



City of Malibu

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March 31, 2010

Ms. Tracy J. Egoscue, Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

RE: Quarterly Progress Report No. 1 (Resolution No. R4-2009-007)

Dear Tracy:

On November 5th, 2009, the California Regional Water Quality Control Board, Los Angeles Region (RWQCB), adopted Resolution No. R4-2009-007. Item 10 of this resolution requires the City of Malibu to submit quarterly reports to the RWQCB. Although the proposed basin plan amendment has not been approved by the State Water Board, the City is sending this quarterly report because we know that you are interested in the project and out of respect for your request for updates. Should the State Water Resources Board approve the proposed prohibition, this letter will serve to comply with the proposed resolution. It should be noted that nothing in this report or its transmittal waives any rights the city has to challenge the legality or appropriateness of the proposed ban and the city expressly reserves all its rights in that regard.

Quarterly progress report no. 1:

History:

- In April of 2005, the City Council adopted the Malibu Civic Center Integrated Water Quality Management Plan (IWQMP) which is aimed at improving the water quality in Malibu Creek, Malibu Lagoon, and Surfrider Beach.
- In March of 2006, the City purchased the Chili Cook-off site for \$25,000,000.
- On November 13, 2006, the City of Malibu awarded a professional engineering contract in the amount of \$1,295,000 to RMC Water and Environment to begin the first phase of the Malibu Civic Center Integrated Water Quality Management Plan project. This plan included providing the preliminary design and environmental documentation (EIR) for stormwater and wastewater improvement solutions in the Civic Center area. The designer utilized over \$350,000 of these funds to provide preliminary engineering design, layout, plant sizing, location, and providing input on plant type. In addition, the designer identified infiltration areas, recycled water potential, determined existing groundwater levels, and much more. Please see the attached graphics.

- On November 20, 2007, the City of Malibu awarded amendment no. 1 to the contract of RMC Water and Environment in an additional amount of \$1,225,310 to further advance the engineering and EIR work for Legacy Park and supporting studies. This included designing an irrigation plan for Legacy Park that would allow for re-use of treated Title 22 effluent for either above or below ground irrigation.
- On July 14, 2008, the City Council awarded a professional engineering contract to Stone Environmental Inc., in the amount of \$320,000 to perform a Cumulative Impacts Hydrology Study for the Civic Center Area (Groundwater mounding and modeling analysis). This study was requested to be performed by the Regional Water Quality Board's Executive Director in an effort to understand the groundwater impacts from existing and proposed development in the Civic Center. Stone Environmental was also the author of the "Risk Assessment of Decentralized Wastewater Treatment Systems in High Priority Areas in the City of Malibu" that was completed in 2004.
- On January 12, 2009, the City of Malibu awarded amendment no. 2 to the contract of RMC Water and Environment in the amount of \$2,647,956. These funds were allocated to provide the final design and supporting EIR for a focused centralized wastewater treatment facility for the civic center area. The design would incorporate determining the latest technology and best use for our topography, climate, uses, etc. This project was eventually placed on hold pending the outcome of the Prohibition Hearing.
- On June 22, 2009, the City of Malibu awarded a professional services contract to the United States Geological Survey (USGS) in the amount of \$283,325 (City portion) to perform a cooperative water resource program. This work involved addressing recurring water quality issues related to nutrients and fecal indicator bacteria (FIB) and was done concurrently with the epidemiological studies of FIB exposure by Southern California Coastal Water Research Project (SCCWRP).
- On July 13, 2009, the City of Malibu awarded Amendment No. 1 to Stone Environmental Inc, in the amount of \$43,382 to enhance the groundwater mounding and modeling analysis with an additional transient model as requested by the RWQCB.
- On September 8, 2009, the City Council amended the USGS contract for an additional amount of \$120,000 to include additional Radon-222 and groundwater quality data collection and DC resistivity testing. The additional data collection and Radon-222 testing will help assess any impact of septic systems for near shore properties and will assist in determining groundwater infiltration capacities.
- On November 23, 2009, City Council gave direction to continue to move forward with the RMC contract and the final design and EIR documentation for a centralized wastewater facility that would facilitate a community based solution as outlined by the City at the RWQCB Hearing of November 5, 2009.

Discussion:

As can be seen, the City of Malibu is making steady progress to design a centralized wastewater treatment facility for the City's civic center area. The City has committed large sums of public money to purchase land, perform engineering studies, and to prepare environmental documentation. In 2007, the City hired RMC Water and Environment to lead the design and environmental documentation phases for both the stormwater and wastewater portions of our Civic Center Integrated Water Quality Management Plan. The engineering team finished the Legacy Park design and EIR in 2009 and incorporated the ability for the park to utilize recycled Title 22 effluent for irrigation when it becomes available. Legacy Park is under construction and will be completed in the fall of 2010.

