

# City of Morro Bay

## City Council Agenda

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### *Mission Statement*

*The City of Morro Bay is dedicated to the preservation and enhancement of the quality of life. The City shall be committed to this purpose and will provide a level of municipal service and safety consistent with and responsive to the needs of the public.*

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**REGULAR MEETING  
WEDNESDAY, NOVEMBER 12, 2014  
VETERANS MEMORIAL HALL - 6:00 P.M.  
209 SURF ST., MORRO BAY, CA**

ESTABLISH QUORUM AND CALL TO ORDER

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CLOSED SESSION REPORT

MAYOR & COUNCILMEMBERS' REPORTS, ANNOUNCEMENTS & PRESENTATIONS

PUBLIC PRESENTATIONS

- Update on the Progress of the LEAP Program

PUBLIC COMMENT - Members of the audience wishing to address the Council on City business matters not on the agenda may do so at this time. For those desiring to speak on items on the agenda, but unable to stay for the item, may also address the Council at this time.

To increase the effectiveness of the Public Comment Period, the following rules shall be followed:

- When recognized by the Mayor, please come forward to the podium and state your name and address for the record. Comments are to be limited to three minutes.
- All remarks shall be addressed to Council, as a whole, and not to any individual member thereof.
- The Council respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the City Council to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.
- Your participation in City Council meetings is welcome and your courtesy will be appreciated.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk, (805) 772-6205. Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

A. CONSENT AGENDA

Unless an item is pulled for separate action by the City Council, the following actions are approved without discussion.

A-1 APPROVAL OF MINUTES FOR THE SPECIAL CLOSED SESSION CITY COUNCIL MEETING HELD ON OCTOBER 28, 2014; (ADMINISTRATION)

**RECOMMENDATION: Approve as submitted.**

A-2 APPROVAL OF MINUTES FOR THE CITY COUNCIL MEETING HELD ON OCTOBER 28, 2014; (ADMINISTRATION)

**RECOMMENDATION: Approve as submitted.**

A-3 STATUS REPORT OF A MAJOR MAINTENANCE & REPAIR PLAN (MMRP) FOR THE EXISTING WASTEWATER TREATMENT PLANT; (PUBLIC SERVICES)

**RECOMMENDATION: Receive and file.**

A-4 AWARD OF MORRO BAY TRANSIT AND TROLLEY OPERATIONS AND MANAGEMENT REQUEST FOR PROPOSALS NO. MB 14-T1 TO MV TRANSPORTATION; (PUBLIC SERVICES)

**RECOMMENDATION: Consider the proposal received and award Request for Proposals (RFP) No. MB 14-T1 to MV Transportation (MV) for the operation and management of Morro Bay Transit (fixed route and Call-A-Ride) (MBT) and trolley services for the period ending 2019.**

A-5 ADOPTION OF RESOLUTION 75-14 AUTHORIZING ADMINISTRATIVE APPROVAL OF SUBLEASES ON CERTAIN MASTER LEASES AND APPROVAL OF REVISED CONSENT TO SUBLEASE AGREEMENT FORM FOR TIDELANDS TRUST LEASE SITES; (HARBOR)

**RECOMMENDATION: Adopt Resolution 75-14 authorizing the Harbor Director to approve the remaining subleases that currently require Council approval, and approve the revised Consent to Sublease Agreement form, as proposed.**

B. PUBLIC HEARINGS

B-1 APPEALS OF THE PLANNING COMMISSION APPROVAL OF COASTAL DEVELOPMENT PERMIT CP0-417 FOR CONSTRUCTION OF A NEW SINGLE-

FAMILY RESIDENCE WITH AN ATTACHED SECONDARY UNIT AT 505 WALNUT STREET (APPELLANTS: BEATTIE, DEROSA, HELLER) (APPLICANTS: WAMMACK); (PUBLIC SERVICES)

**RECOMMENDATION: Deny all appeals and uphold the Planning Commission approval of Coastal Development Permit CP0-417 for 505 Walnut Street.**

C. UNFINISHED BUSINESS / SECOND READING AND ADOPTION OF ORDINANCES

C-1 REVIEW OF REPORT FOR NEW WATER RECLAMATION FACILITY PROJECT COMPARATIVE SITE ANALYSIS: REGIONAL CMC FACILITY VS RANCHO COLINA BY JOHN F. RICKENBACH CONSULTING AND ADOPT RESOLUTION 77-14 STATING PREFERENCE FOR NEW WRF SITE LOCATION; (PUBLIC SERVICES)

**RECOMMENDATION: Receive report, discuss options and adopt Resolution 77-14 stating a preference for the new WRF site location.**

C-2 ADOPTION OF ORDINANCE NO. 589 ADDING SECTION 5.04.275 TO THE MORRO BAY MUNICIPAL CODE RELATING TO THE TIME LIMITED SUSPENSION AND REFUND OF PENALTIES FOR CERTAIN BUSINESSES THAT PAY BUSINESS LICENSE TAXES DUE AND OWING; (ADMINISTRATION)

**RECOMMENDATION: Adopt Ordinance No. 589 after reading the title only and waiving further reading.**

C-3 ADOPTION OF ORDINANCE NO. 590 ADDING SECTION 5.08.220 TO THE MORRO BAY MUNICIPAL CODE RELATING TO REQUIREMENTS FOR LOW REVENUE BUSINESSES TO OBTAIN BUSINESS LICENSES; (ADMINISTRATION)

**RECOMMENDATION: Adopt Ordinance No. 590 after reading the title only and waiving further reading.**

D. NEW BUSINESS

D-1 INTRODUCTION AND FIRST READING OF ORDINANCE NO. 588 AMENDING SECTION 15.04.150 OF THE MORRO BAY MUNICIPAL CODE RELATING TO COMMERCIAL FISHING VESSEL SLIP QUALIFICATIONS; (HARBOR)

**RECOMMENDATION: Accept public testimony, move to waive reading of Ordinance 588 in its entirety, and introduce for first reading by number and title only, Ordinance 588.**

E. COUNCIL DECLARATION OF FUTURE AGENDA ITEMS

F. ADJOURNMENT

**THIS AGENDA IS SUBJECT TO AMENDMENT UP TO 72 HOURS PRIOR TO THE DATE AND TIME SET FOR THE MEETING. PLEASE REFER TO THE AGENDA POSTED AT CITY HALL FOR ANY REVISIONS OR CALL THE CLERK'S OFFICE AT 772-6205 FOR FURTHER INFORMATION.**

**MATERIALS RELATED TO AN ITEM ON THIS AGENDA SUBMITTED TO THE CITY COUNCIL AFTER DISTRIBUTION OF THE AGENDA PACKET ARE AVAILABLE FOR PUBLIC INSPECTION AT CITY HALL LOCATED AT 595 HARBOR STREET; MORRO BAY LIBRARY LOCATED AT 625 HARBOR STREET; AND MILL'S COPY CENTER LOCATED AT 495 MORRO BAY BOULEVARD DURING NORMAL BUSINESS HOURS.**

**IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN A CITY MEETING, PLEASE CONTACT THE CITY CLERK'S OFFICE AT LEAST 24 HOURS PRIOR TO THE MEETING TO INSURE THAT REASONABLE ARRANGEMENTS CAN BE MADE TO PROVIDE ACCESSIBILITY TO THE MEETING.**

AGENDA NO: A-1

MEETING DATE: 11/12/2014

MINUTES – MORRO BAY CITY COUNCIL  
SPECIAL CLOSED SESSION MEETING –  
OCTOBER 28, 2014  
CITY HALL CONFERENCE ROOM – 5:00 P.M.

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	David Buckingham	City Manager
	John Fox	Assistant City Attorney
	Eric Endersby	Harbor Director
	Rob Livick	Public Services Director
	Scot Graham	Planning Manager

ESTABLISH QUORUM AND CALL TO ORDER

Mayor Irons called the meeting to order at 5:00pm.

SUMMARY OF CLOSED SESSION ITEMS - The Mayor read a summary of Closed Session items.

CLOSED SESSION PUBLIC COMMENTS - Mayor Irons opened the meeting for public comments for items only on the agenda.

Michele Arwte, owner of 351 and 361 Vashon spoke documenting both Planning Commission and City Council discussions and actions regarding 3390 Main Street. Speaking on behalf of 200 appeal signatures, she hopes that the City's previous actions would be upheld.

The public comment period was closed.

The City Council moved to Closed Session and heard the following items:

**CS-1 CONFERENCE WITH LEGAL COUNSEL - PENDING LITIGATION:  
PURSUANT TO GOVERNMENT CODE 54956.9(d)(1)**

Medina v City of Morro Bay, San Luis Obispo Superior Court Case #14CV0214

**CS-2 GOVERNMENT CODE SECTION 54956.8 - CONFERENCE WITH REAL  
PROPERTY NEGOTIATOR:**

- Property: Lease Site 129W-131W, Morro Bay Fish Company, 1231 Embarcadero  
Agency Negotiators: Joseph W. Pannone, City Attorney and Eric Endersby,  
Harbor Director  
Under Negotiation: Price and Terms of Payment

CITY COUNCIL RECONVENED TO OPEN SESSION

The Assistant City Attorney reported that with regards to the Closed Session Items, the Council did not take any reportable action pursuant to the Brown Act.

ADJOURNMENT

The meeting adjourned at 5:45p.m.

Recorded by:

Jamie Boucher  
City Clerk

MINUTES - MORRO BAY CITY COUNCIL  
REGULAR MEETING – OCTOBER 28, 2014  
VETERAN’S MEMORIAL HALL – 6:00P.M.

AGENDA NO: A-2  
MEETING DATE: 11/12/2014

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	David Buckingham	City Manager
	John Fox	Assistant City Attorney
	Jamie Boucher	City Clerk
	Rob Livick	Public Services Director
	Joe Woods	Recreation & Parks Director
	Eric Endersby	Harbor Director
	Amy Christey	Police Chief
	Steve Knuckles	Fire Chief
	Susan Slayton	Administrative Services Director

ESTABLISH QUORUM AND CALL TO ORDER – the meeting was called to order at 6:00pm.  
MOMENT OF SILENCE  
PLEDGE OF ALLEGIANCE

CLOSED SESSION REPORT

Mayor Irons reported that with regards to the Closed Session Items, the Council did not take any reportable action pursuant to the Brown Act.

MAYOR AND COUNCILMEMBERS’ REPORTS, ANNOUNCEMENTS & PRESENTATIONS

PUBLIC PRESENTATIONS - None

PUBLIC COMMENT

Chris Jewel, owns Reclaimed Antique Woodwork, located at 1612 Main Street in the pink art deco building. He specializes in architectural antiques; he repurposes them into other things. He’s enjoyed this new line of work and hopes people will come in to take a look.

Betty Winholtz spoke on Item C-1 – the MAS Compliance Audit Program stating that she wrote the Council asking for a reevaluation and is glad to hear that the City Manager has listened and it will be coming forward.

Richard Sadowski announced a family friendly Halloween event being held this Friday at Shoreline Church, located at the old Morro Elementary called Light Night Halloween. Everybody is invited to this family friendly, safe alternative event.

Susan Stewart encouraged people to attend the Pastel Exhibit at the Morro Bay Art Center. This is an international show and it's brilliant. It is a free event; the Art Center is open Monday thru Sundays from noon – 4pm. She also encouraged people to join the Art Center, its only \$35/year.

Jenifer Redman thanked the many volunteers and volunteer groups for their involvement with the Annual Morro Bay Avocado Margarita Festival. It was a wonderful event, put on by a strong committee with over 100 volunteers, and was host to local visitors and tourists alike. The event celebrates the world's best Avocado and was a wonderful fundraiser for all who participated. All who came, celebrated, enjoyed and helped raise money for local Morro Bay. Regarding Item C-1, she hopes that the Council will come up with a plan to support Morro Bay businesses with this audit issue and continues to keep Morro Bay a successful City to do business in.

Dawn Beattie is a listener and supporter of 97.3 Community Radio. She encouraged everybody to listen to the station.

Anika Valasquez, a student at Family Partnership Charter School spoke on a "Free the Children Campaign" called "We Scare Hunger". During Halloween, they will show up asking for canned goods that can be donated to this cause. Items can also be donated at the old Morro Elementary Library Room.

Nancy Castle advertised the Eco Rotary Electronic Waste Recycling Fundraiser being held on November 1<sup>st</sup> from 9am-1pm at Coast Electronics. On November 9<sup>th</sup>, the Historical Society Meeting will be held at the Fire Department and will feature our current as well as our 2 most recently retired Fire Chiefs. The meeting will begin at 4:30pm. She also thanked Councilmembers Smukler and Christine Johnson for their work on the EBAC Resource Fair.

The public comment period was closed.

A. CONSENT AGENDA

Unless an item is pulled for separate action by the City Council, the following actions are approved without discussion.

A-1 APPROVAL OF MINUTES FOR THE SPECIAL CITY COUNCIL MEETING HELD ON OCTOBER 14, 2014; (ADMINISTRATION)

**RECOMMENDATION: Approve as submitted.**

A-2 APPROVAL OF MINUTES FOR THE SPECIAL CITY COUNCIL MEETING HELD ON OCTOBER 14, 2014; (ADMINISTRATION)

**RECOMMENDATION: Approve as submitted.**

A-3 APPROVAL OF MINUTES FOR THE CITY COUNCIL MEETING HELD ON OCTOBER 14, 2014; (ADMINISTRATION)

**RECOMMENDATION: Approve as submitted.**

A-4 APPROVE THE USE OF GOVERNMENTAL IMPACT FEES TO REFURBISH THE DEL MAR PARKING LOT AND WALKWAY; (RECREATION & PARKS)

**RECOMMENDATION:** Authorize staff to use Governmental Impact Fees (Parks) to augment funds available in the Park Fee Fund and Tennis Court Project Fund for refurbishing the parking lot and walkway at Del Mar Park.

A-5 APPROVAL OF PROCLAMATION DECLARING NOVEMBER 15, 2014 AS ARBOR DAY; (PUBLIC SERVICES)

**RECOMMENDATION:** Adopt Proclamation.

A-6 APPROVAL OF RESOLUTION 69-14 FOR THE ASSIGNMENT AND ASSUMPTION OF LEASE SITE 68/68W (HARBOR FRONT SUITES, HELD) LOCATED AT 591 EMBARCADERO FROM 591 EMBARCADERO, LLC TO THE VIOLE' FAMILY, LLC; (HARBOR)

**RECOMMENDATION:** Approve Resolution 69-14, for the Assignment and Assumption of Lease Site 68/68W.

A-7 AUTHORIZATION TO SUBMIT CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT APPLICATION; (PUBLIC SERVICES)

**RECOMMENDATION:** Adopt Resolution 70-14 authorizing staff to submit a grant application to the California Department of Transportation (Caltrans) for a Sustainable Communities grant in the amount of \$249,000 for the preparation of the Morro Bay Sustainable Transportation Study and Adaptation Strategies Plan and \$34,000 grant match.

A-8 REVIEW OF THE QUARTERLY FINANCIAL STATUS REPORTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2014; (ADMINISTRATIVE SERVICES)

**RECOMMENDATION:** Receive and file.

A-9 RESOLUTION NO. 72-14 ADOPTING THE MEMORANDUM OF UNDERSTANDING (MOU) WITH THE SERVICE EMPLOYEES INTERNATIONAL UNION (SEIU) LOCAL 620 AND RELATED COMPENSATION; (ADMINISTRATIVE SERVICES)

**RECOMMENDATION:** Adopt Resolution No. 72-14, approving the two-year MOU with the Service Employees International Union (SEIU) Local 620.

A-10 RESOLUTION NO. 71-14 AUTHORIZING THE CITY OF MORRO BAY TO ENTER INTO A 2014/2015 BOATING SAFETY AND ENFORCEMENT EQUIPMENT GRANT CONTRACT WITH THE STATE OF CALIFORNIA DIVISION OF BOATING AND WATERWAYS IN THE AMOUNT OF \$50,000 FOR PURCHASE OF TWO NEW ENGINES FOR HARBOR PATROL VESSEL 68; (HARBOR)

**RECOMMENDATION:** Adopt Resolution No. 71-14 authorizing the Harbor Director to execute and manage the attached Boating Safety and Enforcement (BS&E) Equipment Grant Contract Agreement #C8957115 with the California Division of

**Boating and Waterways (DBW) for \$50,000 for the funding of two new Mercruiser gasoline engine and outdrive packages for twin Harbor Patrol vessel 68.**

A-11 RESOLUTION NO. 73-14 ADOPTING THE MEMORANDUM OF UNDERSTANDING (MOU) WITH THE MORRO BAY FIRE FIGHTERS ASSOCIATION AND RELATED COMPENSATION; (ADMINISTRATIVE SERVICES)

**RECOMMENDATION: Adopt Resolution No. 73-14, approving the two-year MOU with the Morro Bay Fire Fighters Association.**

A-12 AWARD OF CONTRACT FOR PROJECT NO. MB2015-ST – 01 STREET REHABILITATION; (PUBLIC SERVICES)

**RECOMMENDATION: Award contract as recommended.**

A-13 AUTHORIZATION TO REBID CONTRACT FOR THE PROJECT NO. MB-2013-S2: MORRO CREEK MULTI-USE TRAIL AND BRIDGE PROJECT; (PUBLIC SERVICES)

**RECOMMENDATION: Reject all bids and authorize staff rebid the project as soon as possible.**

The public comment period was opened for the Consent Calendar; seeing none, the public comment period was closed.

