brine Line |
| Messaging is easiest; constituents share value | Comment: Compare locating the plant on existing site and possible alternate Brine line to coast |
| Need Partnerships with Met & colleagues / for redundancy benefit? | Need to couple increase in local portable water with reduction in use overall |
| Overall thought: Highest beneficial use to cost ratio | People don't increase domestic irrigation – grass thereby negative benefits) |
| 3rd Party issue (from going to distribution system) CMWD or could be partner ship | Gray water reuse on site still needed |
| Hits the goals ( not red dots) | Expensive |
| Shorter time frame | Can Brine Line run through Malibu? |
| 1 of 2 favorites | |
| Less uncertainty of regulatory than DPR | |
| Less dependence on imported water | |
| Lesser environmental concerns | |
| Reusing water | |
| Best long term solutions | |
| Upside to drought- Pass regulation easier like DPR | |
| DPR could start as IPR & as regs change. Could switch to all DPR. | |
| Benefit is quick (2016 vs. 2020) | |
| Less environmental impact, so should be able to get permits | |
| O&M offset by income | |
| Get more income | |
| More benefit out of existing facilities | |
| The best option | |
| Regional approach to shipping H20 to colleagues | |
| Value not included: unbought potable H20 | |
| Benefit to using in local area versus value of negotiated sale of H20 to third party | |
| Possible to divert in summertime to save $ from effort | |
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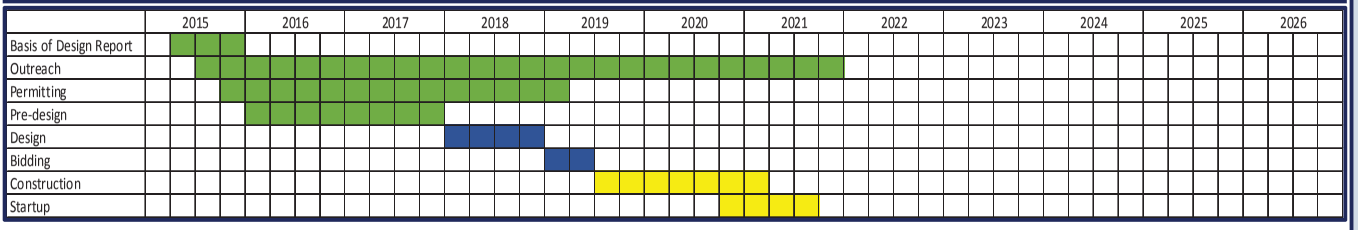
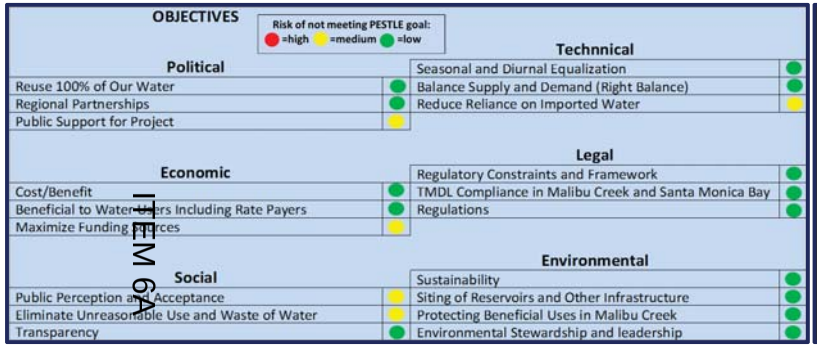
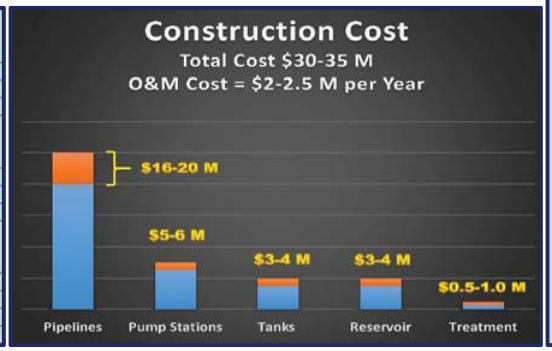
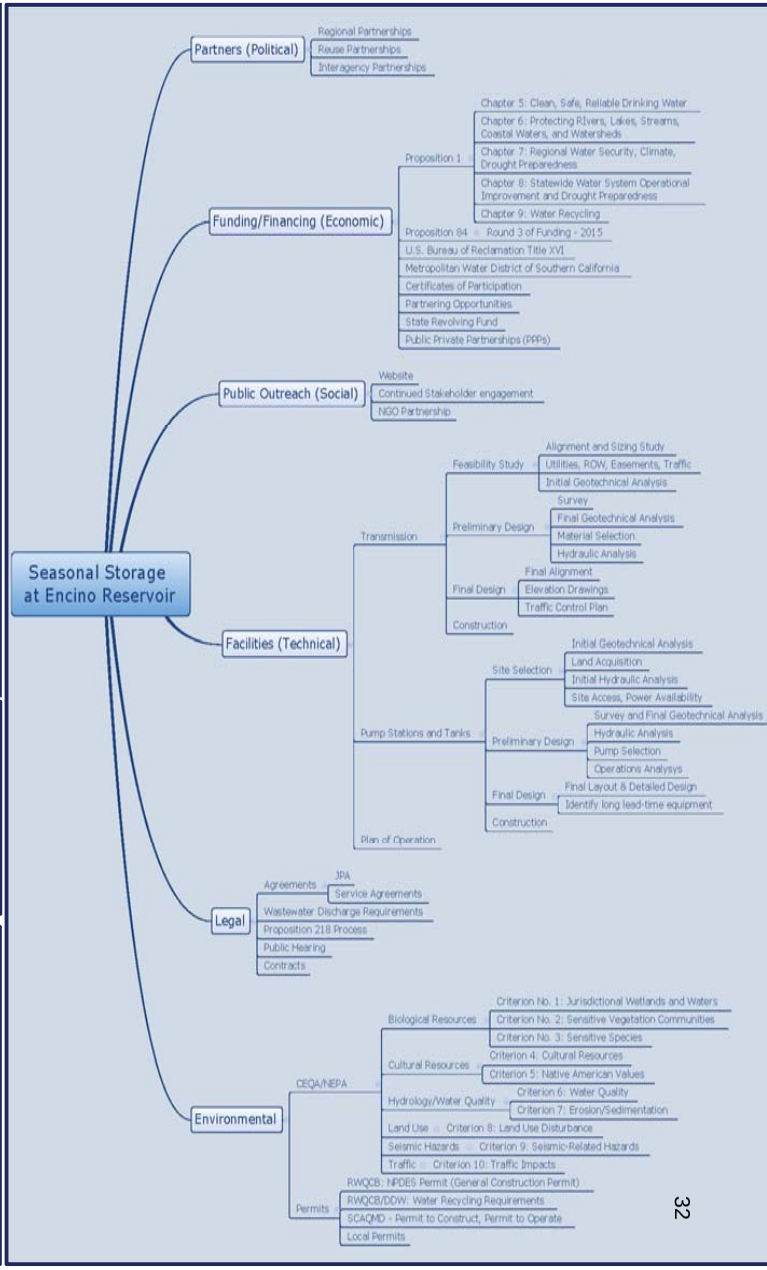
# Scenario 5: Encino Reservoir for Seasonal Storage and Reuse Partner