In 2007 and 2008, the City met with our Technical Advisory Committee (TAC) on several occasions and presented information regarding possible sewer layouts for gravity flow, pressure flow and hybrid systems. It should be noted that State Water Board and Regional Water Board members have served on the TAC. Our consultant presented both pros and cons for each system. In addition, RMC presented information on their research for recycled water users and their potential demands/usage. Attached you will find some of the exhibits that were presented to the TAC. At this point in time, the designer has anticipated that a MBR treatment/reclamation plant would be constructed. It can be built in a modular fashion when additional capacity is necessary.

The City estimates it has already completed 25% of the master facilities planning which was scheduled to be completed by May 1, 2010 per the Resolution. In addition, the City has undertaken a strong public participation program over the last few years. Overall the City has:

- 1) Initiated several surface and below ground studies to determine source and location of potential pollution inputs.
- 2) Initiated detailed hydrogeology/hydrology studies, groundwater mounding studies, topographical surveys, and DC resistivity testing to determine such items as infiltration rates, bedrock levels, mounding areas, flow patterns, and potential pollutant impacts.
- 3) Began in depth studies of groundwater infiltration areas, recycling capabilities and reuse potential.
- 4) Researched water usage records and provided estimates of current and ultimate build out requirements.
- 5) Began outreach to property owners to identify potential willing sellers of land for placement of facility.
- 6) Prepared preliminary layouts of pipes, pumps, and treatment methods.
- 7) Conducted field trips for staff, council and engineering team to review and tour the latest wastewater technologies. This includes field trips to Adelanto, CA and Fontana, CA.

- 8) Worked with commercial and residential property owners as part of a City Managers' Stakeholders Group with over 35 members. Have conducted biweekly and monthly meetings over the last 6 months.
- 9) Have made multiple presentations to HOA's, TAC group, environmental organizations, watershed organizations, COG, and business owners.
- 10) Performed outreach to the entire community through City website, TV channel, and newsletter.
- 11) Have met with local and State government members to provide updates on progress.
- 12) Identified a potential treatment facility site in the Winter Canyon area and met with the property owner who is a willing seller.
- 13) Initiated our application for a State Water Revolving Fund Loan several years ago. City's application has been kept current and is in line for funding at such time the assessment district is formed.
- 14) Identified preliminary cost estimates to construct facility.
- 15) Discussed timing of the phases with the residents and commercial owners. Commercial owners within Phase I appear to be fully supportive.
- 16) Initiated a new ordinance that will require disinfection of all property owners within the residential Colony area and the commercial restaurant areas from Malibu Creek to our eastern city boundary. Anticipated that the ordinance will be adopted this year and full compliance by 2019.

The City is moving forward with a centralized wastewater management plan for the Civic Center area (see attached map). Although the City plan does not currently match the proposed prohibition area, the City has targeted the users with the highest potential impacts to groundwater and has developed a plan that has widespread support from commercial and residential property owners and Heal the Bay. The City's dispersal plan is supported by the recent and relevant science and we hope that it will be embraced by the community and environmental groups. The plan affords the City with the most likely chance for successful formation of an assessment district. We believe we have a willing land owner where the placement of the treatment plant will take place and we are working toward acquiring necessary State Revolving Fund Loan funds. It should be noted that the City's plan does not take into account the vast areas that have been identified by the RWQCB. This is due to several scientific and environmental concerns. As an example, our engineer has estimated that upon build out of the prohibition area, up to 600,000 gpd of wastewater treatment will be needed. In order to discharge this amount of effluent, an ocean outfall will be required. In lieu of an ocean outfall, other alternatives could be considered such as deep well injections or pipeline construction to Hyperion Wastewater Treatment Facility. All of these alternatives are going to be met with staunch environmental opposition and also will be financially infeasible for the property owners to bear. In addition, in order to fully complete an EIR based upon the RWQCB prohibition plan, groundwater studies, surveying, hydrology studies, soils, utilities, cultural resources, biological studies and more would need to be initiated for areas that have not

been included in any of the previous years of work that has taken place. This will require significant new resources and will not allow for the completion of any of the work within the timelines identified by the RWQCB.

I trust this Progress Report No. 1 is fully sufficient in accordance with the resolution.