Mayor Irons pulled Items A-8 and A-13 and Councilmember Nancy Johnson pulled Items A-9 and A-11 from the Consent Calendar.

MOTION: Councilmember Christine Johnson moved the City Council approve Items, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-10 and A-12 from the Consent Calendar as presented. The motion was seconded by Councilmember Smukler and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

A-8 REVIEW OF THE QUARTERLY FINANCIAL STATUS REPORTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2014; (ADMINISTRATIVE SERVICES)

Mayor Irons pulled this item to allow Administrative Services Director Susan Slayton provide a brief oral update.

MOTION: Councilmember Smukler moved to approve Item A-8 of the Consent Calendar as presented. The motion was seconded by Councilmember Christine Johnson and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

A-9 RESOLUTION NO. 72-14 ADOPTING THE MEMORANDUM OF UNDERSTANDING (MOU) WITH THE SERVICE EMPLOYEES INTERNATIONAL UNION (SEIU) LOCAL 620 AND RELATED COMPENSATION; (ADMINISTRATIVE SERVICES)

A-11 RESOLUTION NO. 73-14 ADOPTING THE MEMORANDUM OF UNDERSTANDING (MOU) WITH THE MORRO BAY FIRE FIGHTERS ASSOCIATION AND RELATED COMPENSATION; (ADMINISTRATIVE SERVICES)

Councilmember Nancy Johnson pulled both items feeling it was important to let the public know these two employee groups as well as the other 3 employee groups contracts have been approved and will cost \$413,000 over the next 2 years. She feels staff needs and deserves the money but also feels the public needs to know how much we are spending.

MOTION: Councilmember Nancy Johnson moved to approve Items A-9 and A-11 of the Consent Calendar as presented. The motion was seconded by Councilmember Smukler and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

Councilmember Smukler asked Ms. Slayton to provide a short negotiation history. He also pointed out that we saved money not spending it on an outside negotiation consultant contract.

A-13 AUTHORIZATION TO REBID CONTRACT FOR THE PROJECT NO. MB-2013-S2: MORRO CREEK MULTI-USE TRAIL AND BRIDGE PROJECT; (PUBLIC SERVICES)

Mayor Irons pulled this item to give Public Services Director Rob Livick the opportunity to respond to it. Mr. Livick stated they are look for Council to reject all bids and authorize staff to rebid the project as no bids came in at or under the project budget. There are possible cost savings via the hydro-seeding maintenance, the piles for the bridge foundation system and the pedestrian pathway itself. As an alternative, the Council could authorize the additional funds and direct staff to work with the apparent low bidder to work on a deductive change order to achieve those cost savings. Both options have their risks.

Mayor Irons stated that considering the timeline of getting everything done, it would be prudent to consider a special meeting to consider the award if needed.

MOTION: Mayor Irons moved to approve Item A-13 of the Consent Calendar as presented. The motion was seconded by Councilmember Christine Johnson and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

B. PUBLIC HEARINGS - None

C. UNFINISHED BUSINESS / SECOND READING AND ADOPTION OF ORDINANCES

C-1 DISCUSSION AND DIRECTION ON THE MUNICIPAL AUDIT SERVICES (MAS) BUSINESS LICENSE COMPLIANCE AUDIT PROGRAM; (ADMINISTRATION)

City Manager David Buckingham presented the staff report, providing an update on the City's business license audit and provided recommendations for how to best proceed. Staff is asking Council to pass 2 motions resulting in a change to our current muni code: provide a 90 day amnesty period that forgives penalties for all businesses who obtain a current business license and pay appropriate unpaid taxes; and, establish a gross receipts threshold that all businesses with gross receipts under a certain dollar amount could purchase a business license for a nominal processing tax to be added to the master fee schedule. The effects of these changes would provide that all past due penalties for any business, whether contacted by the City or MAS or has yet to be contacted by either, that obtains a valid business license in the amnesty period, will be forgiven and that a very small business who demonstrates gross receipts under an established threshold would be eligible for a lower annual business license. The audit was conducted to ensure a level playing field for all businesses, to collect lost revenue, and to identify businesses operating without a license. The MAS contract states that MAS has no collection authority; is to identify entities working in Morro Bay without a license; communicates that which is due to the businesses; are paid after taxes/penalties are collected and forwards their collected monies to the City; and, the City conducts an appropriate appeals process. MAS conducts the audit by contacting businesses with existing licenses to ensure they are paying the appropriate level of tax as well as identifying businesses operating in Morro Bay without a license. The current status of the audit is that MAS has made contact with all Morro Bay business license holders with some cases being closed, some have complied and some are in the protest stage. We are in the first year of a 3 year contract. Staff feels that moving forward, we could receive an additional \$200,000 in annual revenues. The appeal process was described as follows: business owners work with MAS and send a protest letter with separate payment for the license and penalties; protests are handled by the City; protest letter should include a detailed explanation for why penalties should be waived; the Morro Bay tax collector will consider each protest, make a determination and send a letter of determination; there is a 15 day appeals period; if appealed, the Council would make a final determination. Staff feels it's important to pass these motions as its apparent that we haven't had an effective audit system in Morro Bay for a long period of time and many businesses are out of compliance; there is also measurable confusion about what businesses require a license; and, finally many very small businesses would suffer undue financial hardship having to pay back taxes at the regular rate. A timeline was proposed: 10/28 – pass both motions; 11/4± hold a special meeting for ordinance introductions; 11/12 – adoption of ordinances; 12/12 – ordinances become effective; 12/13 – City begins refund process to those businesses who have paid penalties; 3/12 – last day of amnesty period; and 3/13 – no business is eligible for the automatic forgiveness.

Mayor Irons recused himself as he is currently in the protest process and is to date, being assessed penalties.

Councilmember Smukler would like to see us extend our communications on the amnesty to Cayucos and Los Osos. He would also like to see a third element to the motions to address revising the code itself so that it was easier to understand.

The public comment period for Item C-1 was opened.

Janice Peters praised the Council for their immediate response to this issue and the concerns of the businesses. She noted that budget restrictions happen, ie: losing our code enforcement officer and then things don't get done. One of the main learning points from this is communication – Council and staff needs to be aware of the potential impact this, or any item, could have on our business community. If you do have a windfall of money, she hopes some of it will be put back into advertising and promotion locally.

Susan Stewart also appreciates the immediate response. She disagrees with the staff report stating that businesses were used to being coddled when this was done in house; she feels no one has ever accused the City of having an easy or friendly business environment. Morro Bay is mostly made up of small family owned businesses that contribute to our community. They provide products and services directly to the public. She appreciates we are working towards more reasonable and comprehensive codes. She still thinks we also need to look at the vendor license requirements for those vendors who come to town only a few times a year.

Kerrigan Mahan apologized for his behavior at the Chamber Business Forum. He still feels we are creating a hostile work environment with this audit. He wondered why we hired MAS as they don't have a good reputation. He went on record that he has dismissed them.

Melanie Williams Mahan also stated that MAS doesn't have a good reputation amongst other cities. MAS hasn't shown them any reasons for needing a business license. They feel harassed. She is disappointed in the way this situation has been handled; we hired first and asked questions later.

Cyndee Edwards, on behalf of Chamber members, recommended the City leadership act swiftly and was pleased that we did so tonight. The manner in which the audit came about and the hiring of a third party collector created anxiety and fear and could have been avoided. Our businesses are the lifeline of the City. She hopes the process is made fair and equitable, that we relieve the business owner of their anxiety and provide clear and concise communication before an audit is set into motion.

Ann Calhoun responded to the \$2500 fee, is it gross or net? She feels it should be cost after materials. Her observation is that this issue isn't ready for "prime-time"; maybe some fine tuning needs to happen first. For example, definitions need to be made clearer. She applauded the Council for acting so quickly.

Mary Van Zee owns Treasures Antique and Mall where she has over 75 vendors in the store and 48 more that do consignment. She feels most won't remain in the store if they have to pay this business license fee. She would also like to see the small business license set based on a net not gross figure.

Jennifer Redman was pleased that both Council and staff have clearly heard the voice of local businesses; she thanked everybody for doing so. She also appreciates the steps being taken. She would like staff to take a look at the \$2500 figure as well as the gross vs net issue. She also hoped that we will continue to work with businesses on the code.

Doug Tobias attended the Chamber's MAS Business Forum. He feels there is a misrepresentation of claim, he stated that no one is required to contract with MAS as a third party intervener; the authority lies with the City and their tax collection.

The public comment period for Item C-1 was closed.

Councilmember Nancy Johnson feels that this item should have initially been pulled and discussed and she apologized that they didn't know at the time what would happen. She agrees that the concept of net vs gross is very important. She asked staff if people can say no to MAS and work directly with the City. Staff confirmed that while it would be preferable to work with MAS; yes, they can work directly with the City.

Councilmember Smukler spoke on the low threshold exemption - gross vs net and hoped we could come up with a motion tonight that takes care of that in a temporary fashion and then look more closely at it when looking to update the entire code. He wishes we had started the whole process with this meeting tonight and apologizes for not having done so.

Councilmember Leage also apologized; he feels that Council let the public down. He/they should have looked into this a little more, no one thought it would have gone this far.

Councilmember Christine Johnson also apologized; the concept looked good on paper and was a need that we had. The silver lining is that we can clean this process up.

MOTION: Councilmember Smukler moved approval of Motion #1 as presented which provides the 90 day amnesty period for businesses. The motion was seconded by Councilmember Christine Johnson and carried 4-0-1 with Mayor Irons having recused himself.

Ayes: C. Johnson, N. Johnson, Leage, Smukler

No's: None

Recused: Irons

Mayor Irons returned to the dais.

MOTION: Councilmember Smukler moved approval of Motion #2 with an adjustment replacing "establish **gross receipts** threshold" with "establish **recommended** threshold". The motion was seconded by Councilmember Nancy Johnson and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

MOTION: Councilmember Smukler moved to direct staff to initiate a code and master fee schedule update for business licenses that includes process, definitions, flat vs gross rates, employees, etc. as well as include a strong stakeholder participation component. The motion was seconded by Councilmember Nancy Johnson and carried unanimously, 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

C-2 PRESENTATION AND REVIEW OF REPORT REGARDING INITIAL FINDINGS ON HYDROLOGIC EVALUATION OF THE POTENTIAL BENEFITS TO THE CITY WATER SUPPLY FROM INCREASING WASTEWATER DISCHARGE TO EITHER

MORRO OR CHORRO CREEK BY CLEATH HARRIS ASSOCIATES; (PUBLIC SERVICES)

Public Services Director Rob Livick introduced John Rickenbach for further comments who framed the Cheath-Harris Geologists technical memoranda in terms of the whole project. The floor was then given to Spenser Harris, of Cleath Harris Geologists for his presentation. Mr. Harris then proceeded to outline his Technical Memoranda regarding City of Morro Bay Water Supply Benefits Analyses in the Morro and Chorro Valleys using a PowerPoint presentation. Mr. Harris first discussed the benefits of adding additional flow to Chorro Creek and the relative benefit to the City's wells in the lower Chorro Valley. Graphics included exhibits that address creek flow and well production, creek correlation graphs, estimates of creek flow and well production with an average of 1.5 million gallons per day of additional treated wastewater discharged to the creek and an estimate of additional well production for both wet and drought years. Mr. Harris then addressed potential benefits in the Morro Valley by making reclaimed water available to agriculture operations to replace that being withdrawn from ground water, i.e. "in-lieu" recharge. Mr. Harris addressed the assumptions in the memo and provided graphics that detailed groundwater elevations, reclaimed water benefits and potential increases in water available for City use. Mr. Harris summed up his presentation with a table that reflected the amount of water that would be available to the City to use through the application of treated wastewater in the Morro and Chorro Valleys. The amount of water available to the City wells in the Chorro Valley ranged from 510 – 900 Acre Feet per year of additional water. While in the Morro Valley the range was 320 – 900 Acre feet per year. The analyses also assumed that discharge in the Chorro Valley included contributions from both the City of Morro Bay and the Cayucos Sanitary District; while the Morro Valley only included the City's reclaimed wastewater. Mr. Harris went on to state there are other factors to consider in both scenarios including: water rights, environmental demand, agricultural water user contracts and basin safe yield.

Council asked if the CSD were included in the Morro scenario would the benefit increase, Mr. Harris stated "by approximately 400 acre feet per year of additional water".

The public comment period for Item C-2 was opened.

Bill Martoney stated that it sounds like most of the year in Chorro Valley, the bulk of the water would be going downstream into the ocean and in the Morro Valley, as far as the farmers, the potential for reusing the recycled water is great. He asked if we have water rights to the Chorro Valley, it's his understanding that we don't. It seems the Morro Valley has the biggest benefit. If we ship this water to the farmers, in turn its water in the Morro Valley that the farmers aren't using, and that is the water that will benefit the City.

Marla Jo Bruton Sadowski would like clarification on where on the County road the water flows into Canet and into the underground aquifer. The CMC plant has a requirement to keep .75 flow in the stream before they can use any reclaimed water. She asked where the County water for Dairy Creek and other uses is coming from when the flow isn't there. She also asked where the JPA stands, do we have a legal JPA contract? It feels Morro Bay is at a disadvantage not knowing that Cayucos is doing and is concerned with our financial welfare.

The public comment period for Item C-2 was closed.

Councilmember Smukler wants to be reassured we receive feedback from the WRFCAC regarding their thoughts on each report we have heard to date as we build towards the decision point.

This report was received and filed.

C-3 DISCUSSION ON ENGAGING MANAGEMENT PARTNERS TO UPDATE THE MAY 2008 ASSESSMENT OF CITY ORGANIZATION AND FINANCIAL OPTIONS; (ADMINISTRATION)

City Manager David Buckingham presented the staff report.

MOTION: Mayor Irons moved to proceed beyond 11:00pm. The motion was seconded by Councilmember Christine Johnson and failed 2-3 with Councilmembers Nancy Johnson, Smukler and Leage voting no.

Ayes: Irons, C. Johnson

No's: N. Johnson, Leage, Smukler

The public comment period for Item C-3 was opened; seeing none, the public comment period was closed.

Mayor Irons stated during the campaign, every candidate remarked on the Management Partners Study and desire to expand and use it as a valuable tool.

MOTION: Mayor Irons moved to take the staff recommendation and move forward and do the update on the Management Partners assessment. The motion was seconded by Councilmember Smukler and carried unanimously 5-0.

Ayes: Irons, C. Johnson, N. Johnson, Leage, Smukler

No's: None

Councilmember Smukler suggested we look at removing/postponing activity #10, wastewater pro formas, for re-evaluation, it may not need to be included.

D. NEW BUSINESS - None

E. COUNCIL DECLARATION OF FUTURE AGENDA ITEMS

Mayor Irons requested a discussion on updating the Council Policies and Procedures in the upcoming year; all Councilmembers concurred.

ADJOURNMENT

The meeting adjourned at 10:55 p.m.

Recorded by:

Jamie Boucher  
City Clerk



**AGENDA NO: A-3**

**MEETING DATE: November 12, 2014**

# Staff Report

**TO: Honorable Mayor and City Council                      DATE: November 4, 2014**

**FROM: Rob Livick, PE/PLS - Public Services Director/City Engineer**

**SUBJECT: Status Report of a Major Maintenance & Repair Plan (MMRP) for the Existing Wastewater Treatment Plant**

## **RECOMMENDATION**

Staff recommends this report be received and filed.

## **ALTERNATIVES**

As no action is requested, there are no recommended alternatives.

## **FISCAL IMPACT**

No fiscal impact at this time as a result of this report. Fiscal impact is addressed through the budget process.

## **BACKGROUND**

This staff report is intended to provide an update on the development of the MMRP for the WWTP. At the February 14, 2013, JPA meeting the Council and District Board approved the development of an MMRP and made the following motion:

- Direct staff to prepare a time sensitive and prioritized MMRP for the WWTP with an anticipated rolling 2 year budget;
- The JPA solicit proposals from a qualified firm, or firms, to provide technical advice and analysis on an as needed basis as determined by Morro Bay's Public Services Director and Cayucos Sanitary District Manager; and
- The Morro Bay Public Services Director and Cayucos Sanitary District Manager report back to the JPA on a semi-annual basis on the progress and costs associated with the MMRP.