## Scenario 5 - Encino Reservoir for Seasonal Storage and Reuse Partner

| Pros | Cons |
|---|---|
| Pro- Line agreement to Woodland Hills C.C. (View lake) Adds circulation | Brine disposal |
| Lowest cost – existing reservoir (x3) | Biggest risk is agreement w/ DWP (x2) |
| IPR/DPR is an add-on potential (x3) | Risk of recycled water being used less in future |
| Most viable | No potable water reuse |
| Potential golf courses to add along the way | Reliance on partnership |
| Pierce has purple pipe but no supply | Need pumping both ways |
| Shorter time frame (x3) | Water benefits others, not LV |
| Already planning to go to Woodland Hills Country Club | Exporting some RW permanently (x2) |
| Low O&M cost (no membranes) (x2) | 2 messages (LV residents, Encino residents) |
| Less uncertainty of regulatory than DPR | Nutrient-salt analysis (surface vs Aquifer vs ocean) should be done |
| Less dependence on imported water | |
| Lesser environmental concerns | |
| Reusing water | |
| Lower pipeline cost because L.A. might build it | |
| Could go back and forth in pipes | |
| Got LV reservoir- 500 Aft | |
| Some monetary benefit | |
| Reuse 100% of LVMWD H2) not possible | |
| Possible long term solution subject | |
| No Brine line required (x2) | |
| Elimination of potable water to reclaimed water system | |
| Low risk option, likely to get support | |
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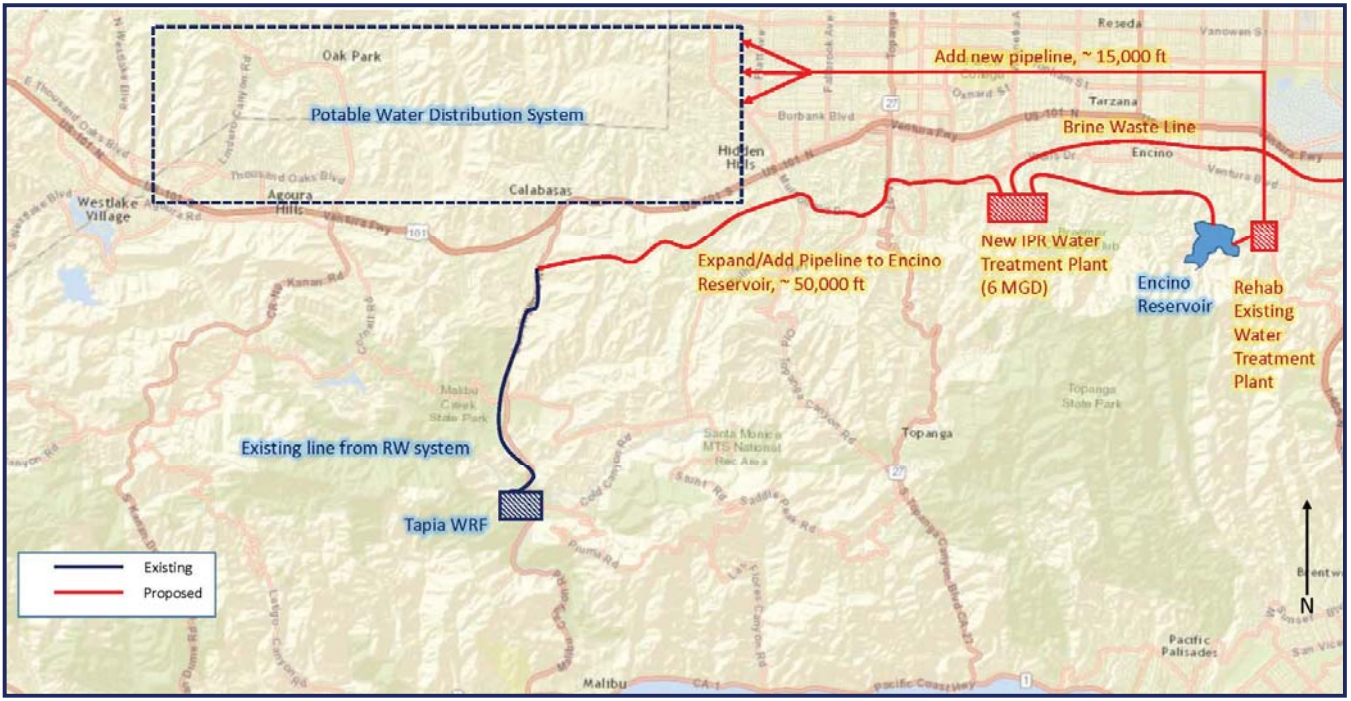
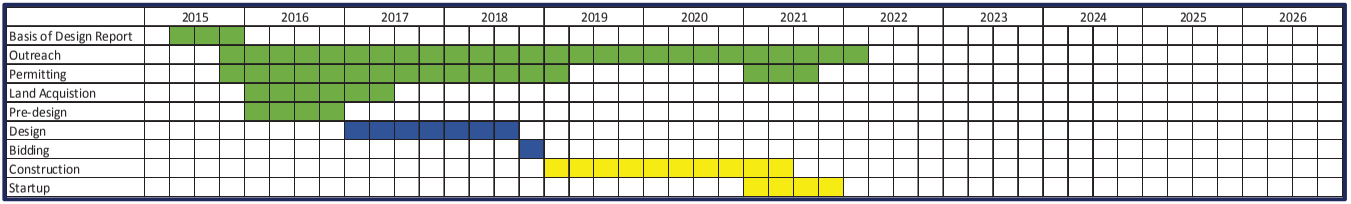
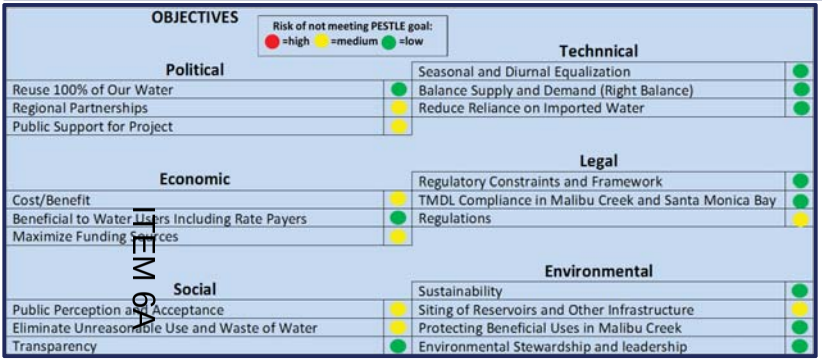
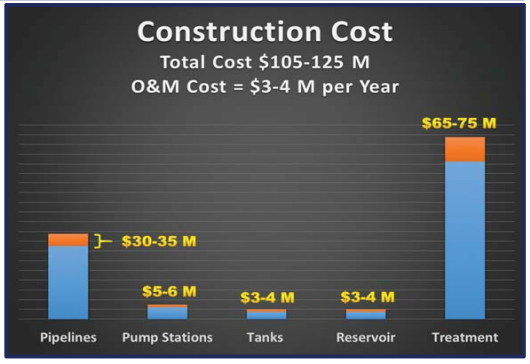
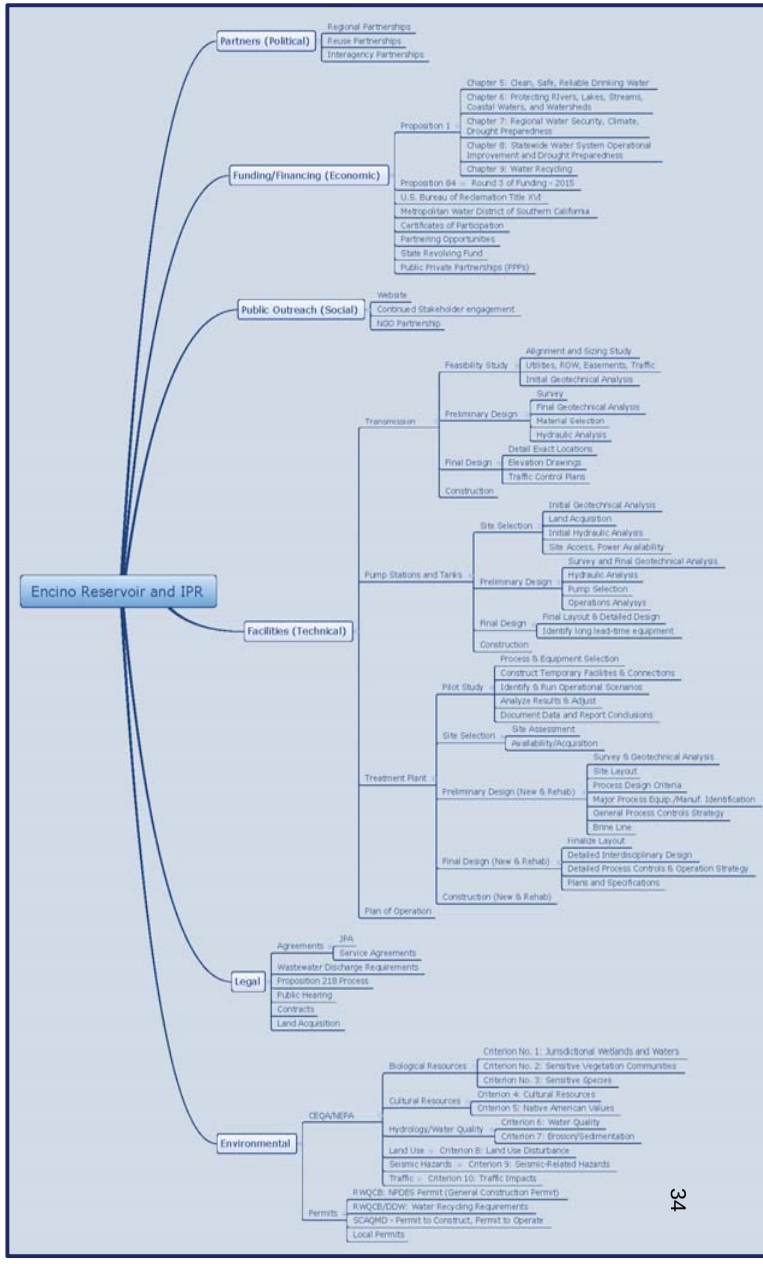
# Scenario 6: Regional IPR with Encino Reservoir