Sincerely,

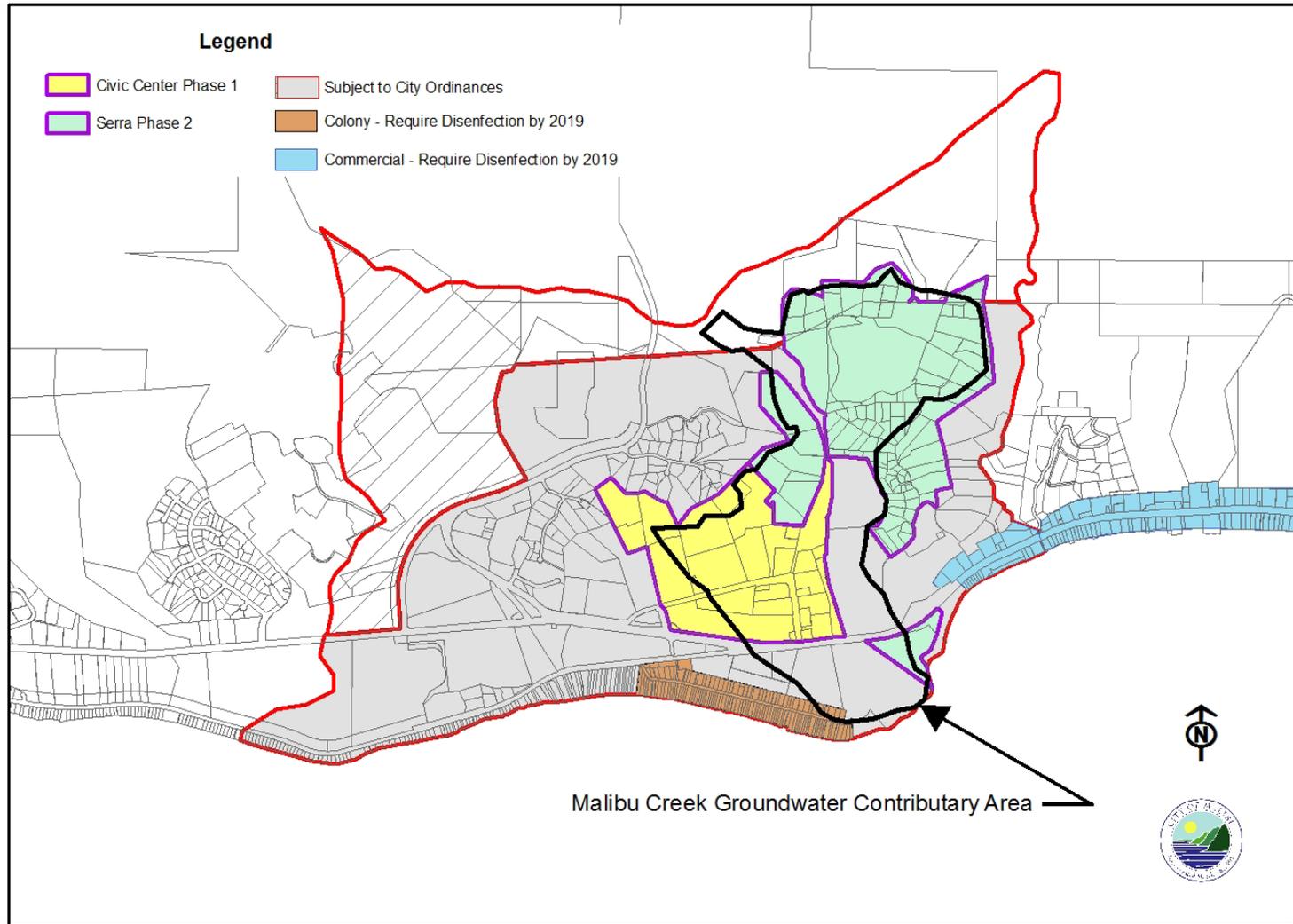


Jim Thorsen
City Manager

Enclosures

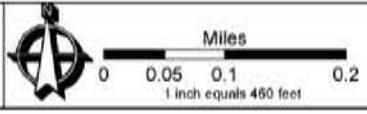
cc: Mayor Barovsky and Honorable Members of the Malibu City Council
Christi Hogin, City Attorney
Vic Peterson, Environmental and Community Development Director