Development of an MMRP will assist the City and District in projecting the budgeting of expenditures required to keep the current plant operating in compliance with regulatory requirements.

Staff's focus has continued to be on developing and implementing work on the MMRP projects approved for the FY14/15 budget. The adopted FY14/15 budget contains \$1.221M in funding MMRP projects. The funds represent new MMRP projects as well as roll over from the FY13/14 budget for the headworks screening project and chlorine contact tank repairs. Staff is continuing to

**Prepared by: RL/BK/RS Dept. Review: RL**

**City Manager Review: \_\_\_\_\_**

**City Attorney's Review: \_\_\_\_\_**

develop and refine the implementation schedule for projects funded in the FY 14/15 budget. This staff report includes a status report on the on-going MMRP projects.

## **DISCUSSION**

### **Digester #1 Repair**

Plant staff began the first steps in the process of cleaning digester #1. They discovered that upon opening the digester, the amount of solids and debris within the digester was greater than anticipated. They have coordinated with the digester cleaning company to modify the scope of work to include additional cleaning time as well as dewatering of the solids and debris removed in the cleaning process. Dewatering is required as there is not enough space in the sludge drying beds to accommodate both the material from the digester and the solids generated from normal operations. After the digester is clean and empty, staff in coordination with Mike Nunley and Associates (MKN), will prepare plans and specifications for the sandblasting and coating of the digester. The goal is to have digester #1 back on-line prior to June 2015.

### **Headworks Influent Screening Project**

The headworks influent screening project remains on schedule. The screens and associated equipment have been installed and are now operational. The Vulcan Factory representative was on-site for start-up of the equipment as well as staff training. Raminha Construction, Inc. has substantially completed the installation and is currently working to complete the punch list for any remaining items covered under their contract. The new influent screens have greatly reduced the amount of debris in the downstream plant processes. Plant staff is happy to report the screens are removing approximately two hundred pounds of rags, plastics, and debris on a daily basis.

During the month of October, Speiss Construction completed maintenance and repair activities on the jib crane at the headworks. The repairs included disassembly and inspection of the jib crane and coating of the crane components. In addition, staff from Kones Cranes installed a new hoist system and controls. The jib crane will be used to lift out the washed and compacted screenings from the lower headworks.

### **Chlorine Contact Basin Improvements**

On October 24, plant staff received the required equipment to replace the head and idler shaft assemblies in the south portion of the chlorine contact tank. Staff has made arrangements with a contractor for the installation of the shafts and associated equipment in early November. Plant staff will also be making minor repairs to other equipment within the tank when the tank is off-line. The work will require by-passing the chlorine contact for at most a twenty-four hour period. By-passing of the tank will result in an effluent violation and the associated minimum mandatory penalty of \$3,000. During the time period the tank is off-line, staff will chlorinate and disinfect the effluent, but will not be able to dechlorinate the effluent resulting in the violation. Both staff at the Regional Water Quality Control Board and the California Department of Health Shellfish Division has been notified of our repair plans and the intent to by-pass the chlorine contact tank.

## **CONCLUSION**

Staff will continue to bring a status report on the development of the MMRP at City Council meetings on a monthly basis.



AGENDA NO: A-4

MEETING DATE: November 12, 2014

## Staff Report

**TO:** Honorable Mayor and City Council                      **DATE:** October 23, 2014

**FROM:** Janeen Burlingame, Management Analyst

**SUBJECT:** Award of Morro Bay Transit and Trolley Operations and Management Request for Proposals No. MB 14-T1 to MV Transportation

### **STAFF AND PUBLIC WORKS ADVISORY BOARD (PWAB) RECOMMENDATION**

Staff and the PWAB recommend the City Council consider the proposal received and award Request for Proposals (RFP) No. MB 14-T1 to MV Transportation (MV) for the operation and management of Morro Bay Transit (fixed route and Call-A-Ride) (MBT) and trolley services for the period ending 2019.

### **ALTERNATIVES**

The City could re-advertise the bid in the hopes of getting more bid proposals submitted; however, there are a couple of issues if that were done:

- The City is in the final year of the contract with MV with no further extensions available under the current contract, and a bid process takes upwards of three months to complete which would go into 2015 and beyond the term of the existing contract; and
- For this bid, staff reached out to companies operating in the northern and southern California areas, as well as locally within the County, where there are more providers operating transit services so it is unlikely there would be any new providers who were not aware of the original RFP solicitation who might bid on a re-advertised bid.

### **FISCAL IMPACT**

With contract award to MV, the cost to operate and manage the MBT and trolley services would be an average of 0.9% more than what the City currently pays for the same services (1% increase for MBT and 0.7% for trolley). The monthly management fee and vehicle service hour fee would be as follows for the five year contract term:

Prepared By: JBurlingame

Dept Review: RL

City Manager Review: \_\_\_\_\_

City Attorney Review: \_\_\_\_\_

<b>Morro Bay Transit</b>	<b>Current Rate</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Monthly management fee	\$ 4,668.00	\$ 4,741.00	\$ 4,820.00	\$ 4,891.00	\$ 4,965.00	\$ 5,010.00
Vehicle service hour fee	\$ 21.84	\$ 21.96	\$ 22.29	\$ 22.75	\$ 23.21	\$ 23.67
Annual management fee	\$ 56,016	\$ 56,892	\$ 57,840	\$ 58,692	\$ 59,580	\$ 60,120
Annual VSH	\$ 78,624	\$ 79,056	\$ 80,244	\$ 81,900	\$ 83,556	\$ 85,212
<b>Total Annual Cost</b>	<b>\$ 134,640</b>	<b>\$ 135,948</b>	<b>\$ 138,084</b>	<b>\$ 140,592</b>	<b>\$ 143,136</b>	<b>\$ 145,332</b>
*VSH - vehicle service hour fee estimated based on 3,600 hours of service						
<b>Trolley</b>	<b>Current Rate</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Monthly management fee	\$ 1,996.00	\$ 2,015.00	\$ 2,049.00	\$ 2,079.00	\$ 2,111.00	\$ 2,130.00
Vehicle service hour fee	\$ 21.84	\$ 21.96	\$ 22.29	\$ 22.75	\$ 23.21	\$ 23.67
Annual management fee	\$ 11,976	\$ 12,090	\$ 12,294	\$ 12,474	\$ 12,666	\$ 12,780
Annual VSH	\$ 32,760	\$ 32,940	\$ 33,435	\$ 34,125	\$ 34,815	\$ 35,505
<b>Total Annual Cost</b>	<b>\$ 44,736</b>	<b>\$ 45,030</b>	<b>\$ 45,729</b>	<b>\$ 46,599</b>	<b>\$ 47,481</b>	<b>\$ 48,285</b>
*VSH - vehicle service hour fee estimated based on 1,500 hours of service						

Compensation paid to MV would be in the form of a fixed monthly management fee and a variable fee based on vehicle service hours (VSH). It should be noted that the VSH to be paid for MBT and trolley services would be based on actual service hours operated. For the first year, the annual cost for MBT and trolley services would increase by 1% and 0.7% respectively.

MBT and trolley services are fully funded with Transportation Development Act (TDA) funds; no general funds are required to supplement the transit budget.

## **DISCUSSION**

The current agreement with MV for operation and management of the MBT and trolley services expires December 31, 2014. The new contract commencing on January 1, 2015 would be for five years with the possibility of a one-year extension.

Staff developed an RFP and draft agreement for dissemination on August 25, 2014, with proposals due September 22, 2014. A notice was placed on the California Association for Coordinated Transportation website and the City's website advertising the RFP. Additionally, a copy of the RFP specifications and notice was sent to nine (9) transportation providers.

MV was the only company who submitted a proposal by the deadline.

Prior to the proposal deadline, three companies contacted the City to relay they would not be submitting a bid. Subsequent to the proposal deadline, the City reached out to the other six companies to inquire if there was anything in the bid process or the transit services to be operated that precluded their company from bidding and to date only one company responded. The reasons varied from not being interested, existing workload, to stating the City seeming to have a good situation with the current provider. The RFP that was advertised in FY 10/11 for the current contract had only two companies (both within San Luis Obispo County) who bid on the transit services.

Staff reviewed MV's proposal in light of the required information to submit in three main categories: technical, organizational/management, and financial. MV's proposal complied with submittal requirements and demonstrated the company has technical, organizational, management, and

financial ability to perform the requested MBT and trolley services.

The PWAB considered this item at its October 16, 2014, meeting and concurred with staff's recommendation to award the RFP to MV Transportation. There was discussion on the small scope of the City's services out for contract (one deviated fixed route bus and season trolley service) as well as the county's location where there are fewer transit providers operating contract services, and if there could be anything the City could do in future transit bid processes to try and get more transit operators to submit proposals. Staff discussed with the Board the potential of doing a joint RFP with other local transit agencies should all of our contract expiration dates coincide with one another as having a larger service area could make it more financially feasible for an out of county transit provider to submit a bid.

### **CONCLUSION**

The cost proposal from MV is estimated to be an average 0.9% more than what the City currently pays for the same services (1% for MBT and 0.7% for trolley). The proposal from MV exhibits the financial, technical, management, and organizational ability to perform the requested MBT and trolley services. As such, staff and the PWAB recommend the City Council consider the proposal received and award Request for Proposals (RFP) No. MB 14-T1 to MV Transportation.

### **Attachments:**

1. [RFP No. MB 14-T1 \(link to City website - http://www.morro-bay.ca.us/transitrfp\)](http://www.morro-bay.ca.us/transitrfp)
2. MV Cost Proposal



## **G. Cost Proposal**

Please note that in addition to the price quoted, MV also offers progress payments, an additional cost savings method that eliminates the interest expense incurred by MV through its credit line. Under this payment structure, MV bills the City for 45% of the total estimated monthly billing, on the 1st and 16th of each month (payment due on the 16th and the 1st of each following month, respectively). This payment method offers an annual discount of 0.25%.

After month end, MV will produce a final invoice for the month as required by the contract, crediting the City with the progress payments made. The City will then pay the balance due within the terms contained in the proposed contract.

Payments are made in arrears, after service is provided and is consistent with FTA requirements which prohibit advance payments.

Please refer to the following pages for MV's cost proposal





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## Section XI - Proposal Certification Form

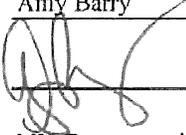
The undersigned agrees to provide the service(s) for which it wishes to be considered for the City of Morro Bay Public Services Department as indicated above and in accordance with all terms and conditions of this RFP and related contract. All services provided shall comply at all times with all applicable local, state, and federal codes, regulations, and requirements.

<u>Description</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b>◆ Morro Bay Transit</b>					
Monthly Management Fee	\$ 4,741	\$ 4,820	\$ 4,891	\$ 4,965	\$ 5,010
Per Vehicle Service Hour Fee	\$ 21.96	\$ 22.29	\$ 22.75	\$ 23.21	\$ 23.67
<b>◆ Trolley</b>					
Monthly Management Fee	\$ 2,015	\$ 2,049	\$ 2,079	\$ 2,111	\$ 2,130
Per Vehicle Service Hour Fee	\$ 21.96	\$ 22.29	\$ 22.75	\$ 23.21	\$ 23.67

Discount of 0.25 % will be allowed for payment within 10 days after receipt and acceptance of invoice and related Monthly Management Report.

Title of Authorized Official Senior Vice President

Name of Authorized Official Amy Barry

Signature of Authorized Official 

Name of Company MV Transportation, Inc.

Address (include City, State, Zip) 479 Mason Street Vacaville, CA 95688

Telephone (include area code) (707) 446-5573

Fax Number (include area code) (707) 446-4177

**Section XII - Budget Breakdown Form**

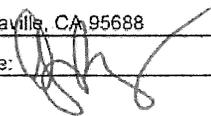
<b>Morro Bay Transit</b>					
<u>Hourly Cost Elements</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Driver Wages	<u>\$14.62</u>	<u>\$14.84</u>	<u>\$15.15</u>	<u>\$15.46</u>	<u>\$15.77</u>
Driver Fringe Benefits	<u>\$4.60</u>	<u>\$4.67</u>	<u>\$4.76</u>	<u>\$4.86</u>	<u>\$4.96</u>
Other (describe)					
<u>Driver Worker's Comp</u>	<u>\$2.73</u>	<u>\$2.78</u>	<u>\$2.83</u>	<u>\$2.89</u>	<u>\$2.95</u>
<b>TOTAL</b>	<u>\$21.96</u>	<u>\$22.29</u>	<u>\$22.75</u>	<u>\$23.21</u>	<u>\$23.67</u>

<b>Morro Bay Trolley</b>					
<u>Hourly Cost Elements</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2013</u>	<u>2013</u>
Driver Wages	<u>\$14.62</u>	<u>\$14.84</u>	<u>\$15.15</u>	<u>\$15.46</u>	<u>\$15.77</u>
Driver Fringe Benefits	<u>\$4.60</u>	<u>\$4.67</u>	<u>\$4.76</u>	<u>\$4.86</u>	<u>\$4.96</u>
Other (describe)					
<u>Driver Worker's Comp</u>	<u>\$2.73</u>	<u>\$2.78</u>	<u>\$2.83</u>	<u>\$2.89</u>	<u>\$2.95</u>
<b>TOTAL</b>	<u>\$21.96</u>	<u>\$22.29</u>	<u>\$22.75</u>	<u>\$23.21</u>	<u>\$23.67</u>

**MB Transit Monthly Cost Elements**

	2015	2016	2017	2018	2019
Project Manager Salary	\$2,526	\$2,563	\$2,602	\$2,641	\$2,681
Project Manager Fringes	\$182	\$184	\$186	\$187	\$189
Road Supervisor	\$0	\$0	\$0	\$0	\$0
Road Supervisor Fringes	\$0	\$0	\$0	\$0	\$0
Other Wages (bus washing)	\$73	\$75	\$76	\$78	\$80
Other Fringes	\$9	\$9	\$10	\$10	\$10
Hiring Expenses	\$63	\$63	\$63	\$63	\$63
Training Expenses	\$142	\$137	\$141	\$146	\$150
Safety Expenses	\$8	\$14	\$15	\$15	\$16
Driver Uniforms	\$9	\$9	\$9	\$10	\$10
Non-Driver Uniforms	\$0	\$0	\$0	\$0	\$0
Telephone	\$87	\$90	\$93	\$95	\$98
Utilities	\$0	\$0	\$0	\$0	\$0
Office Supplies	\$53	\$55	\$57	\$59	\$61
Insurance: Liability Coverage	\$122	\$123	\$123	\$123	\$123
Insurance: Worker's Compensation	\$161	\$164	\$167	\$169	\$172
Insurance: Collision Comprehensive	\$535	\$539	\$542	\$546	\$550
Performance Bond	\$20	\$20	\$20	\$20	\$20
Accounting	\$0	\$0	\$0	\$0	\$0
Management Fee/Profit	\$321	\$381	\$388	\$395	\$400
Other Corporate G&A Expense	\$372	\$309	\$314	\$320	\$325
Other Business License	\$15	\$16	\$16	\$17	\$17
Other Interest Expense	\$38	\$40	\$39	\$38	\$37
Other Depreciation	\$0	\$25	\$25	\$26	\$0
Other Bus Wash Supplies	\$6	\$6	\$6	\$7	\$7
<b>TOTAL*</b>	<b>\$4,741</b>	<b>\$4,820</b>	<b>\$4,891</b>	<b>\$4,965</b>	<b>\$5,010</b>

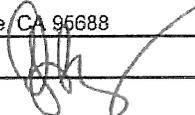
\*Costs listed here should represent an average administrative monthly cost for each line item.