ITEM 6A

**Scenario 6 - Regional IPR with Encino Reservoir**

| Pros | Cons |
|---|---|
| Can add on DPR later (x2) | Siting of new IPR plant |
| Can benefit LV with recycled water & potable water | Same benefit as Scenario 4 but costs more |
| Can get funding now | Uncertainty of Brine line |
| Low risk | Cost |
| Public messaging wouldn't need to be tailored to Woodland Hills, LV. | Partnerships |
| Use others money | Brine waste could be a real long-term issue |
| Use existing infrastructure | Public perception for IPR |
| Low risk in terms of environmental and public stopping project | Why is timeline for Scenario 5 and 6 the same? |
| Malibu creek compliance sooner | A lot more complicated |
| Can be phased - scene 5- scene 6 | O&M must be higher for IPR |
| Many choices for treatment | NEPA problematic with easements on parkland |
| Pipeline cost could be 0 | Higher revenue from potable sales (pays for operations but not 1st costs) |
| Shorter timeline possible? | Higher costs |
| Income could offset O&M | Scenario 4 is cheaper and easier but similar |
| Mulholland pipe alignment should be considered | Nimby issues for plant construction (no direct benefit) |
| Permitting could be easier | Need DWP's agreement |
| Same Pros as Scenario 5 | Possible geologic problems |
| | Political issue with homeowner resistance to putting RW in Encino Reservoir |
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**INFORMATION ONLY**

**April 6, 2015 JPA Board Meeting**

TO: JPA Board of Directors

FROM: Finance & Administration

**Subject: Replacement of Submersible Chopper Pumps: Award (Pg. )**

On March 10, 2015, the LVMWD Board, acting as Administering Agent of the JPA, authorized the General Manager to issue a purchase order in the amount of $78,623.88 to Xylem Water Solutions for the purchase of four submersible chopper pumps and related controllers.