**City of Malibu
Civic Center Wastewater Treatment Plan
(Treatment and Ordinance Areas)**



2/26/10

Alternative	Pros	Cons
Gravity	<ul style="list-style-type: none"> Eliminates grinder pumps for majority of Malibu Colony users 	<ul style="list-style-type: none"> Some properties will need grinder pumps Total of 4 Pump Stations required, including 2 in Malibu Colony
Pressure	<ul style="list-style-type: none"> Every customer must pump to system No Pump Station for Malibu Colony 	<ul style="list-style-type: none"> Every customer must pump to system and be responsible for pump maintenance
Hybrid	<ul style="list-style-type: none"> Every customer must pump to system No Pump Station for Malibu Colony 	<ul style="list-style-type: none"> Every customer must pump to system and be responsible for pump maintenance Total of 2 Pump Stations required

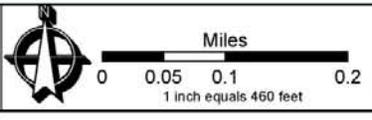
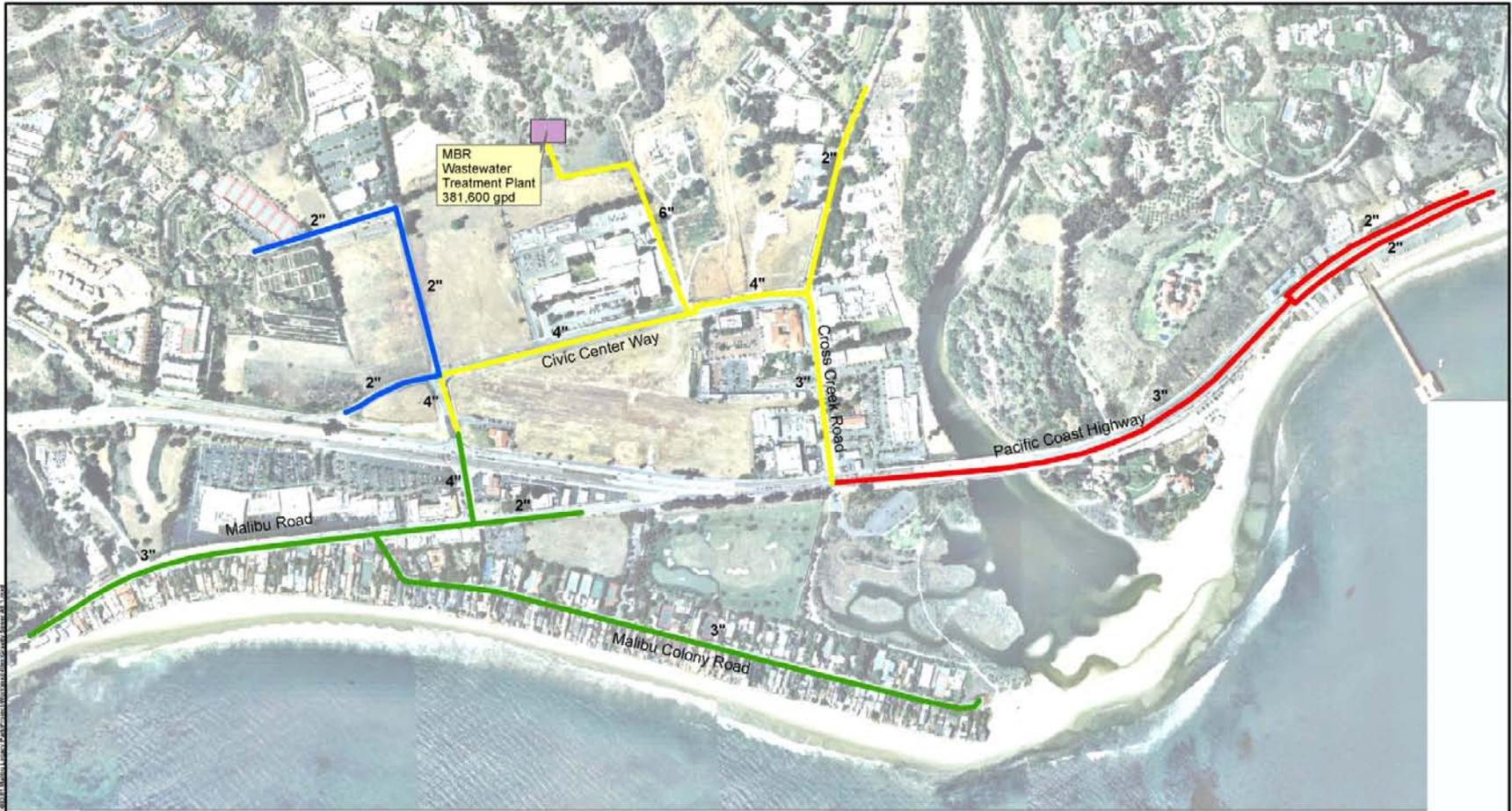