Proposer: MV Transportation, Inc. Phone: (707) 446-5573 Date: 9/18/14  
 Address: 479 Mason Street Vacaville, CA 95688  
 Signature of authorized representative: 

**Trolley Monthly Cost Elements**

	2015	2016	2017	2018	2019
Project Manager Salary	\$1,098	\$1,115	\$1,132	\$1,148	\$1,166
Project Manager Fringes	\$35	\$35	\$35	\$36	\$36
Road Supervisor	\$0	\$0	\$0	\$0	\$0
Road Supervisor Fringes	\$0	\$0	\$0	\$0	\$0
Other Wages (bus washing)	\$32	\$33	\$33	\$34	\$35
Other Fringes	\$2	\$2	\$2	\$2	\$2
Hiring Expenses	\$27	\$27	\$27	\$27	\$27
Training Expenses	\$62	\$59	\$61	\$63	\$65
Safety Expenses	\$4	\$6	\$6	\$7	\$7
Driver Uniforms	\$4	\$4	\$4	\$4	\$4
Non-Driver Uniforms	\$0	\$0	\$0	\$0	\$0
Telephone	\$38	\$39	\$40	\$42	\$43
Utilities	\$0	\$0	\$0	\$0	\$0
Office Supplies	\$23	\$24	\$25	\$26	\$27
Insurance: Liability Coverage	\$53	\$53	\$53	\$53	\$53
Insurance: Worker's Compensation	\$70	\$71	\$72	\$74	\$75
Insurance: Collision Comprehensive	\$233	\$234	\$236	\$238	\$239
Performance Bond	\$8	\$8	\$8	\$8	\$8
Accounting	\$0	\$0	\$0	\$0	\$0
Management Fee/Profit	\$140	\$166	\$169	\$172	\$174
Other Corporate G&A Expense	\$162	\$134	\$137	\$139	\$141
Other Business License	\$7	\$7	\$7	\$7	\$7
Other Interest Expense	\$16	\$17	\$17	\$16	\$16
Other Depreciation	\$0	\$11	\$11	\$11	\$0
Other Bus Wash Supplies	\$3	\$3	\$3	\$3	\$3
<b>TOTAL*</b>	<b>\$2,015</b>	<b>\$2,049</b>	<b>\$2,079</b>	<b>\$2,111</b>	<b>\$2,130</b>

\*Costs listed here should represent an average administrative monthly cost for each line item

Proposer: MV Transportation, Inc. Phone: (707) 446-5573 Date: 9/18/14  
 Address: 479 Mason Street Vacaville CA 95688  
 Signature of authorized representative: 

### Job Classification and Wage Scale

Wage Scale Position	Starting Rate New Employee*				
	2015	2016	2017	2018	2019
Project Manager	\$20.91	\$21.22	\$21.54	\$21.86	\$22.19
Trainer	in overhead	in overhead	in overhead	in overhead	in overhead
Vehicle Operator	\$10.25	\$10.50	\$10.75	\$11.00	\$11.25
Dispatcher	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

	Average Hourly Rate				
	2015	2016	2017	2018	2019
Project Manager	\$20.91	\$21.22	\$21.54	\$21.86	\$22.19
Trainer	in overhead	in overhead	in overhead	in overhead	in overhead
Vehicle Operator	\$14.62	\$14.84	\$15.15	\$15.46	\$15.77
Dispatcher	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

\*Not including training rates for new employees. Specify below training rate(s) for each position different than above listed rates; use attachment if necessary. If training rates (or other rates) apply to work performed other than new employee training, also specify below. In addition, please indicate below the job classification for each position.

Training rate is same as the rate listed above.

Proposer: MV Transportation, Inc. Phone: (707) 446-5573 Date: 9/18/14  
 Address: 479 Mason Street Vacaville, CA 95688  
 Signature of authorized representative: 

**Job Classification**

Classification Please list below job classifications by position (use attachment if necessary):

Salaried, Exempt : General Manager

---

Salaried, Non Exempt: N/A

---

Hourly: Driver, Bus Washing

---

Proposer: MV Transportation, Inc.

Phone: (707) 446-5573

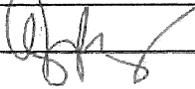
Date: 9/18/14

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Address: 479 Mason Street Vacaville, CA 95688

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Signature of authorized representative:





AGENDA NO: A-5

MEETING DATE: November 12, 2014

## Staff Report

**TO:** Honorable Mayor and City Council                      **DATE:** October 28, 2014

**FROM:** Eric Endersby, Harbor Director

**SUBJECT:** Adoption of Resolution 75-14 Authorizing Administrative Approval of Subleases on Certain Master Leases and Approval of Revised Consent to Sublease Agreement Form for Tidelands Trust Lease Sites

### RECOMMENDATION

Staff recommends the City Council adopt Resolution 75-14 authorizing the Harbor Director to approve the remaining subleases that currently require Council approval, and approve the revised Consent to Sublease Agreement form, as proposed.

### ALTERNATIVES

Regarding Resolution 75-14, Council can elect not to adopt the Resolution and retain the authority to approve subleases for the few remaining Master Leases currently requiring Council sublease approval, until new Master Leases are negotiated for those properties. At that time, unless specifically directed by Council, those leases would include the authority for staff approval of subleases.

Regarding the proposed Consent to Sublease Agreement form, Council can elect not to approve the revision, therefore, requiring full sublease re-application and re-approval rather than sublease renewal.

### FISCAL IMPACT

There will be minimal fiscal impact with the adoption of Resolution 75-14 (estimated at less than \$1,500 between now and 2018).

### BACKGROUND

All sublease agreements require City approval. The City's current modern Master Lease Agreement form provides for administrative approval of subleases by the Harbor Director. In addition, the City's Harbor Department Lease Management Policy states "Future lease agreements may provide for the City Manager or his designee to approve sublease agreements which meet the stated qualifications for approval and which comply with the terms and conditions of the lease agreements." The Harbor Director has been so designated. Currently, there remains seven older

Prepared By: EE

Dept Review: \_\_\_\_\_

City Manager Review: \_\_\_\_\_

City Attorney Review: \_\_\_\_\_

Master Leases (out of 30) that still require Council approval of subleases by resolution.

As currently written, the approved Consent to Sublease Agreement form does not make any provision for sublease renewals in Paragraph 3 regarding the sublease term. Therefore, once the stated term of any sublease has reached its expiration, an entire new sublease application and approval must be processed. That includes another application, application fee, subtenant's statement of qualifications, experience and proposed operation for the subleased site. The term of any sublease between the City and Master Tenant/Subtenant follows the term of the sublease agreement required between the Master Tenant and Subtenant, and can last from one year to multiple years, but in no case can it exceed the term of the Master Lease agreement.

### **DISCUSSION**

Of the seven remaining older Master Leases that require Council approval of subleases, one expires in 2016 with the others expiring in 2018. With the adoption of the Lease Management Policy which calls for administrative approvals, sublease approvals by Council action is now the exception, not the rule. Granting authority by resolution for the Harbor Director to approve subleases for the remaining older Master Leases will not only be in keeping with that policy but also streamline and simplify the process for the tenants and subtenants, staff, and City Council.

Revising the Consent to Sublease Agreement form as proposed, eliminates the duplicative and unnecessary step of sublease re-application and re-approval while still maintaining the other important elements of sublease approval such as a current business license, insurance, and compliance with all terms of the Master Lease agreement. This agreement form revision will enable a more efficient and customer-friendly sublease renewal process.

### **CONCLUSION**

Staff is recommending adoption of Resolution 75-14 allowing for administrative approval of subleases on the seven remaining Master Leases that require Council sublease approval. Staff is also recommending Council approval of a revised Consent to Sublease Agreement form enabling sublease renewals rather than sublease re-applications. Both these actions will simplify and streamline the subleasing process on Tidelands Trust properties, and remain in accordance with the City's Lease Management Policy.

**RESOLUTION NO. 75-14**

**RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF MORRO BAY, CALIFORNIA  
GRANTING THE HARBOR DIRECTOR ADMINISTRATIVE  
AUTHORITY TO APPROVE SUBLEASES ON CERTAIN  
TIDELANDS TRUST MASTER LEASES**

**THE CITY COUNCIL  
City of Morro Bay, California**

**WHEREAS**, the City of Morro Bay is the lessor of certain properties on the Morro Bay Waterfront described as City Tidelands leases and properties; and

**WHEREAS**, the City's current Master Lease Agreement format provides for administrative approval by the Harbor Director of subleases to those Master Leases; and

**WHEREAS**, the City's adopted Harbor Department Lease Management Policy stipulates future sublease agreement approvals may be made by the City Manager or his designee, and the Harbor Director has been so designated; and

**WHEREAS**, there remains seven City and Pipkin leases, which predate the above-referenced Policy and current Master Leases, that require approval of subleases by resolution of City Council; and

**WHEREAS**, it is in the best interest of the City, tenants, subtenants, and staff for there to be consistency in the lease management policies and procedures and to streamline leasing and business practices wherever possible.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Morro Bay, California, the Harbor Director is hereby granted authority to approve subleases al on all remaining City Master Leases that require City Council approval of subleases.

**PASSED AND ADOPTED** by the City Council of the City of Morro Bay at a regular meeting thereof held on the 12th day of November, 2014 on the following vote:

AYES:

NOES:

ABSENT:

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Jamie L. Irons, Mayor

ATTEST:

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Jamie Boucher, City Clerk

## CONSENT TO SUBLEASE AGREEMENT

THIS CONSENT TO SUBLEASE AGREEMENT is entered into this \_\_\_\_\_ day of \_\_\_\_\_, by and between \_\_\_\_\_, hereinafter referred to as TENANT, and \_\_\_\_\_, dba, \_\_\_\_\_ hereinafter referred to as SUBTENANT and approved by the City of Morro Bay, California, hereinafter referred to as CITY.

### RECITALS

WHEREAS, a Master Lease was executed on \_\_\_\_\_ for the premises known as Lease Site \_\_\_\_\_ and;

WHEREAS, TENANT desires to sublease a portion of the premises to SUBTENANT, and:

WHEREAS, the Master Lease requires CITY consent of any sublease in the following form of agreement.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. TENANT and SUBTENANT jointly and severally guaranty ~~that~~ TENANT will pay to City all of the sums required of TENANT and any sums due by reason of SUBTENANT's activities under the terms of the Master Lease dated \_\_\_\_\_ hereinafter known as "Master Lease". In the event TENANT fails to make such payment, SUBTENANT agrees to promptly make such payment to CITY for TENANT. Failure to pay the rent shall constitute a violation of the Master Lease and CITY shall, after three (3) days written notice to TENANT, have the following options:

(a) CITY may elect to pursue all legal remedies against TENANT alone or against both TENANT and SUBTENANT or against SUBTENANT alone. CITY'S election to pursue one instead of both of the parties shall not preclude a later action against the other party to recover any amounts not paid and both TENANT and SUBTENANT agree that they are to be jointly and severally liable for any breach by the SUBTENANT.

(b) CITY shall have all other legal remedies provided for in the lease and allowed by law, including the right to bring an action for unlawful detainer against SUBTENANT, TENANT or both for non-payment of rent by TENANT or SUBTENANT'S portion of rent due to CITY.

2. SUBTENANT acknowledges receipt of a complete copy of the Master Lease and all amendments thereto and specifically agrees to comply with each and all of the terms and conditions of the Master Lease. TENANT guarantees SUBTENANT's compliance with each and all of the terms and conditions of the Master Lease, as each# pertains to the portion of the Lease Ssite subject to the subject sublease (attached as Exhibit A hereto) (the "Sublease")they are leasing, and all of the parties agree ~~that~~ a violation by SUBTENANT of the terms of the Master Lease, as each# pertains to the portion of the Lease Ssite subject to they are Aubleasing, shall constitute a violation of the Master Lease by TENANT. ~~TENANT~~ agrees to take whatever action is required to secure SUBTENANT's compliance with each and all of the terms of the Master Lease, and agrees to indemnify CITY, as Landlord, from any and all claims, loss, cost or expense resulting from SUBTENANT's failure to comply with the terms of the Master Lease.

~~3. The initial term of the sSublease attached as Exhibit "A" shall be \_\_\_\_\_ years, commencing upon execution of the Subsaid lease; provided, that, TENANT may extend the term of the Ssublease with the SUBTENANT without obtaining a new Consent to Sublease Agreement from CITY'sthe City Council under the following conditions: (1) Tenant receives prior written authorization from the Harbor Director to extend the term of the Ssublease,; (2) the extended term of the Ssublease does not exceed the term of the Master Lease,; (3) the new extended Ssublease agreement or amendment to the sublease agreement shall not modify any other terms of the Master lease or the original Ssublease, except its term,; (4) TENANT provides CITY with a fully executed copy of the extendednew Ssublease or amendment to the sublease within five business days after the extended Ssublease has beenbeing fully executed. The extendednew Ssublease or amendment to the sublease shall be added to Exhibit "A" of this Consent to Sublease Agreement. The Harbor Director's authorization of any extension in the term of the Ssublease does not serve to waive any rights ofthe CITY set forth in the Master Lease or in this Consent to Sublease Agreement, including any claims for breach of the Master Lease or of this Consent to Sublease Agreement. The Sublease shall, in all events, terminate upon termination of the Master Lease for any reason, including, but not limited to, a termination which occurs as a result of court judgment.~~

~~3. The term of the sublease attached as Exhibit A shall be \_\_\_\_\_ years commencing upon execution of said lease provided, however, that the term of the sublease shall not in any event exceed the terms of the Master Lease and said Sublease shall, in all events, terminate upon termination of the Master Lease for any reason, including, but not limited to, a termination which occurs as a result of court judgment.~~

4. Pursuant to the provision in the Master Lease requiring TENANT to pay rental based on percentage of gross sales, SUBTENANT agrees to and shall keep full, complete, and accurate records, and books of account in accordance with accepted accounting practices as showing the total amount of gross sales, as defined in the Master Lease, made each calendar month in, on or from the subleased premises. SUBTENANT shall keep said records and books of account within San Luis Obispo County and shall notify CITY in advance of their location at all times. Said records, books of account and all cash register tapes, including any sales tax reports that SUBTENANT may be required to furnish any government or governmental agency, including but not limited to those items listed in Exhibit B attached hereto and incorporated herein, shall at all reasonable times be open to the inspection of TENANT, CITY, CITY'S auditor, or other authorized representative or agent of TENANT or CITY.

5. The proposed use by SUBTENANT is as follows:

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Percentage of Gross Rental Applicable to Permitted Use: \_\_\_\_\_.

Said designated use shall not be changed without the prior written consent of CITY. SUBTENANT acknowledges that the percentage of gross payment required for the proposed use under the terms of the Master Lease is as set forth hereinabove. SUBTENANT agrees that any use by SUBTENANT of the subleased premises for a purpose other than that specified in this paragraph, whether or not permitted under the terms of the Master Lease, shall constitute an unauthorized use subject to those penalties set forth in the Master Lease. The location and size of the proposed use shall not be altered without the prior written consent of the CITY. Specifically, and in addition to any other terms and provisions of the lease, all parties agree that if SUBTENANT makes a use of the subleased premises which is not included within or permitted under the terms of the Master Lease, TENANT shall be liable for and shall pay to CITY, 10% of the gross revenue from such unpermitted use.

6. SUBTENANT shall not alter or improve the premises or any part thereof without first obtaining the prior written consent of CITY.

7. SUBTENANT agrees to submit a statement of previous business experience and agrees to submit current personal and business financial statements upon request and further agrees to submit such documents as part of the CITY's consideration of the consent to Sublease Agreement. SUBTENANT shall not assign, mortgage, or encumber the subleased premises in whole or in part without the prior written consent of CITY.

8. Unless SUBTENANT is included as an additional insured under the terms of TENANT's liability insurance, SUBTENANT agrees to maintain adequate liability insurance in the manner and form required under the Master Lease in an amount of not less than \$1,000,000 per occurrence and agrees to name the CITY OF MORRO BAY as an additional primary insured without offset against the CITY's insurance. SUBTENANT agrees to provide the certificates of insurance and copies of the actual insurance policies to the CITY as required under the Master Lease and otherwise comply with the insurance requirements set forth in the Master Lease. CITY reserves the right to require reasonable increases in the liability insurance coverage from time to time.

9. SUBTENANT and TENANT agree to indemnify and save CITY free and harmless from and against any and all claims, including reasonable attorney's fees and court costs arising from SUBTENANT's failure to comply with any of the terms of this Consent and Sublease Agreement.

10. This Agreement cannot be modified except by a written document mutually approved by the parties hereto. A waiver of any of the conditions or terms of this Consent or of the Master Lease shall not constitute a waiver of any future breach of any terms or conditions of this Consent or the Master Lease.

11. To the extent that the terms of the proposed Sublease are inconsistent with the terms of this Agreement or Master Lease with the CITY OF MORRO BAY, this Agreement or Master Lease shall supersede and be the controlling document. To the extent that this Consent to Sublease Agreement is inconsistent with the terms of the Master Lease, the Master Lease shall supersede and be the controlling document.

IN WITNESS WHEREOF, the parties hereto have executed this Consent to Sublease Agreement as of the day and year first above written at Morro Bay, California.