**SUMMARY:**

This item involves the replacement of existing submersible chopper pumps and related controllers for the dewatering, reactor and cure buildings at the Rancho Las Virgenes Composting Facility. Also, staff recommends the purchase of one spare pump.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

Sufficient funds are available in the adopted Fiscal Year 2014-15 JPA Budget for the submersible chopper pumps and related controllers. The cost of the work is allocated 70.6% to LVMWD and 29.4% to Triunfo Sanitation District.

**DISCUSSION:**

Background:

The existing submersible chopper pumps at the Rancho Las Virgenes Composting Facility in the dewatering, reactor, and cure buildings have reached the end of their useful life and require replacement. The pumps protect the buildings from overflows and flooding by delivering water collected in the sumps back to the wastewater system. The replacement pumps, complete with control panels, will be installed at the three different locations and will be easily interchangeable to allow for quick relocation in the event of pump failure. Replacing the pumps concurrently with one style of pump and controller streamlines the process for maintenance and training. The fourth pump will serve as a back-up for use during repairs or scheduled maintenance to reduce downtime and the possibility of back-ups, overflows, or spills. No control panel is needed for the back-up pump.

Bid Process:

The Request for Bids was posted on the District's website, and nine vendors were notified of the solicitation via e-mail. Three bids were received and publicly opened. Xylem Water Solutions (Xylem) was identified as the lowest responsible, responsive bidder with a bid total of $78,525. However, upon further review of the bids, staff determined that the Xylem bid was incorrectly tabulated. The extended total for the control panels on Xylem's bid was not in agreement with the stated unit price of $16,217.00. As a result, the bid tabulation was corrected based on the Instructions to Bidders, which called for unit pricing to prevail in the case of a discrepancy with extended totals, increasing Xylem's total bid amount from $78,525.00 to $78,623.88, the award amount.

| BIDDER | BID TOTAL |
|---|---|
| **Xylem Water Solutions** | **$78,623.88*** |
| Rockwell Engineering & Equipment Company | $81,259.50 |
| Weir Specialty Pumps (Flo-Systems) | $108,483.34 |
| *Corrected extended total using unit pricing | |

**GOALS:**

Construct, Manage and Maintain All Facilities and Provide Services to Assure System Reliability and Environmental Compatibility

Prepared By: Gretchen Bullock, Buyer

**INFORMATION ONLY**

**April 6, 2015 JPA Board Meeting**

TO: JPA Board of Directors

FROM: Facilities & Operations

**Subject: Residential Recycled Water Fill Station (Pg. )**

**SUMMARY:**

Several Board Members recently expressed an interest in the residential recycled water fill station provided by the Dublin San Ramon Services District (DSRSD) and suggested that the JPA may want to consider offering a similar service to its customers. This report provides additional information on DSRSD, its recycled water fill stations, and potential next steps to pursue a JPA recycled water fill station.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

No

**DISCUSSION:**

About Dublin San Ramon Services District (DSRSD):

DSRSD is located in Dublin, California and relies on State Water Project water from Zone 7 for its potable water supply. Due to the very low allocations to State Water Project Contractors, its supply is severely limited. DSRSD declared a drought emergency on May 5, 2014 with an overall conservation goal of 25%, consisting of a 5% indoor reduction target and 50 to 60% outdoor reduction target.

To achieve its conservation targets, DSRSD's drought response plan included a conceptual program to offer free recycled water to its residential customers in order to conserve potable water supplies and mitigate residents' concerns about maintaining their landscaping. The concept lead to development of the residential recycled water fill station, the first of its kind.

DSRSD's Residential Recycled Water Fill Station:

The residential recycled water fill station is open seven days a week during the summer and four days a week during the winter. Residents are trained prior to using the fill station and must provide information on where and how they propose to use the water. If the recycled water is to be supplied to an irrigation system, the customer must install a backflow prevention device to protect the potable water system from a potential cross-connection. The minimum volume for pick up is one gallon; the maximum is 300 gallons per trip. There is currently no limit to the number of trips per customer per day.

The station is staffed with a mix of DSRSD staff and temporary employees. DSRSD staff worked closely with its local Regional Water Quality Control Board and county health department to permit the fill station. By the end of 2014, DSRSD had distributed over 2.3 million gallons of recycled water via milk jugs, buckets and totes. Attached is a recent presentation from DSRSD and an article from January 2015 *WE&T Magazine* describing the fill station in greater detail.

Potential JPA Residential Recycled Water Fill Station:

The logical question is: could the JPA provide a residential recycled water fill station? The short answer is

"yes." However, there are several important details to be worked out. First, the JPA would need approval from the Los Angeles Regional Water Quality Control Board and Los Angeles County Health Department. Given that a fill station has been permitted elsewhere in California, the process should be straight-forward. Nevertheless, sufficient time would need to be dedicated to address questions and concerns that may arise during the permit review process.

Logistically, it would make the most sense to site the fill station at the Rancho Las Virgenes Composting Facility. The service would be a good compliment to the existing compost give-away. There would be a direct benefit to customers with a gallon-for-gallon savings in potable water, but it would not likely be effective in reducing excess recycled water. To put the quantities in perspective, it would take 1,087 trips of 300 gallons each to give away one acre foot of recycled water. However, the fill station would likely improve customer perceptions of recycled water, which could provide an intangible benefit should the JPA consider future opportunities for potable reuse.

Additional staffing would be necessary to operate and manage the fill station. Also, there would be a modest cost to construct the facility. Forms, procedures and rules for use of the fill station could easily be replicated for JPA use from samples provided by DSRSD.

If the Board would like to pursue the residential recycled water fill station, the next steps would be to meet with representatives of the Los Angeles Regional Water Quality Control Board and Los Angeles County Health Department and to put together a detailed operations plan for the facility.