8/30/07
DRAFT
Gravity Sewer
Alternative 1A by Area

Legend		
■	Lift Station	— Area 1 Gravity
●	Manhole	— Area 2 Gravity
—	3" Sewer Diameter	— Area 3 Gravity
—		— Area 4 Gravity
—		— Area 1 Force Main
—		— Area 2 Force Main
—		— Area 3 Force Main



Exhibit 3: Gravity Sewer – Alternative 1A by Area



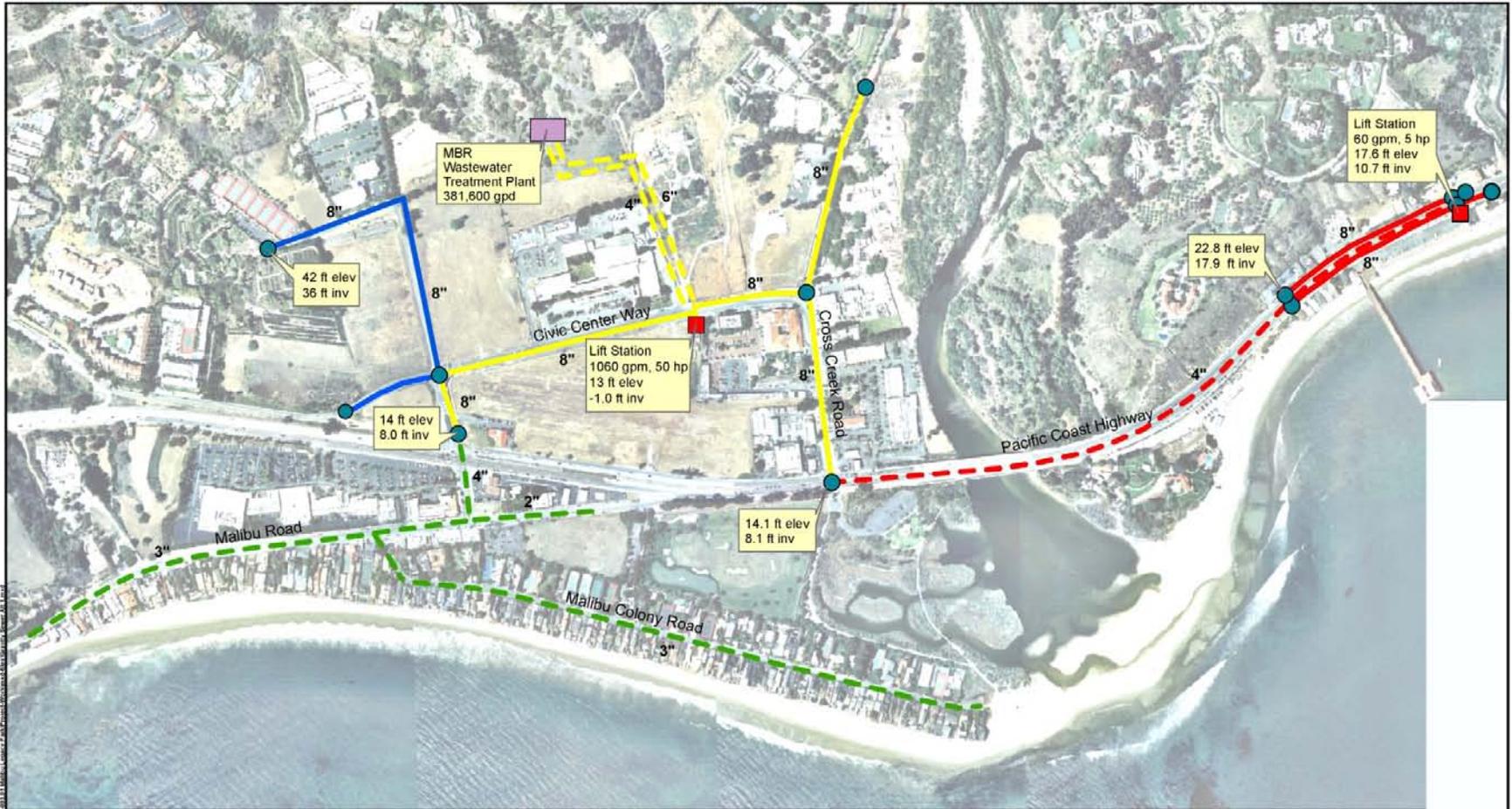
8/30/07
**DRAFT
 Pressure Sewer
 by Area**

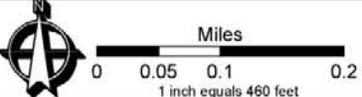
Lift Station	Area 1 Pressure	Area 3 Pressure
Manhole	Area 2 Pressure	Area 4 Pressure
3" Sewer Diameter		

RMC
Water and Environment

SOURCE: City of Malibu (2007), Quetta Engineering (2007).