TENANT:

SUBTENANT:

\_\_\_\_\_  
  
\_\_\_\_\_

\_\_\_\_\_  
  
\_\_\_\_\_

CITY OF MORRO BAY:

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Eric Endersby, Harbor Director

**EXHIBIT "B"**

**CONSENT TO SUBLEASE AGREEMENT**

At a minimum, certain books and records shall be kept by ~~Lessee~~ TENANT and ~~Sublessee~~ SUBTENANT such as:

1. Pre-numbered and dated guest checks;
2. Pre-numbered sales invoices or daily cash register tapes;
3. Bank Statements;
4. Sales Tax Returns;
5. Sales Journals;
6. Cash Disbursement Journals; and
7. General Ledger



AGENDA NO: B-1

MEETING DATE: November 12, 2014

# Staff Report

**TO:** Honorable Mayor and City Council **DATE:** November 12, 2014

**FROM:** Whitney McIlvaine, Contract Planner

**SUBJECT:** Appeals of the Planning Commission approval of Coastal Development Permit CP0-417 for Construction of a New Single-family Residence with an attached Secondary Unit at 505 Walnut Street (Appellants: Beattie, DeRosa, Heller) (Applicants: Wammack)

### RECOMMENDATION

Staff recommends the City Council deny all appeals and uphold the Planning Commission approval of Coastal Development Permit CP0-417 for 505 Walnut Street.

### ALTERNATIVES

1. Uphold the appeals, thereby reversing Planning Commission’s approval and denying Coastal Development Permit CP0-417.
2. Continue review to a date certain and provide direction to staff and the applicant regarding revisions to project design.

### FISCAL IMPACT

Appeals were filed on a Coastal Development Permit within the Coastal Commission’s appeal jurisdiction and, therefore, there was no fee for filing the appeals. All costs associated with preparing the appeal staff report, public noticing, and attending the City Council meeting will be absorbed by the City.

### SUMMARY

On August 19, 2014, the Planning Commission continued review of plans for a project at 505 Walnut Street with direction to the applicant regarding desired architectural changes. On September 16, 2014, the Planning Commission conditionally approved plans for construction of a new single-family dwelling with an attached secondary dwelling unit on a vacant corner lot at 505 Walnut Street. Approved plans, dated August 28, 2014, are attached as Exhibit E. The Planning Commission Resolution for approval is attached as Exhibit F. Minutes of the September 16<sup>th</sup> meeting are attached as Exhibit G. The September 16, 2014 staff report is attached as Exhibit H.

On September 23, 2014, an appeal of the Planning Commission action was filed by Alex

Prepared By: <u>WM</u>	Dept Review: <u>SG</u>
City Manager Review: _____	
City Attorney Review: _____	

Beattie. On September 25, an appeal was filed by Betty De Rosa. On September 26, an appeal was filed by Jeffrey R. Heller. (See Exhibits B, C, and D). The appeals are based primarily on concerns regarding scenic view policies, neighborhood compatibility, and confusion over property lines.

### **BACKGROUND**

Approved plans show a 2,025 square-foot, single-family residence with an attached 460 square-foot garage and a 450 square-foot secondary unit above the garage; a ground-floor porch; and two upper-level decks. An open parking area for the secondary unit is proposed on the east side of the garage. Total square footage of the structure is 2,935 plus 272 square feet of porch and deck areas. Reduced plans are attached as Exhibit E.



View from Walnut Street of Approved Project

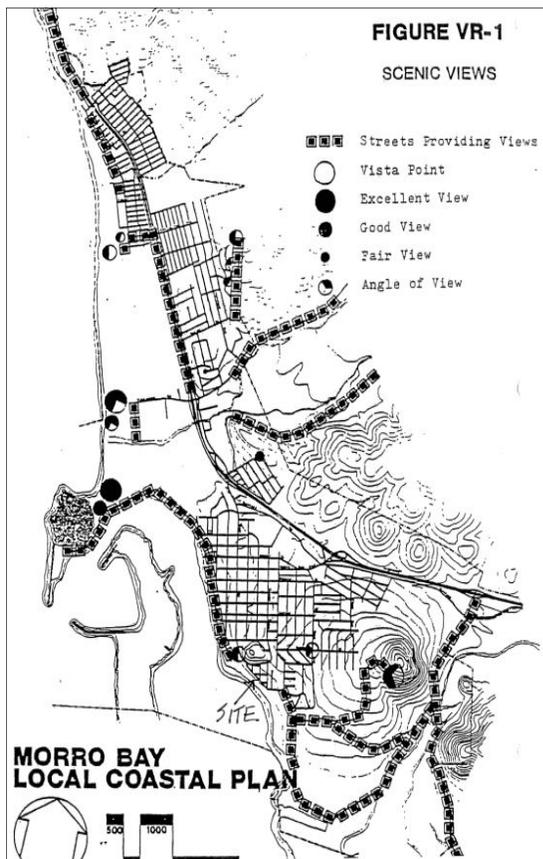
Earlier project plans were originally reviewed by the Planning Commission on August 19, 2014. Taking into consideration: 1) the specifics of the project site; 2) surrounding development - both older and more recent; and, 3) the project's location along the southern entryway into City, the Commission continued review with direction to the applicant to redesign the Main Street façade to be less top heavy and include more articulation, possibly with the addition of a porch on the lower level. The Commission also directed staff to review parking and sight distance where Walnut and Cypress Streets intersect with Main Street. At the meeting, several members of the public expressed concerns with the project related to size, parking, views, and neighborhood compatibility. Previous plans are attached as part of the staff report for the August 19, 2014 meeting (Exhibit H).

At the September 16, 2014 meeting, several members of the public again expressed their concerns, primarily with the size of the project and its potential impact on neighboring views. Commissioners discussed the reduced potential for the project to block public views toward the water since it is on the inland side of Main Street; project size and design in relation to the immediate vicinity and the surrounding neighborhood; the siting of the proposed structure on the lot with regard to perceived height, mass and traffic sight distance; and architectural

changes. Commissioners concluded that the revised plans and architectural changes complied with previous direction as well as City development standards and conditionally approved the project as redesigned.

## **DISCUSSION**

### **Scenic Views: Appellant Beattie states broadly that staff misinterpreted section 30251 of the Local Coastal Plan.**



The Coastal Land Use Plan (LCP) and General Plan contain policies protecting scenic coastal views.

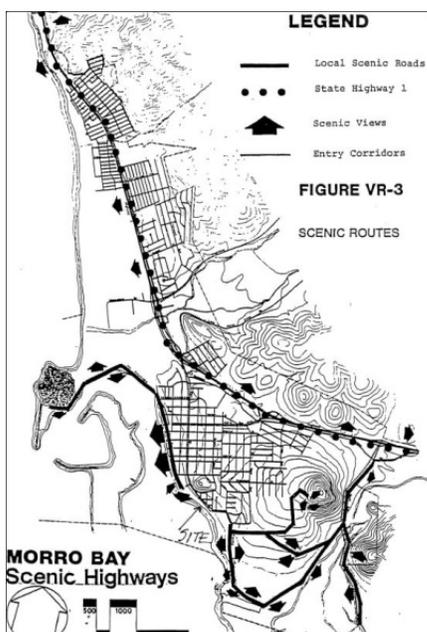
LCP Policy 12.01 and General Plan Policy VR-2 both state, “The scenic and visual qualities of the coastal areas shall be considered and protected as a resource of public importance.” These policies essentially reiterate Coastal Act Section 30251. Both policies require development to be sited and designed to protect views to and along the ocean and scenic and coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. Both policies require new development in highly scenic areas, as depicted on LCP Figure 30 and General Plan Figure VR-1 (identical exhibits), to be subordinate to the character of its setting.

*The property at 505 Walnut is not located in a City designated highly scenic area, as shown on the figure to the left, therefore, the project is not required to be “subordinate to the character of its setting.” The project is on the inland side of Main Street, which reduces potential impacts on water views. The site does not contain any significant natural landforms. Grading is proposed to lower the building into the site. There are no adopted design themes applicable to this site. Surrounding development includes a wide variety of home sizes and architectural styles.*

**Neighborhood Compatibility: Appellants Beattie, Heller, and De Rosa all maintain that the project is not compatible with the existing neighborhood, especially in terms of size and massing.**

*The project is not unlike other newer residential construction in the vicinity, which is typically two-story and more than 2,500 square feet in size. Overall, the surrounding neighborhood exhibits an eclectic mix of dwelling sizes, architectural styles, and building materials.*

*As designed, the project meets or exceeds all zoning standards for height, setbacks, coverage, and parking. (See the Zoning Ordinance Standards table in the September 16, 2014 staff report.) Impacts of the proposed building height (24 feet) are offset somewhat by the fact that surrounding residences are generally uphill from the project site.*



*The project is located along Main Street, which is a designated entry corridor, providing a southern access to the City from South Bay Boulevard and through Morro Bay State Park. In a discussion of city entryways (p.IV-16), the General Plan states, "The City should exercise strict design control over new development along these corridors to improve architectural coordination and quality."*

*The Planning Commission considered the project in the context of its surroundings and determined that the project, as redesigned and sited, would be appropriate for its location in this neighborhood and along this entryway into the City.*

**Property Lines: Appellant Beattie states the property lines shown conflict with existing property lines.**

Concern over property lines seems to stem from the location of existing fences and walls, which do not necessarily indicate property lines. The applicant has submitted a corner lot survey prepared by Danny Horn, a licensed Land Surveyor, which was reviewed by the County and recorded (Book 33 Page 61) on September 26, 2014. The same surveyor also prepared a topographic survey. Site development plans are based on these surveys. Nothing has been submitted to staff to support the allegation of an incorrect survey.

**CONCLUSION:**

The Appellants are requesting that Council overturn Planning Commission approval of Coastal Development Permit CP0-417 and deny the proposed construction of a new single-family dwelling and attached secondary unit as presented on revised plans dated August 28,

2014. Staff recommendation, based on review and analysis of the appeal and policies within the City's General Plan, Coastal Land Use Plan and Zoning Ordinance, is to deny the appeals and uphold the Planning Commission's conditional approval of Coastal Development Permit CP0-417 as specified by City Council Resolution #74-14.

**EXHIBITS:**

Exhibit A - City Council Resolution 74-14

Exhibit B - Appeal filed by Mr. Alex Beattie

Exhibit C - Appeal filed by Betty De Rosa

Exhibit D - Appeal filed by Jeffrey Heller

Exhibit E - 11"x17" Approved Plans

Exhibit F - Planning Commission Resolution 19-14

Exhibit G - Minutes of the September 16, 2014 Planning Commission meeting

Exhibit H - September 16, 2014 Planning Commission staff report and selected attachments, including reductions of earlier plans, August 19, 2014 meeting minutes, and August 19, 2014 staff report

Full-size plans and 11" x 17" reductions are included in Council member packets.

**RESOLUTION NO. 74-14**

**A RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF MORRO BAY, CALIFORNIA  
TO DENY THE APPEALS AND UPHOLD THE PLANNING COMMISSION'S  
APPROVAL OF COASTAL DEVELOPMENT PERMIT #CP0-417 FOR THE  
CONSTRUCTION OF A NEW TWO-STORY SINGLE-FAMILY RESIDENCE WITH  
AN ATTACHED SECONDARY UNIT AT 505 WALNUT STREET**

**THE CITY COUNCIL  
City of Morro Bay, California**

**WHEREAS**, the Planning Commission of the City of Morro Bay conducted public hearings at the Morro Bay Veteran's Hall, 209 Surf Street, Morro Bay, California, on August 19 and September 16, 2014, for the purpose of considering Coastal Development Permit #CP0-417; and

**WHEREAS**, on September 16, 2014, the Morro Bay Planning Commission adopted Resolution 19-14 with findings and conditions for approval of Coastal Development Permit #CP0-417; and

**WHEREAS**, on September 23, 2014, an appeal of the Planning Commission action approving Coastal Development Permit #CP0-417 was filed by Alex Beattie, specifically requesting the Council overturn the Planning Commission decision and deny Coastal Development Permit #CP0-417; and

**WHEREAS**, on September 25, 2014, an appeal of the Planning Commission action approving Coastal Development Permit #CP0-417 was filed by Betty De Rosa, specifically requesting the Council overturn the Planning Commission decision and deny Coastal Development Permit #CP0-417; and

**WHEREAS**, on September 26, 2014, an appeal of the Planning Commission action approving Coastal Development Permit #CP0-417 was filed by Jeffrey R. Heller, specifically requesting the Council overturn the Planning Commission decision and require the applicant to reduce the size and height of the project and incorporate exterior building materials that reflect design elements of the adjacent properties of character; and

**WHEREAS**, the City Council of the City of Morro Bay conducted a public hearing at the Morro Bay Veteran's Hall, 209 Surf Street, Morro Bay, California, on November 12, 2014, for the purpose of considering appeals of the Planning Commission approval of Coastal Development Permit #CP0-417; and

**WHEREAS**, notices of said public hearings were made at the time and in the manner required by law; and

**WHEREAS**, the City Council has duly considered all evidence, whether written or oral, including without limitation, the testimony of the appellants, the applicant, interested parties, City staff and all written and oral evaluations and recommendations by staff, presented at Planning Commission hearings and the City Council hearing.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Morro Bay as follows:

**Section 1: Findings.** Based upon all the evidence, the Council makes the following findings:

**California Environmental Quality Act (CEQA)**

1. Pursuant to the California Environmental Quality Act, the Director has found the project as proposed categorically exempt under Section 15303, Class 3(a), “New Construction or Conversion of Small Structures,” because the project is a single-family home with an attached secondary dwelling in a residential zone and does not have a significant effect on the environment.

**Coastal Development Permit Findings for Approval**

1. The development of a new single-family residence with an attached secondary dwelling unit is consistent with the applicable provisions of the General Plan and certified Local Coastal Program.
2. The project, as conditioned, is consistent with the character of the neighborhood in which it is located. It is surrounded by compatible uses of low density residential development, and like other structures in the neighborhood, the proposed project is two stories and has an attached two car garage.
3. The development of a new single-family residence and attached secondary dwelling unit will not cause any health and safety concerns, and will not impact neighboring uses, environmentally sensitive habitat areas, or otherwise create significant impacts.

**Section 2. Action.** The City Council does hereby deny the appeals and upholds the action of the Planning Commission to approve Coastal Development Permit #CP0-417, subject to the following conditions:

**Standard Conditions:**

1. This permit is granted for the land described in the staff report dated September 16, 2014, for the project at 505 Walnut Street depicted on plans dated August 28, 2014, on file with the Public Services Department, as modified by these conditions of approval, and more specifically described as follows: Site development, including all buildings and other

features, shall be located and designed substantially as shown on Planning Commission approved plans submitted for Coastal Development Permit #CP0-417, unless otherwise specified herein.

2. Inaugurate Within Two Years: Unless the construction is commenced not later than two (2) years after the effective date of this Resolution and is diligently pursued, thereafter, this approval will automatically become null and void; provided, however, that upon the written request of the applicant, prior to the expiration of this approval, the applicant may request up to two extensions for not more than one (1) additional year each. Any extension may be granted by the City's Public Services Director (the "Director"), upon finding the project complies with all applicable provisions of the Morro Bay Municipal Code (the "MBMC"), General Plan and certified Local Coastal Program Land Use Plan (LCP) in effect at the time of the extension request.
3. Changes: Minor changes to the project description or conditions of approval shall be subject to review and approval by the Public Services Director. Any changes to this approved permit determined, by the Director, not to be minor shall require the filing of an application for a permit amendment subject to Planning Commission review.
4. Compliance with the Law: (a) All requirements of any law, ordinance or regulation of the State of California, the City, and any other governmental entity shall be complied with in the exercise of this approval, (b) This project shall meet all applicable requirements under the MBMC, and shall be consistent with all programs and policies contained in the LCP and General Plan for the City.
5. Hold Harmless: The applicant, as a condition of approval, hereby agrees to defend, indemnify, and hold harmless the City, its agents, officers, and employees, from any claim, action, or proceeding against the City as a result of the action or inaction by the City, or from any claim to attack, set aside, void, or annul this approval by the City of the applicant's project; or applicants failure to comply with conditions of approval. Applicant understands and acknowledges the City is under no obligation to defend any legal actions challenging the City's actions with respect to the project. This condition and agreement shall be binding on all successors and assigns.
6. Compliance with Conditions: The applicant's establishment of the use or development of the subject property constitutes acknowledgement and acceptance of all Conditions of Approval. Compliance with and execution of all conditions listed hereon shall be required prior to obtaining final building inspection clearance and a Certificate of Occupancy, as may be required. Deviation from this requirement shall be permitted only by written consent of the Director or as authorized by the Planning Commission. Failure to comply with any of these conditions shall render this entitlement, at the discretion of the Director, null and void. Continuation of the use without a valid entitlement will constitute a violation of the MBMC, which is a misdemeanor.