**GOALS:**

Lead in Sanitation and Recycled Water Services Focusing on Maximum Reuse

Prepared By: David R. Lippman, Director of Facilities and Operations

**ATTACHMENTS:**

DSRSD Presentation

WE&T Magazine Article

# FILL'ER UP | DROUGHT RELIEF

## through Recycled Water Fill Stations

Dublin San Ramon Services District

*Water, wastewater, recycled water*

**WateReuse** *CA Annual Conference*
*Los Angeles, CA*

*March 15-17, 2015*

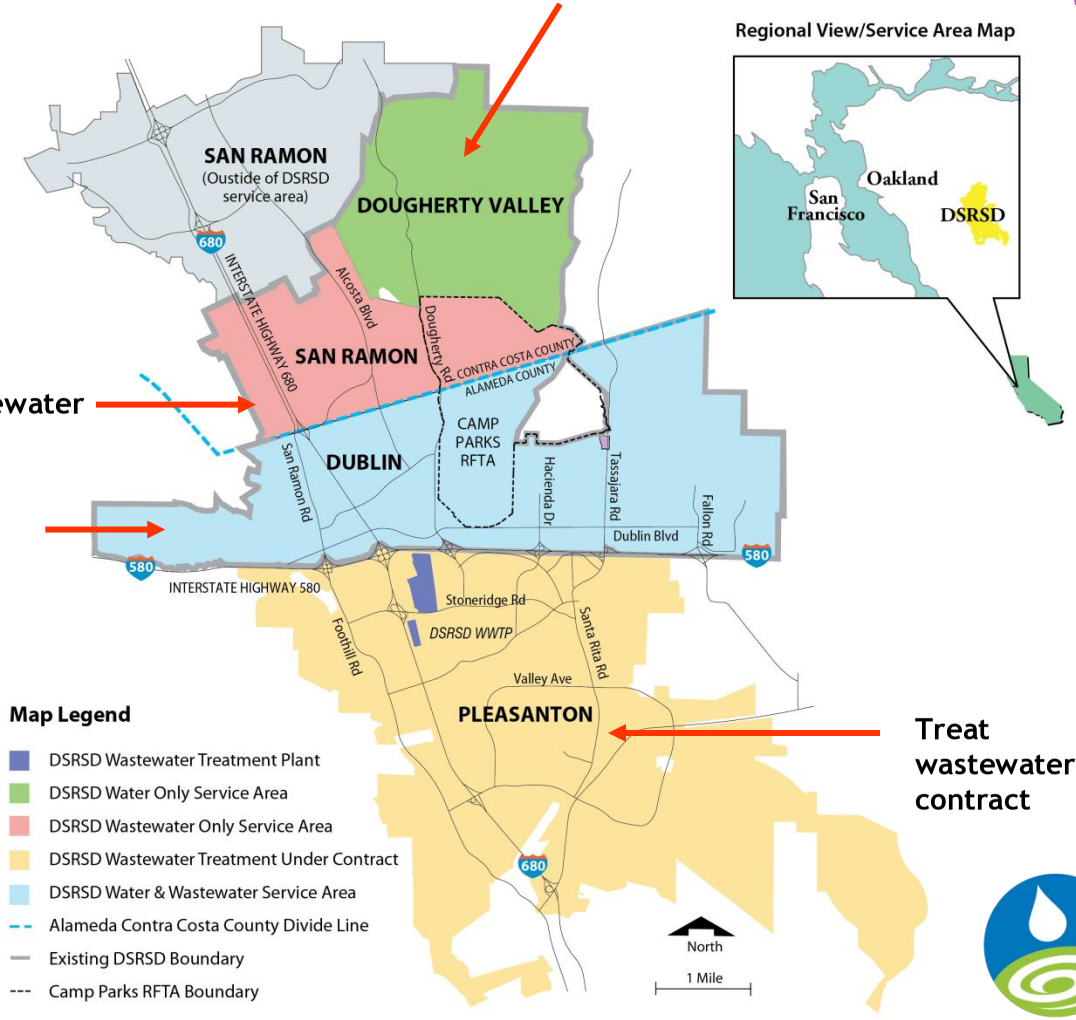
ITEM 6

# About DSRSD

Distribute potable and recycled water

Collect and treat wastewater

Distribute potable and recycled water; collect and treat wastewater

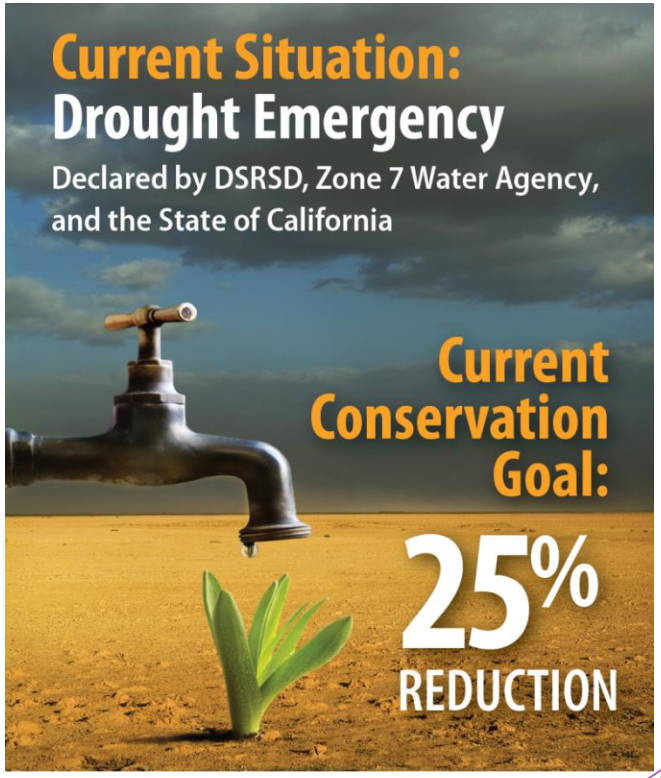



Treat wastewater by contract

Dublin San Ramon Services District
*Water, wastewater, recycled water*

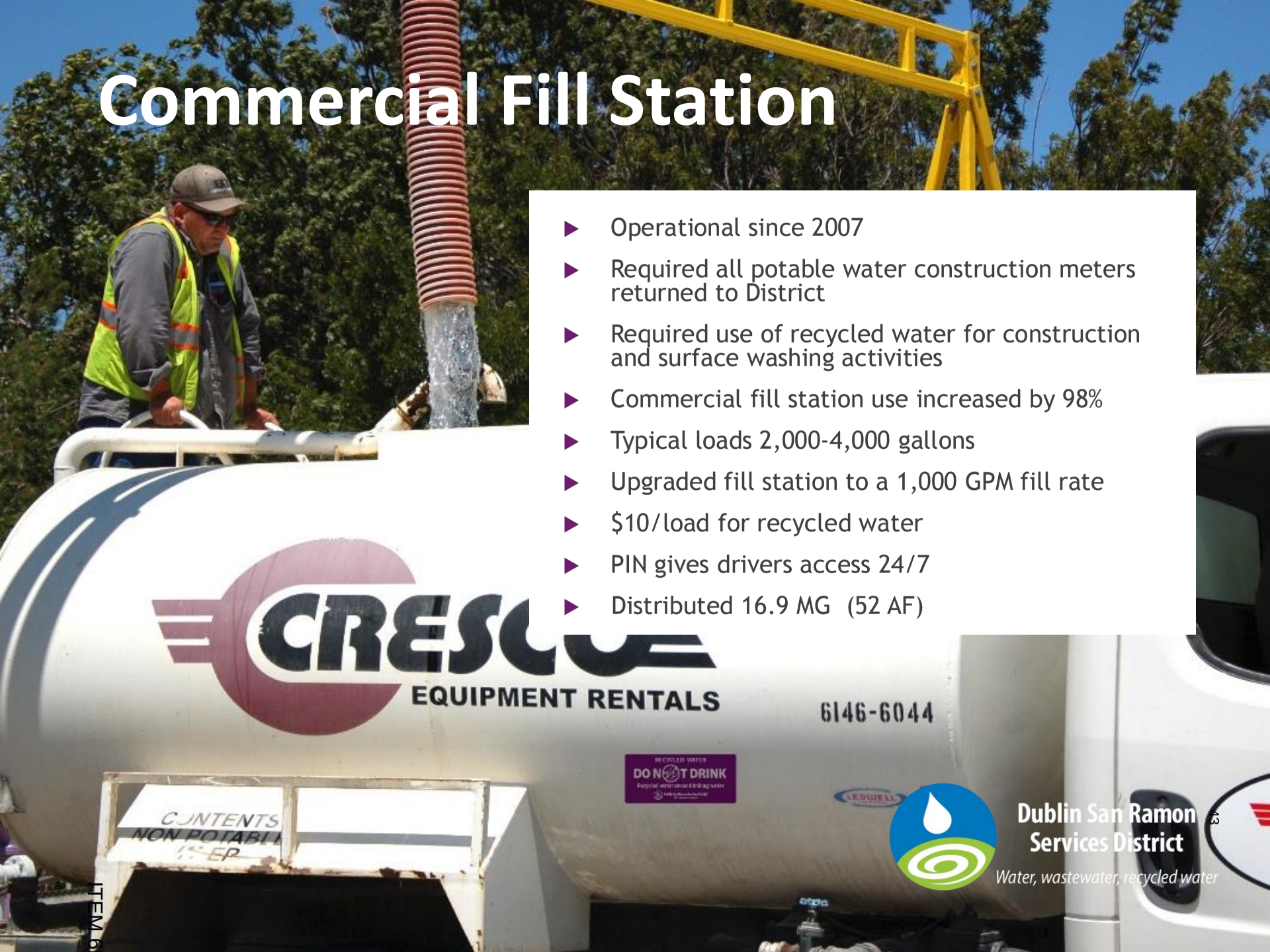
# Potable Water Restrictions

- DSRSD declared a Community Drought Emergency May 5, 2014
- Overall conservation goal of 25%
  - 5% inside
  - 50-60% outside
- Use of potable water:
  - Prohibited for construction purposes
  - Limited for irrigation purposes




Dublin San Ramon Services District
Water, wastewater, recycled water

# Commercial Fill Station




- Operational since 2007
- Required all potable water construction meters returned to District
- Required use of recycled water for construction and surface washing activities
- Commercial fill station use increased by 98%
- Typical loads 2,000-4,000 gallons
- Upgraded fill station to a 1,000 GPM fill rate
- $10/load for recycled water
- PIN gives drivers access 24/7
- Distributed 16.9 MG (52 AF)

Dublin San Ramon Services District
*Water, wastewater, recycled water*

# Residential Recycled Water Fill Station


- DSRSD's Drought Response Action Plan included conceptual program offering free recycled water to residents:
  - To conserve potable water; and