Exhibit 4: Pressure Sewer by Area



 <p>MALIBU LEGACY PARK PROJECT FULFILL A DREAM. LEAVE A LEGACY.</p>	 <p>Miles 0 0.05 0.1 0.2 1 inch equals 460 feet</p>	<p>8/30/07</p> <h3>DRAFT Hybrid Sewer by Area</h3>	<p>Legend</p> <ul style="list-style-type: none"> ■ Lift Station ● Manhole — Area 1 Gravity - - - Area 3 Gravity — Area 4 Gravity — Area 1 Force Main - - - Area 2 Pressure Sewer - - - Area 3 Force Main <p>3" Sewer Diameter</p>	 <p>RMC Water and Environment</p>
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SOURCE: City of Malibu (2007), Quark Engineering (2007).

Exhibit 5: Hybrid Sewer by Area

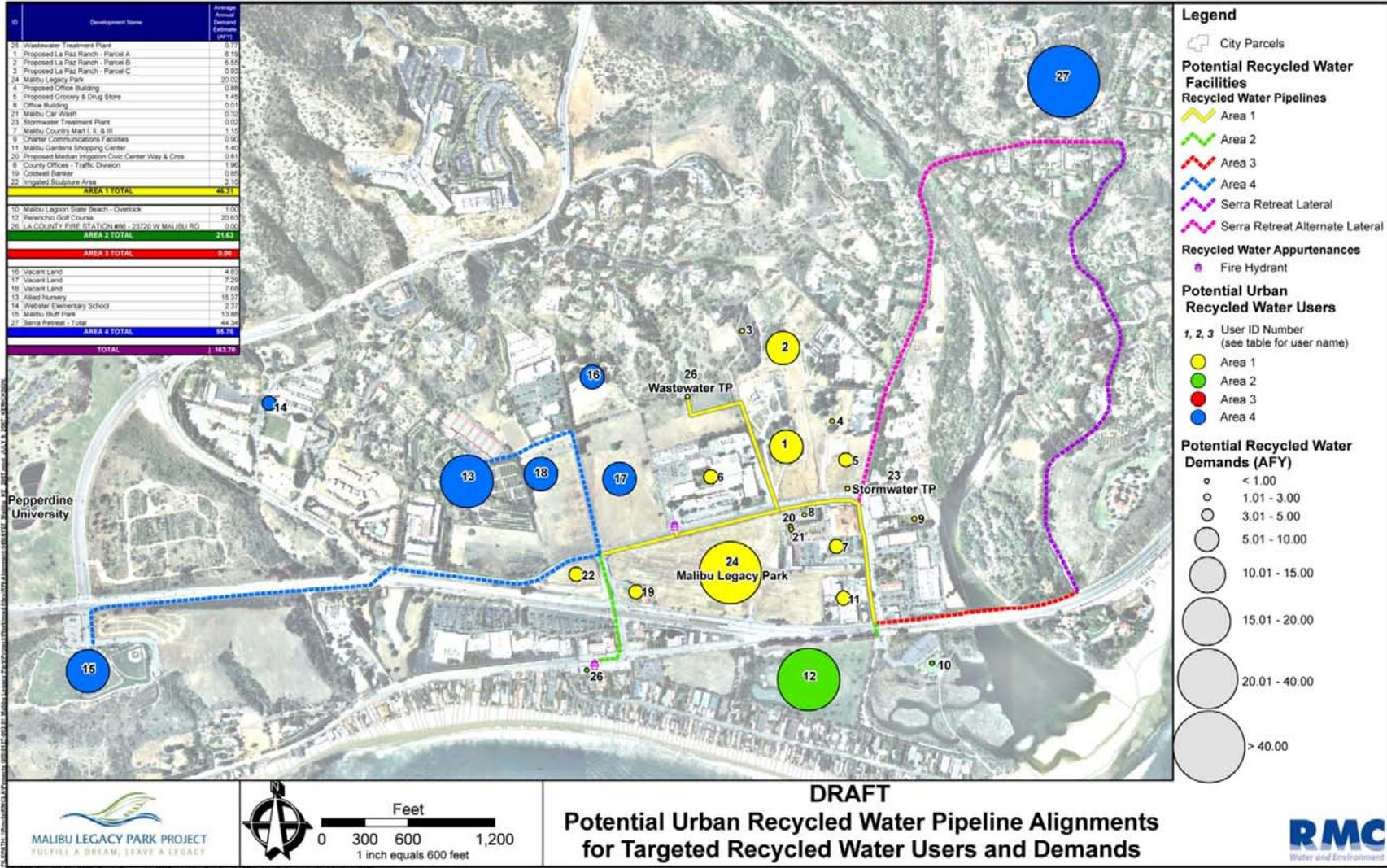
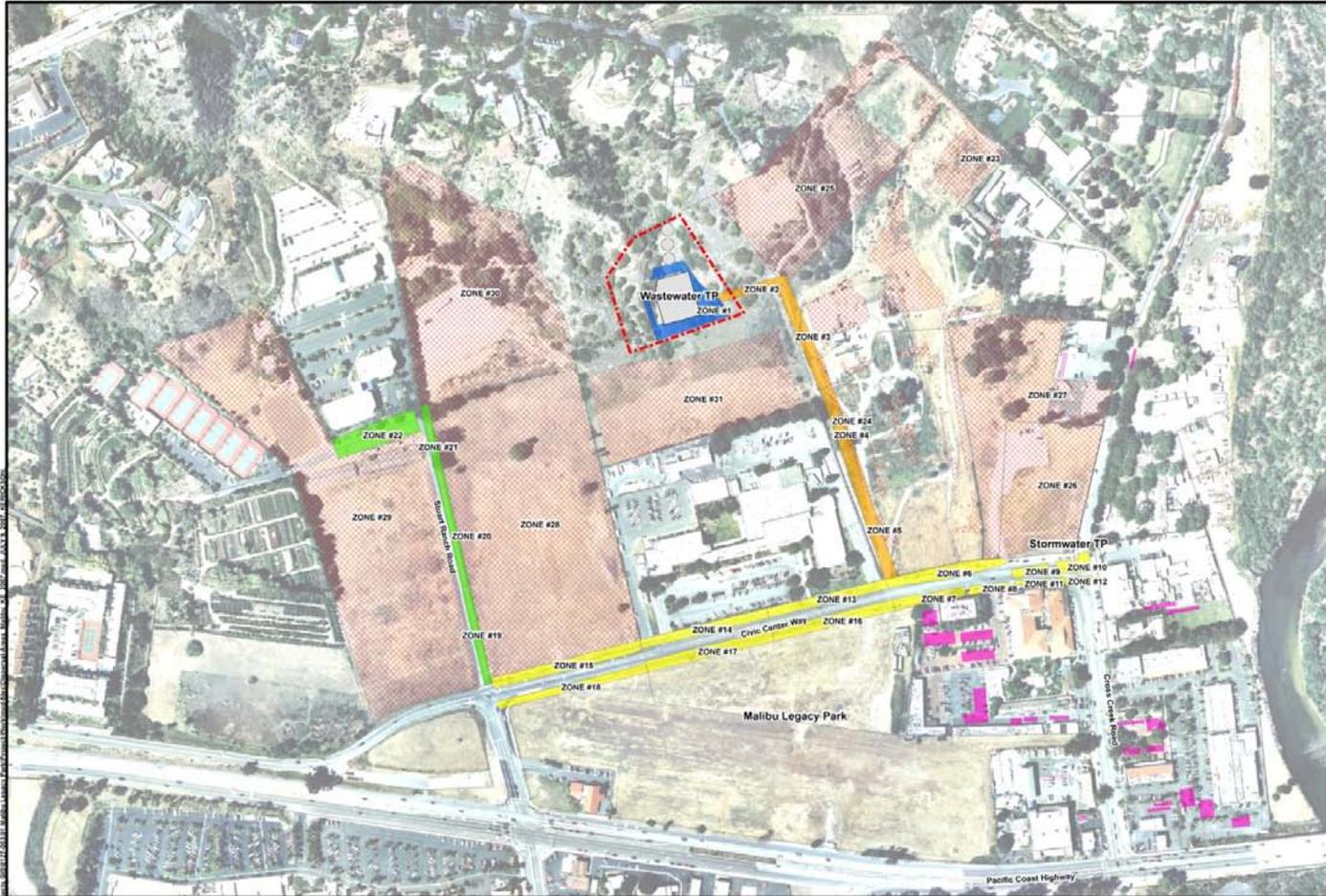