7. Compliance with Morro Bay Standards: This project shall meet all applicable requirements under the MBMC, and shall be consistent with all programs and policies contained in the Local Coastal Program and General Plan of the City.
8. Conditions of Approval: The Findings and Conditions of Approval shall be included as a full-size sheet in the Building Plans.

**Planning Conditions:**

1. Boundaries and Setbacks: The property owner is responsible for verification of lot boundaries. At the time of foundation inspection, the property owner shall verify lot boundaries and building setbacks to the satisfaction of the City Planning Manager and City Building Official.
1. Height Certification: Prior to foundation inspection, a licensed land surveyor shall measure and inspect the forms and submit a letter to the City Planning Manager certifying the tops of the forms are in compliance with the finish floor elevations as shown on approved plans. Prior to either roof nail or framing inspection a licensed surveyor shall measure the height of the structure and submit a letter to the City Planning Manager, certifying the height of the structure is in accordance with the approved set of plans and complies with the height requirements of the Morro Bay, Municipal Code Section 17.12.310.
2. Dust Control: Prior to issuance of a grading permit, a method of control to prevent dust and wind blow earth problems, shall be submitted for review and approval by the Building Official. (MBMC Section 17.52.070)
3. Archaeology: In the event of the unforeseen encounter of subsurface materials suspected to be of an archaeological or paleontological nature, all grading or excavation shall immediately cease in the immediate area, and the find shall be left untouched until a qualified professional archaeologist, knowledgeable in local indigenous culture, or paleontologist, whichever is appropriate, is contacted and called in to evaluate and make recommendations as to disposition, mitigation or salvage. The developer shall be liable for costs associated with the professional investigation. (MBMC Section 17.48.310)
4. Secondary Unit Parking: The minimum width of the area between the face of the retaining wall along the eastern property line and the eastern face of the building shall be 11 feet to enable room for a viable parking space for the secondary unit.
5. Lighting: Prior to issuance of a building permit, the applicant shall submit an exterior lighting plan for review and approval by the City Planning Manager. The plan shall show all exterior lighting fixtures and locations and shall be subject to the following standards:
  - a. The point source of all exterior lighting shall be shielded from offsite views.
  - b. Exterior lighting shall be directed downward and shall use cut-off fixtures or shields.

- c. Exterior lighting shall be designed not to focus illumination onto exterior walls.
  - d. Bright white-colored lighting shall not be used for exterior lighting.
6. **Undergrounding:** All utilities to the structure shall be undergrounded.
  7. **Retaining Walls:** The retaining walls along the east and north property lines shall incorporate surface texture and be neutral in color. The project landscape plan shall include vegetation to mitigate the visual impact of the retaining wall especially as seen from the public streets. The landscape plan shall support vegetation to enable 50% coverage of the retaining wall within 5 years.
  8. **Fencing:** Fencing is prohibited in the exterior yard setback along Main Street to avoid interference with traffic sight distance. Any project fencing elsewhere on site is subject to conformance with MBMC Section 17.48.100.
  9. **Landscaping:** A complete landscape plan showing plant type, size, number, location, watering schedule, and method of maintenance shall be submitted with the building plans. Plant material shall be predominately native and drought tolerant. Planting within 10 feet of the Main Street property line shall not have a mature height of more than 18 inches to avoid interference with traffic sight distance.
  10. **Inspection:** The applicant shall comply with all Planning conditions listed above and obtain a final inspection from the Planning Division at the necessary time in order to ensure all conditions have been met.

**Building Conditions:**

1. Prior to construction, the applicant shall submit a complete building permit application and obtain the required building permit.

**Fire Code Requirements:**

1. Fire Sprinklers. The new residence shall be equipped with an automatic fire sprinkler system, in accordance with MBMC Section 14.08.090(I)(2) and 2010 California Residential Code, Section R313.
2. Carbon Monoxide Alarms. For new construction, an approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. (CRC 315)

**Public Works Conditions:**

1. Sewer Backwater Valve: Construction plans shall reflect that a sewer backwater valve shall be installed on site to prevent a blockage or maintenance of the municipal sewer main from causing damage to the proposed project. (MBMC Section 14.24.070).

2. Frontage improvements are required along Main Street (MBMC Section 14.44.020) Specific improvements include a street tree, curb, gutter and six-foot wide sidewalk with ADA compliant ramps at the corners. Building plans shall show the ultimate street improvements for the Main Street frontage. Developer may defer the installation of curb, gutter and sidewalk if deemed necessary to better coordinate construction with other planned improvements. If work is deferred, the required improvements shall be shown on the building plans with a note indicating deferral. A deferral agreement shall be recorded against the property prior to issuance of a building permit.
3. To provide sufficient right-of-way for frontage improvements, the property owner shall dedicate to the City a five-foot wide strip of lot frontage along Main Street to the satisfaction of the Public Works Director prior to issuance of a building permit.
4. Provide a standard erosion and sediment control plan (MBMC Sections 12.04 & 14.48). The Plan shall show control measures to provide protection against erosion of adjacent property and prevent sediment or debris from entering the City right of way, adjacent properties, any harbor, waterway, or ecologically sensitive area. This Plan shall be provided with the Building Permit application.
5. Show the installation of a driveway approach per City of Morro Bay standards B-7 or B-8. Note that driveway width for this property shall not exceed 25'.
6. Install a 6-inch asphalt or concrete curb at the edge of pavement as shown on attached Exhibit 1.
7. Include the locations of the sewer lateral, water service, and water and sewer mains.
8. Grading and Drainage: Show existing and proposed topography and grading plan. Show drainage paths on the plans. Projects are encouraged to implement Low Impact Development (LID) feature.
9. A minimum of three street trees shall be planted in the front and exterior yard setbacks with consideration for traffic safety, sight distance, and views to the satisfaction of the Planning Manager and City Engineer.
10. Add the following Notes to the Construction Plans:
  - a. No work within (or use of) the City's Right of Way shall occur without an encroachment permit. Encroachment permits are available at the City of Morro Bay Public Services Office located at 955 Shasta Ave. The Encroachment permit shall be issued concurrently with the building permit.
  - b. Any damage, as a result of construction operations for this project, to City facilities, i.e. curb/berm, street, sewer line, water line, or any public improvements shall be repaired at no cost to the City of Morro Bay.

**PASSED AND ADOPTED** by the City Council of the City of Morro Bay at a regular meeting thereof held on this 12<sup>th</sup> day of November, 2014 on the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

---

JAMIE L. IRONS, MAYOR

ATTEST

---

JAMIE BOUCHER, City Clerk

RECEIVED  
City of Morro Bay

SEP 23 2014

City Attorney



## CITY OF MORRO BAY

Public Services Department  
Planning Division

955 Shasta Avenue  
Morro Bay, CA 93442  
(805) 772-6577

### APPEAL FORM

**In CCC Appeals Jurisdiction?**

- YES - No Fee  
 NO - Fee Paid:  Yes  No

Project Address being appealed: 505 Walnut Morro Bay, Ca	
Appeal from the decision or action of (governing body or City officer):  <input type="checkbox"/> Administrative Decision <input checked="" type="checkbox"/> Planning Commission <input type="checkbox"/> City Council	
Appeal of action or specific condition of approval:  Planning commission Resolution 19-14	
Permit number and type being appealed (ie. coastal permit, use permit, tentative subdivision): Coastal Permit # CPO-417	
Date decision or action rendered: Sept 16, 2014	
Grounds for the appeal (attach additional sheets as necessary): 1. Staff report incorrectly characterized neighborhood setting and compatibility with existing neighborhood 2. Staff report misinterpreted section 30251 of the Local Coastal plan. 3. Staff report misrepresented architectural compatibility with respect to siting and massing. 4. The property lines shown conflict with existing property lines	
Requested relief or action: 1. Deny application and suggest that the applicant resubmit with a design more compatible with (subordinate to) the setting. 2. Require a recorded survey of the site that includes references to existing property lines and development	
Appellant (please print):  Alex Beattie	Phone: 805 772-5694
Address: 564 Acacia St Morro Bay, CA 94234	
Appellant Signature: <u><i>Alex Beattie</i></u> Date: <u>9/22/2014</u>	

**FOR OFFICE USE ONLY**

Accepted by: <u><i>Dana Swanson</i></u>	Date appeal filed: <u>Sept 23, 2014</u>
Appeal body: <u>City Council</u>	Date of appeal hearing:



## CITY OF MORRO BAY

Public Services Department  
Planning Division

955 Shasta Avenue  
Morro Bay, CA 93442  
(805) 772-6577

### APPEAL FORM

In CCC Appeals Jurisdiction?

YES - No Fee  
 NO - Fee Paid:  Yes  No

Project Address being appealed: <u>505 Walnut, Morro Bay, CA</u>	
Appeal from the decision or action of (governing body or City officer): <input type="checkbox"/> Administrative Decision <input checked="" type="checkbox"/> Planning Commission <input type="checkbox"/> City Council	
Appeal of action or specific condition of approval: <u>Planning Commission Resolution 19-14</u>	
Permit number and type being appealed (ie. coastal permit, use permit, tentative subdivision): <u>Coastal Permit # CPO-417</u>	
Date decision or action rendered: <u>September 16, 2014</u>	
Grounds for the appeal (attach additional sheets as necessary): <u>1. Compatatibility of proposed house with existing neighbors, neighborhood.</u>  <u>See attached.</u>	
Requested relief or action: <u>1. Deny application and suggest applicant resubmit a design more compatible with the neighborhood.</u>  <u>See Attached.</u>	
Appellant (please print): <u>Betty DeRosa</u>	Phone: <u>818 243-1357</u>
Address: <u>270 Cypress, Morro Bay, CA</u> <u>mailing address - 1549 Columbia Dr. Glendale, CA 91205</u>	
Appellant Signature: <u>Betty DeRosa</u>	Date: <u>Sept 25, 2014</u>

**RECEIVED**  
City of Morro Bay

#### FOR OFFICE USE ONLY

Accepted by:	Date appeal filed:
Appeal body:	Date of appeal hearing:

**SEP 25 2014**

Administration

Appeal of action or specific condition of approval:

Compatibility of house design to blend with the existing neighborhood.

Grounds for appeal:

The proposed construction is a two story "cape cod" design with numerous articulations such as porches, a pop out on the Main St. side, lower and upper floor and an upstairs balcony.

The existing homes in the immediate vicinity are of mid-twentieth century modern, constructed mainly of wood, glass and concrete block, all located on Cypress. The house directly to the east is a wood and stucco home of California modern style most likely built in the 1950's or 1960's, painted brown and green in keeping with the muted colors of the immediate neighborhood. The house northeast of the proposed project is a painted wood structure with multiple additions. The base house was once a small 600 square foot fisherman cabin dating back to the 1930's. Across the street from the 505 Walnut property is a one and partial 2 story home, again built with concrete block and wood and painted muted colors of brown and green.

As you can see by my descriptions the proposed home at 505 Walnut has none of these features. The Cape Cod design as well as the large two story size dwarfs the existing homes and looks out of place in our particular, neighborhood.

Requested Relief or Action.

As much as I would like to limit the size of the proposed house, it does follow existing building codes in the area. I would like to see a one story with a partial two story home in a more compatible design. Possibly a modern design that would blend in with the existing 20<sup>th</sup> Century modern designed homes. The home built on the corner of Acacia and Main blends in nicely with the existing homes and does not draw attention to itself. The home was built 60 years after the existing homes.

I would also request that Morro Bay Planning Board not use a "one size fits all" in their decision making on new home construction in existing neighborhoods. Morro Bay has several unique neighborhoods that over the last 30 years have been exploited with oversized homes that do not blend with the existing homes. There are pockets of newer oversized homes that have been built on available properties, but all the homes were built at the same time on large properties that could handle multiple homes being built. Every home is oversized and they have complimentary but different house designs.

# EXHIBIT D



## CITY OF MORRO BAY

Public Services Department  
Planning Division

955 Shasta Avenue  
Morro Bay, CA 93442  
(805) 772-6577

### APPEAL FORM

#### In CCC Appeals Jurisdiction?

YES - No Fee  
 NO - Fee Paid:  Yes  No

Project Address being appealed: <u>505 Walnut St.</u>	
Appeal from the decision or action of (governing body or City officer): <input type="checkbox"/> Administrative Decision <input checked="" type="checkbox"/> Planning Commission <input type="checkbox"/> City Council	
Appeal of action or specific condition of approval: <u>Appealing approval of CDP for 2-story house with 25ft. height limit at this location.</u>	
Permit number and type being appealed (ie. coastal permit, use permit, tentative subdivision): <u><del>CEP</del> Coastal Development Permit</u>	
Date decision or action rendered: <u>9/16/14</u>	
Grounds for the appeal (attach additional sheets as necessary): <u>SEE ATTACHED</u>	
Requested relief or action: <u>[REDACTED]</u> <u>SEE ATTACHED</u>	
Appellant (please print): <u>JEFFREY R. HELLER</u>	Phone: <u>805-286-8822</u>
Address: <u>291 Palm Avenue</u>	
Appellant Signature: <u>[Signature]</u>	Date: <u>9/26/14</u>
<b>FOR OFFICE USE ONLY</b>	
Accepted by:	Date appeal filed:
Appeal body:	Date of appeal hearing:

## GROUNDS FOR APPEAL

One priority of the Coastal Act is "the protection of the character of the community and its neighborhood.

### Bulk/Scale

While there are larger homes up the hill in "Morro Heights", the existing homes along the east side of Main Street (from the Park entrance heading north to Acacia St.) are primarily modest SINGLE STORY houses less than 2000 sq. ft. in size. (See Pictures 1-5). Homes along the west side of Main Street are also single story or 2-story homes that are sited below the main street level and have flat or low sloping roofs. Newer structures have been designed and sited to MINIMIZE their impact on the surrounding structures and neighborhood (See pictures 6-7).

### Neighborhood Character

In addition to modestly scaled structures in this neighborhood, there are a number of unusual structures along this historic section of Main Street, including "The Cannery", the "lighthouse", and the "Windmill House", the "rock house" among others (See pictures 8-11).

Immediately adjacent to the proposed development---historically important single story homes built between 1940 and 1960 exist (See pictures 12-14). These homes were ahead of their time when built. They all follow the natural contours of the land, have modest footprints, and are completely unique designs with natural exposed woods and substantial glazing. They are the basis of a highly unique neighborhood in Morro Bay and are irreplaceable.

**The proposed project is 3,000 sq. ft. with a 25ft. high roof and is sited on the highest point of the lot. The bulk/scale of the structure is clearly incompatible with the majority of existing SFR's along Main Street from the State Park to Acacia St.**

**If built as currently proposed—this project will block views for multiple surrounding homes, de-value adjacent properties of "character", and set a precedent for future homes of this scale to be built along this unique section of Main Street. Once this precedence is established---it will be difficult to contain.**

**REQUESTED RELIEF OR ACTION:**

Mitigate the bulk/scale issues by:

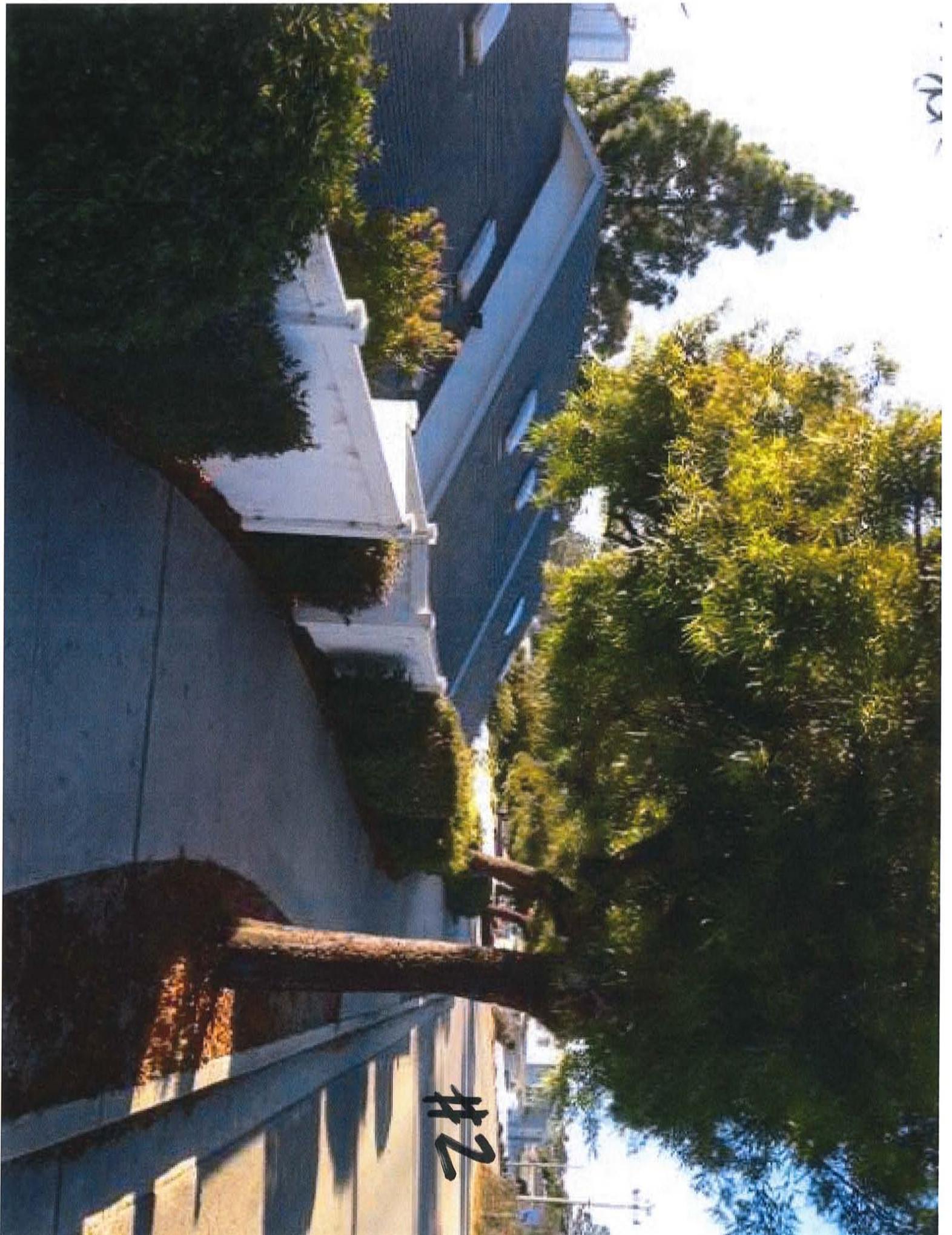
1. Reducing the size of the house (including garage) to a maximum of 2,400 sq. ft.
2. Set the maximum roof height at 20 ft. above average natural grade. (This could easily be accomplished through a combination of excavation of soils and re-design of roof structure).