  - Mitigate residents concerns about maintaining landscaping over the summer
- Program hurdles:
  - Regulatory approval
  - Public acceptance and participation
  - Safeguarding health and safety at the fill station and customers' homes

# Regulatory Approvals

- **State Water Resources Control Board (SWRCB)**
  - User Agreement with instructions http://www.dsrsd.com/home/showdocument?id=929
  - Training program
  - Recycled water stickers for customer's containers
- **Regional Water Quality Control Board**
  - CDPH submittal and approval
  - Allowed under 96-011 General Permit
  - Report requested after the first month


Small container stickers 3.5" X 5"


Large container stickers 4" X 8"

Dublin San Ramon Services District
*Water, wastewater, recycled water*

# Residential Recycled Water Fill Station

- Must receive training prior to the first use
- Must sign user agreement prior to the first use
- Wallet ID card
  - Verifies resident has completed training and user agreement
- OK to make multiple trips in a day

Dublin San Ramon Services District
Water, wastewater, recycled water

# Residential Recycled Water Fill Station

- Recycled water is free
- Fill Station is open to all- not just DSRSD customers
- Minimum 1 gallon and Maximum 300 gallons per trip
- Open only during posted hours
- Attendant checks wallet cards and logs loads

Dublin San Ramon Services District

*Water, wastewater, recycled water*

# Residential Recycled Water Fill Station

- Summer hours: Open 7 days/week
  Monday – Friday 2-7pm
  Thursday, Saturday, Sunday 8am-Noon
- Open throughout winter… closed when it rains
- Winter hours: Open 4 days/week
  Monday, Wednesday, Friday Noon-5pm
  Saturday 8am-noon
- By the end of 2014:
  - DSRSD distributed over 2.30 MG of recycled water to residents via milk jugs, buckets, and totes
  - 495 residential participants