Exhibit 6: Potential Urban Recycled Water Pipeline Alignments for Targeted Recycled Water Users and Demands



Legend

- City Parcels
- Wastewater Treatment Plant**
- Potential Treatment Plant Area
- Treatment Plant
- Treatment Plant Storage Tanks
- Potential New Dispersal Areas**
- Existing Commercial Leach Fields
- Dispersal at WWTP Site
- Dispersal along Wave Property Access Road
- Dispersal along Civic Center Way Right-of-Way
- Dispersal along Stuart Ranch Road Right-of-Way
- Dispersal at Areas with Pending Applications *

Notes:
 Potential new dispersal area locations are approximate.
 * Dispersal at areas with pending applications assumes approximately 25% of total parcel area will be available for dispersal. Exact locations of potential dispersal areas are not known at this time, as such, the entire parcel is shaded. The La Paz Avenue Development (SITE ID 17) has existing plans for dispersal areas. These potential dispersal areas are shown.



**DRAFT
 Potential Dispersal Areas
 for Wastewater Flows**



Exhibit 7: Potential Dispersal Areas for Wastewater Flows

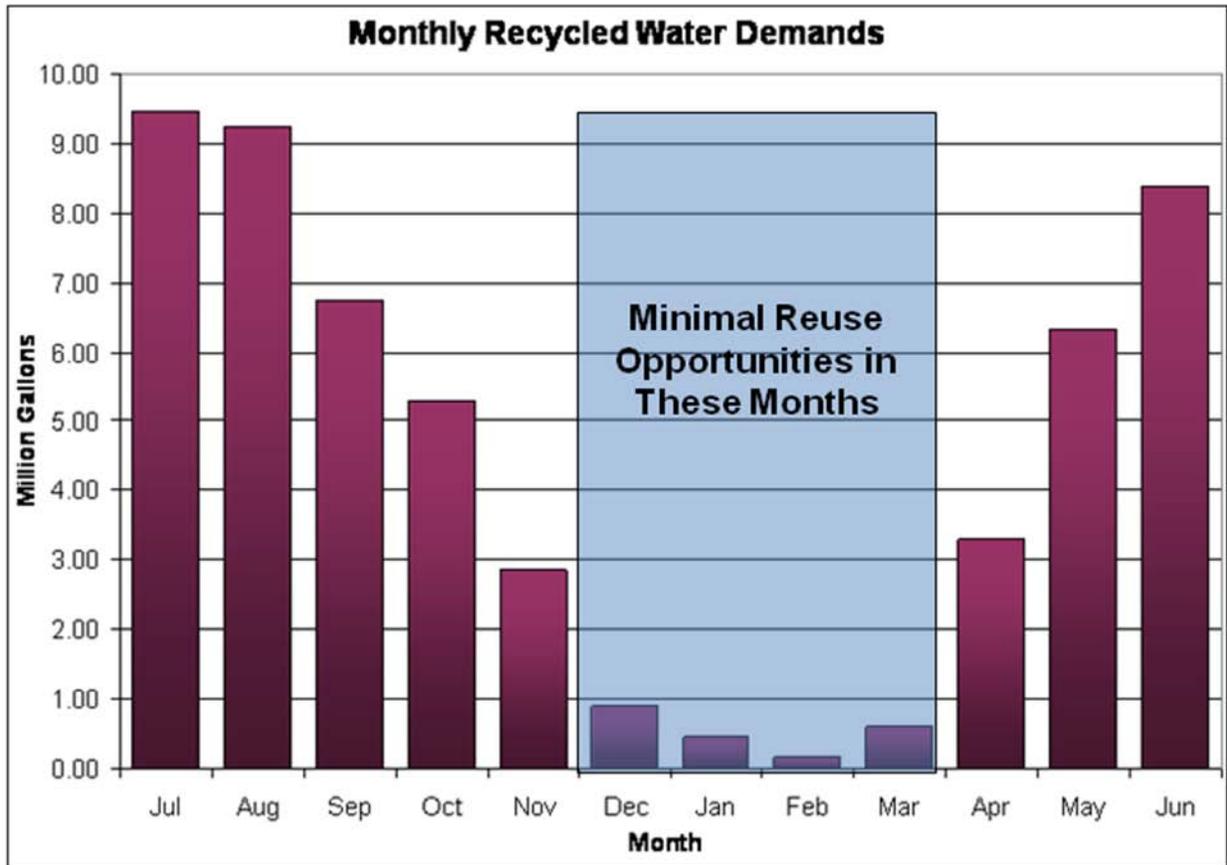


Exhibit 8: Monthly Recycled Water Demands