Mitigate the neighborhood character issues by:

1. Incorporating exterior building materials (stained wood, CMU, roof eave details, window configurations, etc.) that reflect design elements of the adjacent properties of "character".

井





#2



#3



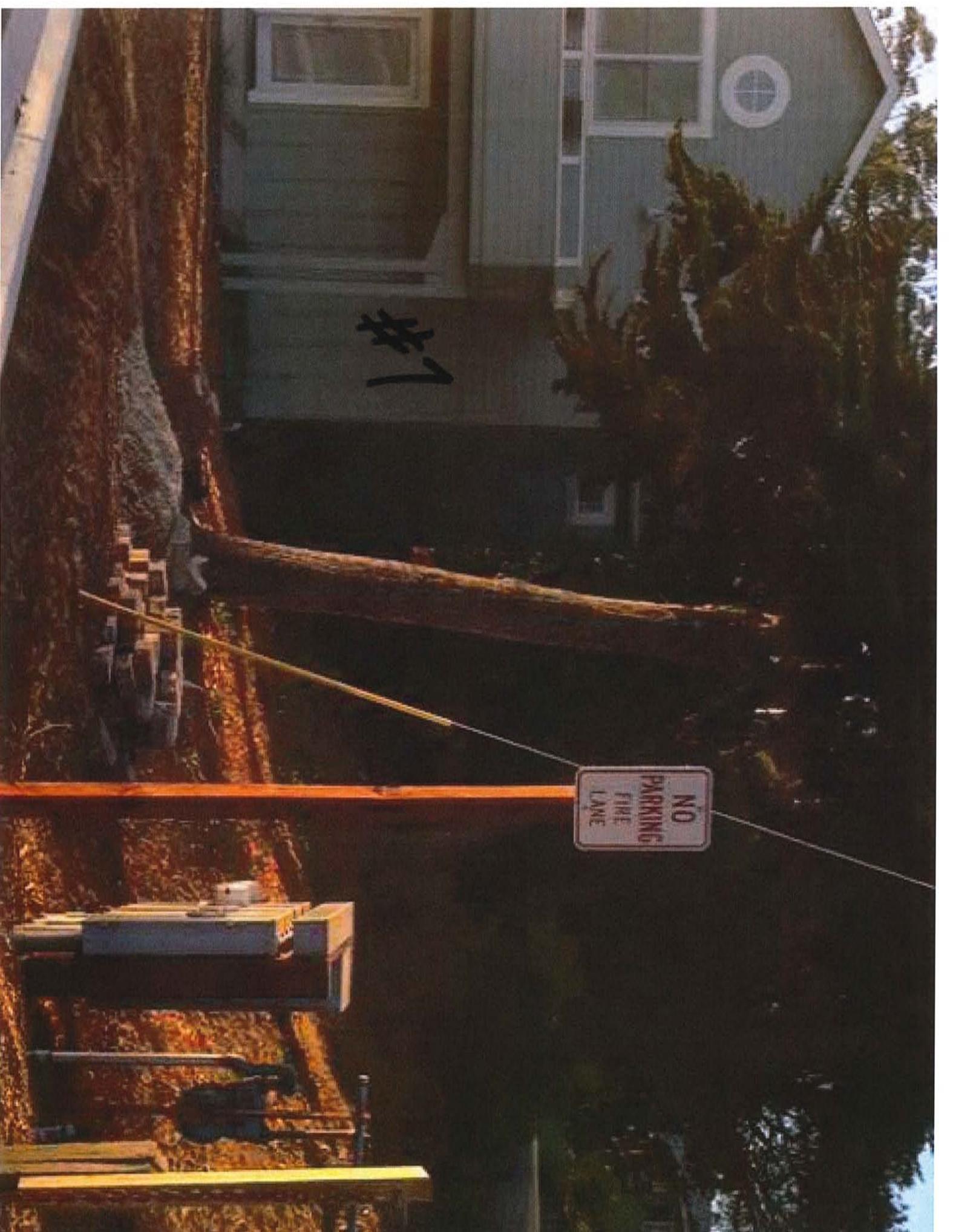
#4



#5



#6



#8





#9



#10



#11

#12





#14



# EXHIBIT E



## Materials Legend

1. Composition Shingle Roofing  
Woodmore Collection  
Woodcrest/Sycamore
2. Eaves and Trim  
SW0050 - Classic Light Buff  
(Sherwin Williams)
3. Hardy Plank & Shingle Siding  
SW0032 - Needle Point Navy  
(Sherwin Williams)
4. Wood Doors  
SW0050 - Classic Light Buff  
(Sherwin Williams)
5. Vinyl Windows  
Milgard White



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## Wammack Residence

Lot 6, Block 3, Morro Rock Park  
505 Walnut Ave., Morro Bay, CA

Mel & Marilyn Wammack

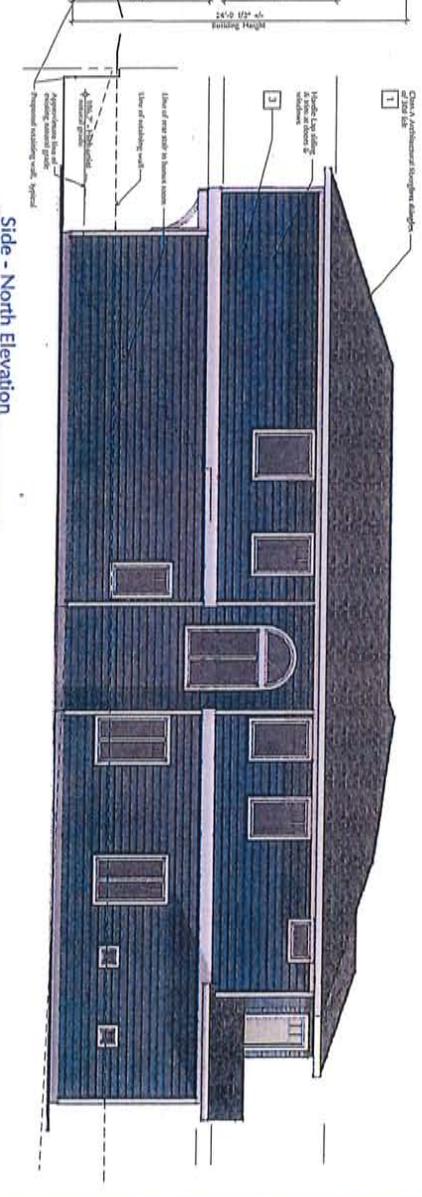
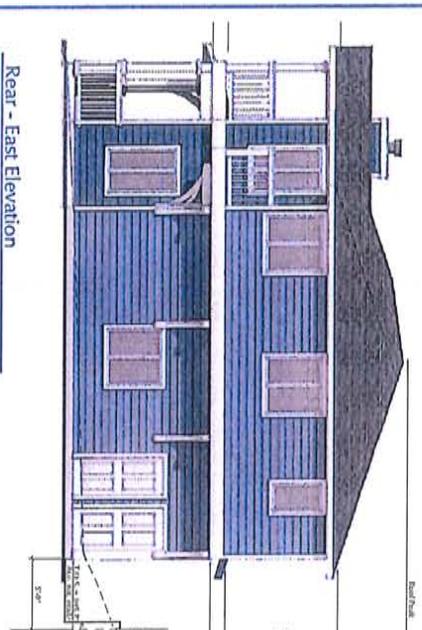
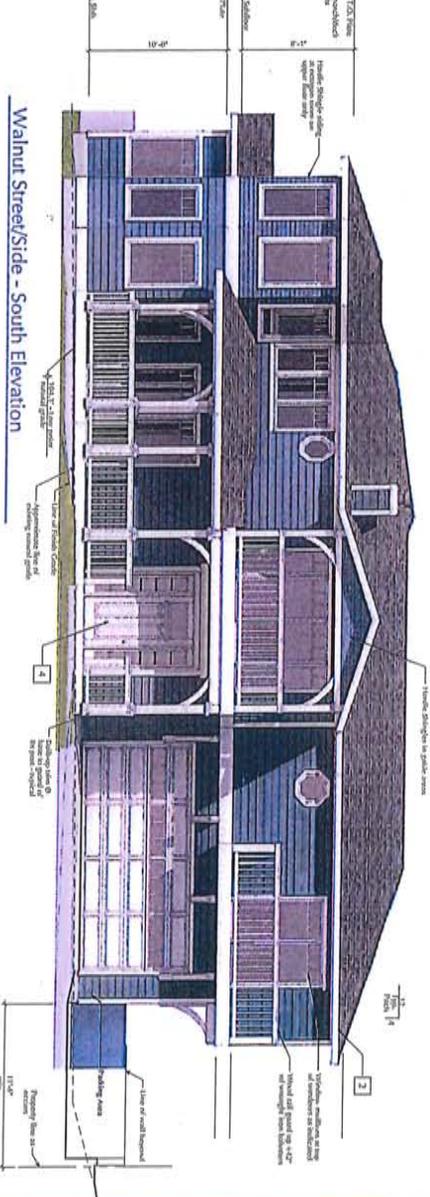
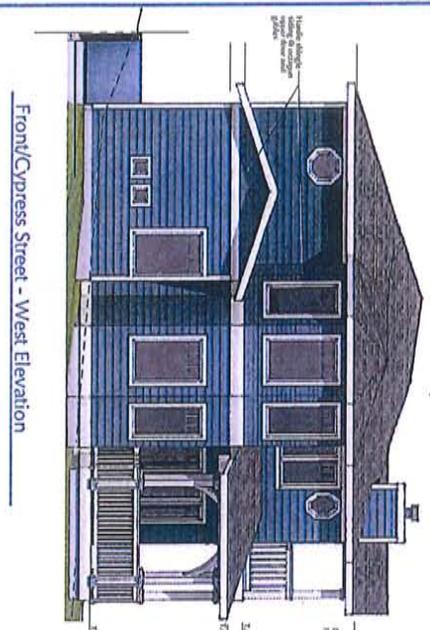
## Jeff Schneiderei Architect

580 Dolliver Street  
Pismo Beach, CA 93449  
www.jschneidereiarchitects.com

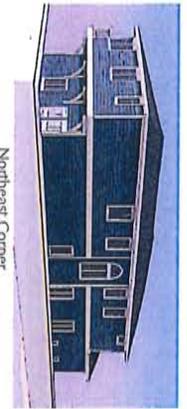
424 652 8034 LA  
805 773 8333 Pismo  
Web  
© 2014

C-22524 Architecture  
B-724046 Construction  
LEED AP Sustainability





- Materials Legend**
- 1 Composite Siding (Blue)
  - 2 Composite Siding (White)
  - 3 Painted Siding (Blue)
  - 4 Painted Siding (White)
  - 5 Painted Siding (Dark Blue)
  - 6 Painted Siding (Dark Blue)
  - 7 Painted Siding (Dark Blue)
  - 8 Painted Siding (Dark Blue)
  - 9 Painted Siding (Dark Blue)
  - 10 Painted Siding (Dark Blue)
  - 11 Painted Siding (Dark Blue)
  - 12 Painted Siding (Dark Blue)
  - 13 Painted Siding (Dark Blue)
  - 14 Painted Siding (Dark Blue)
  - 15 Painted Siding (Dark Blue)
  - 16 Painted Siding (Dark Blue)
  - 17 Painted Siding (Dark Blue)
  - 18 Painted Siding (Dark Blue)
  - 19 Painted Siding (Dark Blue)
  - 20 Painted Siding (Dark Blue)



**CITY OF MORRO BAY**  
**PLANNING DIVISION**  
**EXTERIOR ELEVATIONS**

CASE NO. CPD 417

**APPROVED** *[Signature]*  
**CLEARED** *[Signature]*  
 9.16.17

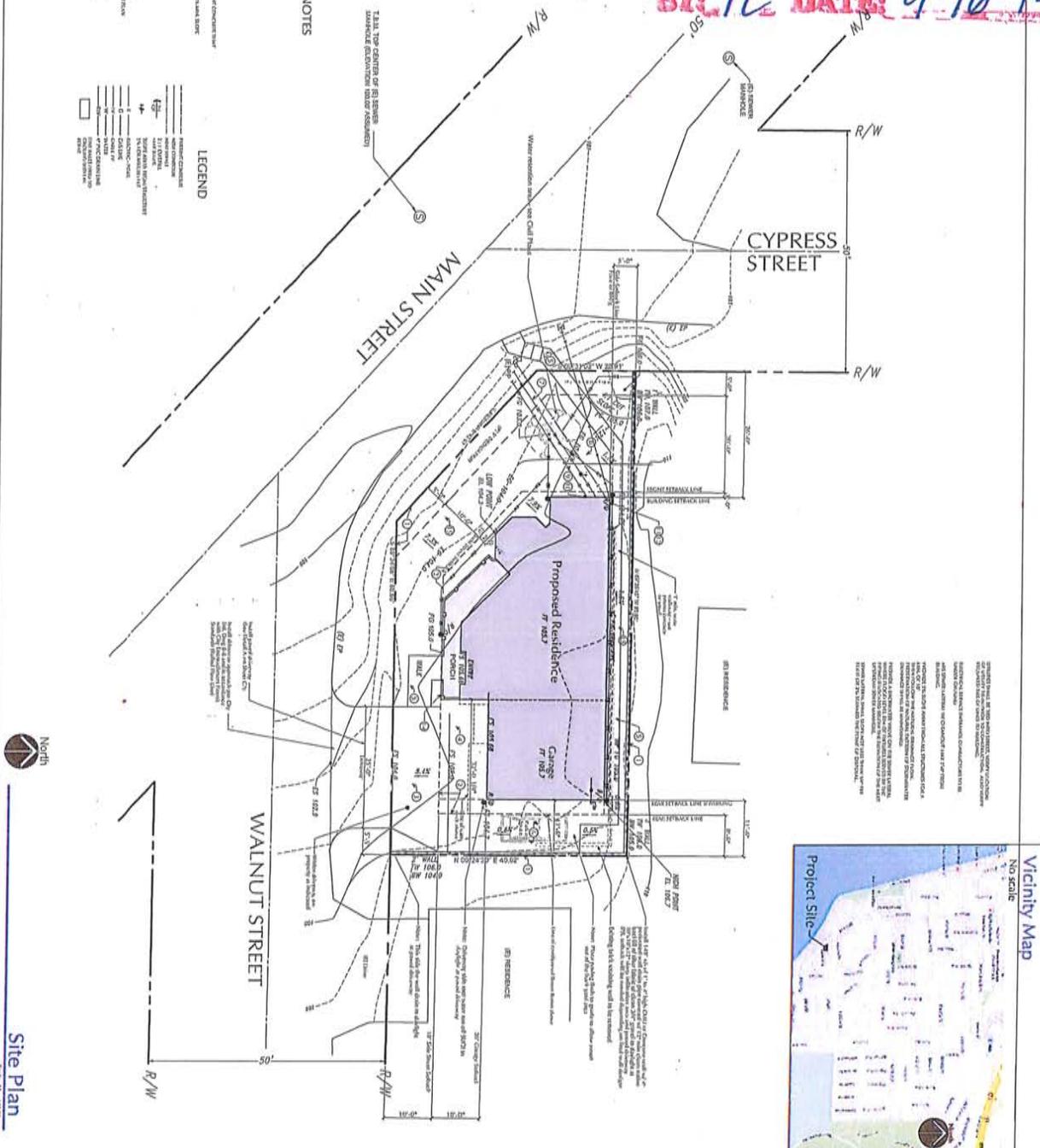


**CITY OF MORRO BAY  
PLANNING DIVISION**

**CASE NO. CPD 417**  
**APPROVED ✓ CLEARED**  
**BY: PC DATE: 9.16.14**

- KEY NOTES**
- 1 PROPERTY LINE
  - 2 EXISTING STRUCTURE
  - 3 NEW CONSTRUCTION
  - 4 EXISTING DRIVE
  - 5 DRIVEWAY
  - 6 EXISTING DRIVEWAY
  - 7 DRIVEWAY TO BE RELOCATED
  - 8 DRIVEWAY TO BE WIDENED
  - 9 DRIVEWAY TO BE CLOSED
  - 10 DRIVEWAY TO BE OPENED
  - 11 DRIVEWAY TO BE RECONSTRUCTED
  - 12 DRIVEWAY TO BE RELOCATED AND WIDENED
  - 13 DRIVEWAY TO BE RELOCATED AND CLOSED
  - 14 DRIVEWAY TO BE RELOCATED AND OPENED
  - 15 DRIVEWAY TO BE RELOCATED AND RECONSTRUCTED
  - 16 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED
  - 17 DRIVEWAY TO BE RELOCATED AND WIDENED AND OPENED
  - 18 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND OPENED
  - 19 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND CLOSED
  - 20 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND OPENED AND CLOSED