Dublin San Ramon Services District
Water, wastewater, recycled water

# Staffing Considerations

- Hire and train attendants (temporary employees)
- $12/hour pay rate ($15/hour to temp agency)
- Use District staff to man the facility one day per week

Dublin San Ramon Services District
Water, wastewater, recycled water

# Unexpected Benefits of the Residential Fill Station

- Users have become comfortable with recycled water. They love it, they want it, they are no longer afraid of it
- Media loved the program (local, state, national, and even international reporters)
- Users and the media are now better educated about recycled water and its role in creating sustainable communities


**"Recycled Water Keeps this Garden Green" signs given to residential users to post in their yard.**

# What Customers Say

*"Everyone who comes here is pretty happy about it. It's a fantastic program that's for the future. They keep adding stations as it gets more popular - making it as convenient as possible. I love the program. I hope more people do it."*

*"We started with 5 gallon water jugs, moved up to a 55 gallon drum and now we've got the 275 gallon tote. Our yard is really green. We're really glad this program has been offered."*

*"It's an awesome service and everyone is so nice. It does help. More agencies need to do this or it's just water that gets dumped into the Bay."*

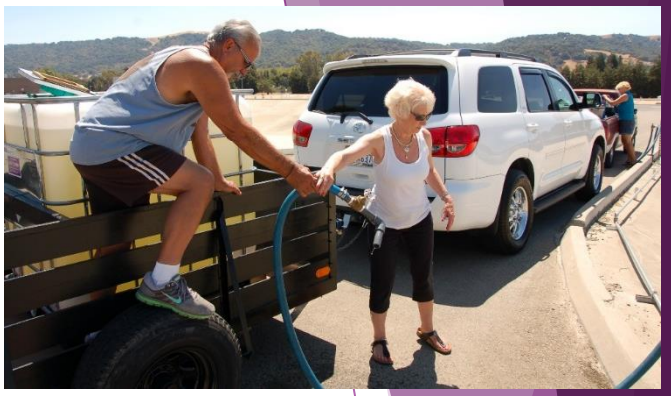
*"When I walk my dog by the creek, you're going to find a lot more bacteria in the creek than in this recycled water."*

Dublin San Ramon Services District

Water, wastewater, recycled water

# Lessons Learned

- Three hose bibs not enough…
  now there are eight
- Provide a mix of “back-in” and “drive through” fill stations for trailers
- Need shut off valves on the end of hoses
- Things break, repairs are common
- Shed is needed for attendant shelter and storage of materials
- Signage is crucial
  - Traffic control is needed when busy
    - Average between 100 – 120 customer trips/day
  - Some people are not good drivers
  - Residents need a clear route through the plant



# The Concept is Already Being Replicated

- City of Livermore
- Central Contra Costa Sanitation District
- Others?

Dublin San Ramon Services District
Water, wastewater, recycled water

# Acknowledgments


**DSRSD Board of Directors:**

- Georgean Vonheeder-Leopold
- Ed Duarte
- Pat Howard
- Richard Halket
- Dawn Benson

**DSRSD Staff:**

- Bert Michaleczk, General Manager
- Dan Gallagher, Operations Manager/Drought Coordinator
- Levi Fuller, Wastewater Treatment Plant Operations Manager
- Dan Lopez, Mechanical Maintenance Supervisor
- Shawn Quinlan, Mechanic II
- Steven Delight, Senior Civil Engineer
- Stefanie Olson, Clean Water Programs Specialist
- Florence Khaw, Environmental Compliance Inspector II

**DSRSD Staff (Continued):**

- Sue Stephenson, Community Affairs Supervisor
- Renee Olsen, Community Affairs Specialist II
- Joyce Chang, Graphic Designer
- Lori Martin, Administrative Assistant II
- Louanne Ivy, Administrative Analyst II
- Simone Grashuis, Human Resources Tech
- Ann Cigliuti, Environmental Compliance Inspector II
- Kapil Mohan, Environmental Compliance Inspector II

**State Water Resources Control Board, San Francisco District**

- Robert Brownwood, District Engineer/Senior Sanitary Engineer
- Vladimir Rakhamimov, Associate Sanitary Engineer

**San Francisco Bay Area Regional Water Quality Control Board:**

- Blair Allen, Water Resources Control Engineer

# Questions?

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Dublin San Ramon Services District
Water, wastewater, recycled water

# Sharing the wealth

## A water recycling facility in the California Bay Area gives away water to help mitigate the drought

Desperate times call for desperate measures. But, in the case of the Dublin San Ramon Services District in Dublin, Calif., desperate times – specifically a dire, regional drought – also led to ingenuity and the creation in June of the first recycled water giveaway program of its kind in the U.S.

"It's been a great program and it's taken a bite out of the drought," said Sue Stephenson, community affairs supervisor at the district.

The district has given away more than 7.5 million L (2 million gal) of tertiary effluent to residents at its recycled water filling stations. The water is to help maintain lawns and other nonpotable uses.

Stephenson said it was much easier to make the water free rather than charge a user fee. "It's not worth the bookkeeping and it's better PR value to make it free," she said.

The district also decided to offer the water to everyone who was willing to drive to the Jeffrey G. Hansen Water Recycling Plant. "You don't have to be a residential customer to get the water," Stephenson said.

The district now has a very popular program. It was intended to be temporary, but "I doubt we can stop it because people love it too much," Stephenson said.

### From idea to fruition

Stephenson said the district wanted to start the recycled water giveaway program when it was "obvious the drought was going to hit us hard." She said the California Department of Water Resources told the district it would not receive its water allotment until September, and even then it likely would receive only 5% of the amount it had requested.

A district employee suggested extending

**In June, the Dublin San Ramon Services District introduced the first recycled water giveaway program of its kind in the U.S. Residents and customers can apply for a permit to receive recycled water to use for watering lawns and for other nonpotable uses. Demand for this water was so high that the district had to add attendants to its recycling facility help with the water dispensing and to direct traffic.** Joyce Chang/DSRSD

ITEM 6B

the industrial water recycling program, which has hauled about 53 million L (14 million gal) of water so far this year. The employee suggested offering the water to residential customers. Both the California Department of Public Health and the San Francisco Bay Regional Water Quality Control Board had to grant approval, and the request initially was rejected.

Stephenson said the district went back to the control board and complained that "you can go to any Home Depot or Lowes and get all kinds of nasty, toxic chemicals, and all you get is a sheet of paper declaring what's in it." The district asked if it could give out recycled water but do so with a disclaimer warning residents not to drink the water, she said.

Stephenson said the Department of Public Health reconsidered and granted them the ability to institute the new program after the district wrote and revised disclaimer language.

"Stefanie Olsen, who heads our pollution prevention and water conservation, asked the maintenance guys to put in three hose bibs [at the facility to dispense recycled water]," Stephenson said. "We thought that would be too many. That it might be overkill."

The district soon discovered it was wrong: On day one, 30 people received the 20-minute training session and disclaimer labels about the water. (The disclaimers are applied to the water containers.) The number of water seekers soon multiplied.

**The recycled water is available to both Dublin San Ramon Services District customers and local residents. Sue Stephenson, community affairs supervisor at the District, said most of the customers who access the recycled water are senior citizens and women.** Joyce Chang/DSRSD

"More than 500 people are now permitted to haul recycled water," she said.

And the district added five additional hose bibs to help dispense the water. It also added attendants to help with water dispensing and directing traffic. So many people wanted the recycled water that the district even had to extend the program's hours.

Stephenson said the district created signs that certified users have put on their lawns. "The signs say, 'I'm green because of recycled water,'" she explained.

The district also created a Facebook page where "people are sharing with each other where they got containers, pumps, and indicators," Stephenson said. "It's created a real sense of community."

The best part about the program, Stephenson said, is that if other utilities want to imitate it, it's easily adaptable.

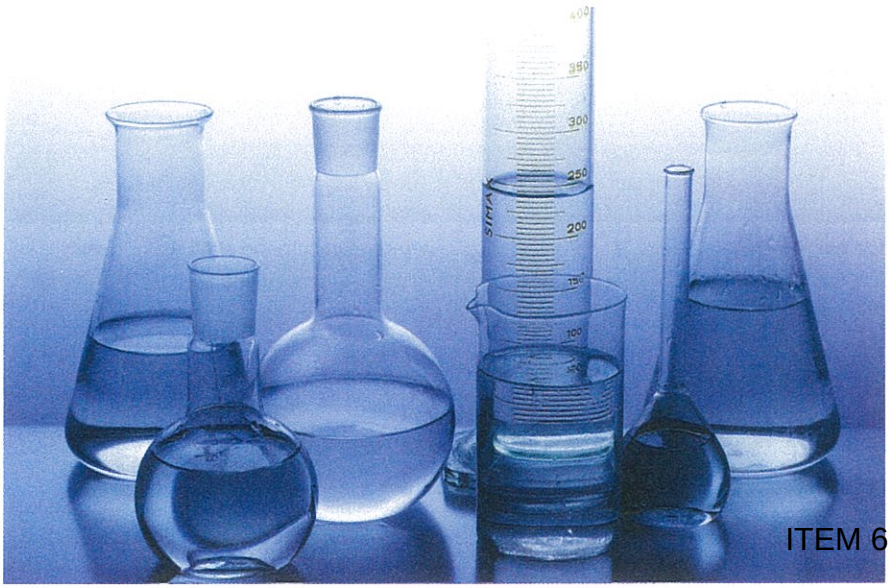
***– LaShell Stratton-Childers,*** *WE&T*

# Beneficial invaders

## Scientists research how bacteriophages can infect filamentous bacteria and aid wastewater treatment

Wastewater treatment practices typically change slowly. But, scientists are making landmark discoveries in this field and exploring ways to enhance wastewater treatment. Ramesh Goel, associate professor of civil and environmental engineering at the University of Utah (Salt Lake City), is one of many scientists who are investigating bacteriophages – viruses that infect and replicate only within bacteria. Specifically, Goel is learning how bacteriophages could be used to control bacteria in wastewater.

Filamentous bacteria can cause such operational problems as bulking and membrane biofouling. They also can threaten aquatic life in receiving streams if they are



ITEM 6B

**INFORMATION ONLY**

**April 6, 2015 JPA Board Meeting**

TO: JPA Board of Directors

FROM: Facilities & Operations

**Subject: Reservoir No. 2 Improvements: Ratification of Change Order No. 1 and Emergency Purchase Order for Silt and Sediment Removal Activities (Pg. )**

The JPA approved funding for this matter in the Fiscal Year 2014-15 JPA Budget. On March 10, 2015, the LVMWD Board, acting as Administering Agent of the JPA, ratified the General Manager's approval of Change Order No. 1 with Zusser Company, Inc., in the deductive amount of $82,346, to remove the silt and sediment removal bid item from the Reservoir No. 2 Improvements Project, and issuance of an emergency purchase order to Toro Enterprises, Inc., in the amount of $70,452.00, to complete the silt and sediment removal work.

**SUMMARY:**

On October 14, 2014, the Board awarded a construction contract to Zusser Company, Inc., in the amount of $815,934.00, for the Reservoir No. 2 Improvements Project. The scope of the project consists of cleaning and removing debris from the reservoir, installing an HDPE geomembrane liner over the reservoir's earthen sides, improving the piping and drainage facilities and performing miscellaneous grading work.

During construction, it became readily apparent that Zusser lacked the capability to perform silt and sediment removal from the bottom of the reservoir within a reasonable amount of time. The absence of sufficiently-sized equipment and adequate manpower resulted in little or no progress for the activity. As a critical path item of work, the delay presented a potential risk of significant fines from the Los Angeles Regional Water Quality Control Board for effluent discharge to Malibu Creek during the creek avoidance period beginning on April 15th.

As a result, staff discussed the concern with Zusser and negotiated a mutually agreeable deductive change order, in the amount of $82,346, to remove the silt and sediment bid item from the contract. However, the task remained a critical path item of work because the HDPE liner could not be installed with the silt and sediment in the reservoir. The need to complete the task and allow for completion of the liner installation prior to April 15th created an emergency due to regulatory requirements.

Toro Enterprises was hired to remove the silt and sediment at a cost of $70,452.00. The work was completed on February 25, 2015, and the liner installation proceeded without further delay.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

Sufficient funding is provided in the adopted Fiscal Year 2014-15 JPA Budget for this work. No additional appropriation is required at this time. The project costs are allocated 70.6% to LVMWD and 29.4% to Triunfo Sanitation District.

Prepared By: David R. Lippman, P.E., Director of Facilities and Operations