- LEGEND**
- 1 EXISTING DRIVEWAY
  - 2 NEW DRIVEWAY
  - 3 DRIVEWAY TO BE RELOCATED
  - 4 DRIVEWAY TO BE WIDENED
  - 5 DRIVEWAY TO BE CLOSED
  - 6 DRIVEWAY TO BE OPENED
  - 7 DRIVEWAY TO BE RECONSTRUCTED
  - 8 DRIVEWAY TO BE RELOCATED AND WIDENED
  - 9 DRIVEWAY TO BE RELOCATED AND CLOSED
  - 10 DRIVEWAY TO BE RELOCATED AND OPENED
  - 11 DRIVEWAY TO BE RELOCATED AND RECONSTRUCTED
  - 12 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED
  - 13 DRIVEWAY TO BE RELOCATED AND WIDENED AND OPENED
  - 14 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND OPENED
  - 15 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND CLOSED
  - 16 DRIVEWAY TO BE RELOCATED AND WIDENED AND RECONSTRUCTED AND OPENED AND CLOSED



**Sheet Index**

Sheet	Description	1 of 3
1	General Information & Site Plan	1 of 3
2	Excavator Elevations	2 of 3
3	Floor Plans	3 of 3

**Project Data**

Project Description: New Single Family Residence  
 Address: 1014 Cypress Street, Morro Bay, CA 94052  
 APN: 066-353-006  
 Zone: R-1  
 Lot Area: 0.112 Acres 48,100 sq ft  
 Subdiv: Frontside - Walnut Residential  
 Legal Description: 20' Frontside - Walnut Residential  
 10' Frontside - Walnut Residential  
 10' Frontside - Walnut Residential  
 11.57' (Frontal) 5' (Rear) Frontal

**Building Area:**  
 Covered Area: 1,025 sq ft  
 Second Floor: 990 sq ft  
 Total Proposed Living Space: 2,475 sq ft

**Foundation and Non-Conditioned Space:**  
 Garage area: 460 sq ft  
 Area of Foundation Deck: 162 sq ft  
 Bonus Room Deck: 58 sq ft

**Structure:**  
 2 Story  
 2 1/2" - 4" - 1/4" - 1/2" (heavy weight grout)

**Contact Information**

Overseer/Applicant: Mel & Marilyn Wammack  
 16851 Avenida Financia  
 Pismo Beach, CA 93450  
 Phone: 619.301.2432

Architect: Jeff Schneider  
 5100 Oakwood Street  
 Pismo Beach, CA 93449  
 Phone: 619.301.2432  
 Fax: 619.301.2432

Contractor: Rob Reynolds Construction  
 6223 Windsor Road  
 Pismo Beach, CA 93449  
 Phone: 619.301.2432  
 Fax: 619.301.2432

Soils Engineer: Jackson Geotechnical Services, LLC  
 P.O. Box 4814  
 Pismo Beach, CA 93449  
 Phone: 619.301.2432  
 Fax: 619.301.2432

**Site Plan**  
 2009-11-10-09

## RESOLUTION NO. PC 19-14

A RESOLUTION OF THE MORRO BAY PLANNING COMMISSION APPROVING THE COASTAL DEVELOPMENT PERMIT (CP0-417) FOR THE CONSTRUCTION OF A NEW TWO-STORY 2,935 SQUARE- FOOT SINGLE-FAMILY RESIDENCE WITH A TWO-CAR GARAGE, AN ATTACHED SECONDARY UNIT, AND 272 SQUARE FEET OF PORCH AND DECKING WITH A THIRD OPEN PARKING SPACE AT 505 WALNUT STREET.

**WHEREAS**, the Planning Commission of the City of Morro Bay conducted a public hearing at the Morro Bay Veteran's Hall, 209 Surf Street, Morro Bay, California, on August 19, 2014, for the purpose of considering Coastal Development Permit #CP0-417, and continued review until September 16, 2014; and

**WHEREAS**, notices of said public hearings were made at the time and in the manner required by law; and

**WHEREAS**, the Planning Commission has duly considered all evidence, including the testimony of the appellant and testimony of the applicant, interested parties, and the evaluation and recommendations by staff, presented at said hearing.

**NOW, THEREFORE, BE IT RESOLVED** by the Planning Commission of the City of Morro Bay as follows:

**Section 1: Findings.** Based upon all the evidence, the Commission makes the following findings:

### **California Environmental Quality Act (CEQA)**

1. Pursuant to the California Environmental Quality Act, the Director has found the project as proposed categorically exempt under Section 15303, Class 3(a), "New Construction or Conversion of Small Structures," because the project is a single-family home with an attached secondary dwelling in a residential zone and does not have a significant effect on the environment.

### **Coastal Development Permit Findings**

2. The Planning Commission finds the development of a new single-family residence with an attached secondary dwelling unit is consistent with the applicable provisions of the General Plan and certified Local Coastal Program.
3. The Planning Commission finds the project, as conditioned, is consistent with the character of the neighborhood in which it is located. It is surrounded by compatible uses of low density residential development; has similar bulk and scale as nearby structures; and like other structures in the neighborhood, the proposed project is two stories and has an attached two car garage.

4. The Planning Commission finds the development of a new single-family residence and attached secondary dwelling unit will not cause any health and safety concerns, and will not impact neighboring uses, environmentally sensitive habitat areas, or otherwise create significant impacts.

**Section 2. Action.** The Planning Commission does hereby approve Coastal Development Permit #CP0-417 subject to the following conditions:

### STANDARD CONDITIONS

1. This permit is granted for the land described in the staff report dated September 16, 2014, for the project at 505 Walnut Street depicted on plans dated August 28, 2014, on file with the Public Services Department, as modified by these conditions of approval, and more specifically described as follows: Site development, including all buildings and other features, shall be located and designed substantially as shown on Planning Commission approved plans submitted for CP0-417, unless otherwise specified herein.
2. Inaugurate Within Two Years: Unless the construction is commenced not later than two (2) years after the effective date of this Resolution and is diligently pursued, thereafter, this approval will automatically become null and void; provided, however, that upon the written request of the applicant, prior to the expiration of this approval, the applicant may request up to two extensions for not more than one (1) additional year each. Any extension may be granted by the City's Public Services Director (the "Director"), upon finding the project complies with all applicable provisions of the Morro Bay Municipal Code (the "MBMC"), General Plan and certified Local Coastal Program Land Use Plan (LCP) in effect at the time of the extension request.
3. Changes: Minor changes to the project description or conditions of approval shall be subject to review and approval by the Public Services Director. Any changes to this approved permit determined, by the Director, not to be minor shall require the filing of an application for a permit amendment subject to Planning Commission review.
4. Compliance with the Law: (a) All requirements of any law, ordinance or regulation of the State of California, the City, and any other governmental entity shall be complied with in the exercise of this approval, (b) This project shall meet all applicable requirements under the MBMC, and shall be consistent with all programs and policies contained in the LCP and General Plan for the City.
5. Hold Harmless: The applicant, as a condition of approval, hereby agrees to defend, indemnify, and hold harmless the City, its agents, officers, and employees, from any claim, action, or proceeding against the City as a result of the action or inaction by the City, or from any claim to attack, set aside, void, or annul this approval by the City of the applicant's project; or applicants failure to comply with conditions of approval. Applicant understands and acknowledges the City is under no obligation to defend any legal actions challenging the City's actions with respect to the project. This condition and agreement shall be binding on all successors and assigns.

6. Compliance with Conditions: The applicant's establishment of the use or development of the subject property constitutes acknowledgement and acceptance of all Conditions of Approval. Compliance with and execution of all conditions listed hereon shall be required prior to obtaining final building inspection clearance and a Certificate of Occupancy, as may be required. Deviation from this requirement shall be permitted only by written consent of the Director or as authorized by the Planning Commission. Failure to comply with any of these conditions shall render this entitlement, at the discretion of the Director, null and void. Continuation of the use without a valid entitlement will constitute a violation of the MBMC and is a misdemeanor.
7. Compliance with Morro Bay Standards: This project shall meet all applicable requirements under the MBMC, and shall be consistent with all programs and policies contained in the LCP and General Plan of the City.
8. Conditions of Approval: The Findings and Conditions of Approval shall be included as a full-size sheet in the Building Plans.

#### **Planning Conditions:**

1. Boundaries and Setbacks: The property owner is responsible for verification of lot boundaries. At the time of foundation inspection, the property owner shall verify lot boundaries and building setbacks to the satisfaction of the City Planning Manager and City Building Official.
1. Height Certification: Prior to foundation inspection, a licensed land surveyor shall measure and inspect the forms and submit a letter to the City Planning Manager certifying the tops of the forms are in compliance with the finish floor elevations as shown on approved plans. Prior to either roof nail or framing inspection a licensed surveyor shall measure the height of the structure and submit a letter to the City Planning Manager, certifying the height of the structure is in accordance with the approved set of plans and complies with the height requirements of the Morro Bay, Municipal Code Section 17.12.310.
2. Dust Control: Prior to issuance of a grading permit, a method of control to prevent dust and wind blow earth problems, shall be submitted for review and approval by the Building Official. (MBMC Section 17.52.070)
3. Archaeology: In the event of the unforeseen encounter of subsurface materials suspected to be of an archaeological or paleontological nature, all grading or excavation shall immediately cease in the immediate area, and the find shall be left untouched until a qualified professional archaeologist, knowledgeable in local indigenous culture, or paleontologist, whichever is appropriate, is contacted and called in to evaluate and make recommendations as to disposition, mitigation or salvage. The developer shall be liable for costs associated with the professional investigation. (MBMC Section 17.48.310)

4. Secondary Unit Parking: The minimum width of the area between the face of the retaining wall along the eastern property line and the eastern face of the building shall be 11 feet to enable room for a viable parking space for the secondary unit.
5. Lighting: Prior to issuance of a building permit, the applicant shall submit an exterior lighting plan for review and approval by the City Planning Manager. The plan shall show all exterior lighting fixtures and locations and shall be subject to the following standards:
  - a. The point source of all exterior lighting shall be shielded from offsite views.
  - b. Exterior lighting shall be directed downward and shall use cut-off fixtures or shields.
  - c. Exterior lighting shall be designed not to focus illumination onto exterior walls.
  - d. Bright white-colored lighting shall not be used for exterior lighting.
6. Undergrounding: All utilities to the structure shall be undergrounded.
7. Retaining Walls: The retaining walls along the east and north property lines shall incorporate surface texture and be neutral in color. The project landscape plan shall include vegetation to mitigate the visual impact of the retaining wall especially as seen from the public streets. The landscape plan shall support vegetation to enable 50% coverage of the retaining wall within 5 years.
8. Fencing: Fencing is prohibited in the exterior yard setback along Main Street to avoid interference with traffic sight distance. Any project fencing elsewhere on site is subject to conformance with MBMC Section 17.48.100.
9. Landscaping: A complete landscape plan showing plant type, size, number, location, watering schedule, and method of maintenance shall be submitted with the building plans. Plant material shall be predominately native and drought tolerant. Planting within 10 feet of the Main Street property line shall not have a mature height of more than 18 inches to avoid interference with traffic sight distance.
10. Inspection: The applicant shall comply with all Planning conditions listed above and obtain a final inspection from the Planning Division at the necessary time in order to ensure all conditions have been met.

**Building Conditions:**

1. Prior to construction, the applicant shall submit a complete building permit application and obtain the required building permit.

**Fire Code Requirements:**

1. Fire Sprinklers. The new residence shall be equipped with an automatic fire sprinkler system, in accordance with MBMC Section 14.08.090(I)(2) and 2010 California

Residential Code, Section R313.

2. Carbon Monoxide Alarms. For new construction, an approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. (CRC 315)

**Public Works Conditions:**

1. Sewer Backwater Valve: Construction plans shall reflect that a sewer backwater valve shall be installed on site to prevent a blockage or maintenance of the municipal sewer main from causing damage to the proposed project. (MBMC Section 14.24.070).
2. Frontage improvements are required along Main Street (MBMC Section 14.44.020) Specific improvements include a street tree, curb, gutter and six-foot wide sidewalk with ADA compliant ramps at the corners. Building plans shall show the ultimate street improvements for the Main Street frontage. Developer may defer the installation of curb, gutter and sidewalk if deemed necessary to better coordinate construction with other planned improvements. If work is deferred, the required improvements shall be shown on the building plans with a note indicating deferral. A deferral agreement shall be recorded against the property prior to issuance of a building permit.
3. To provide sufficient right-of-way for frontage improvements, the property owner shall dedicate to the City a five-foot wide strip of lot frontage along Main Street to the satisfaction of the Public Works Director prior to issuance of a building permit.
4. Provide a standard erosion and sediment control plan (MBMC Section 12.04 & 14.48). The Plan shall show control measures to provide protection against erosion of adjacent property and prevent sediment or debris from entering the City right of way, adjacent properties, any harbor, waterway, or ecologically sensitive area. This Plan shall be provided with the Building Permit application.
5. Show the installation of a driveway approach per City of Morro Bay standards B-7 or B-8. Note that driveway width for this property shall not exceed 25'.
6. Install a 6-inch asphalt or concrete curb at the edge of pavement as shown on attached Exhibit 1.
7. Include the locations of the sewer lateral, water service, and water and sewer mains.
8. Grading and Drainage: Show existing and proposed topography and grading plan. Show drainage paths on the plans. Projects are encouraged to implement Low Impact Development (LID) feature.
9. A minimum of three street trees shall be planted in the front and exterior yard setbacks with consideration for traffic safety, sight distance, and views to the satisfaction of the Planning Manager and City Engineer.

10. Add the following Notes to the Construction Plans:

- a. No work within (or use of) the City's Right of Way shall occur without an encroachment permit. Encroachment permits are available at the City of Morro Bay Public Services Office located at 955 Shasta Ave. The Encroachment permit shall be issued concurrently with the building permit.
- b. Any damage, as a result of construction operations for this project, to City facilities, i.e. curb/berm, street, sewer line, water line, or any public improvements shall be repaired at no cost to the City of Morro Bay.

PASSED AND ADOPTED by the Morro Bay Planning Commission at a regular meeting thereof held on this 16th day of September, 2014 on the following vote:

AYES: Commissioners Michael Lucas, Richard Sadowski, and Gerald Luhr

NOES:

ABSENT:

ABSTAIN: Commission Chairperson Robert Tefft



Gerald Luhr, Acting Chairperson

ATTEST



Rob Livick, Planning Secretary

The foregoing resolution was passed and adopted this 16th day of September, 2014.

Proposed Residence  
FF 105.7

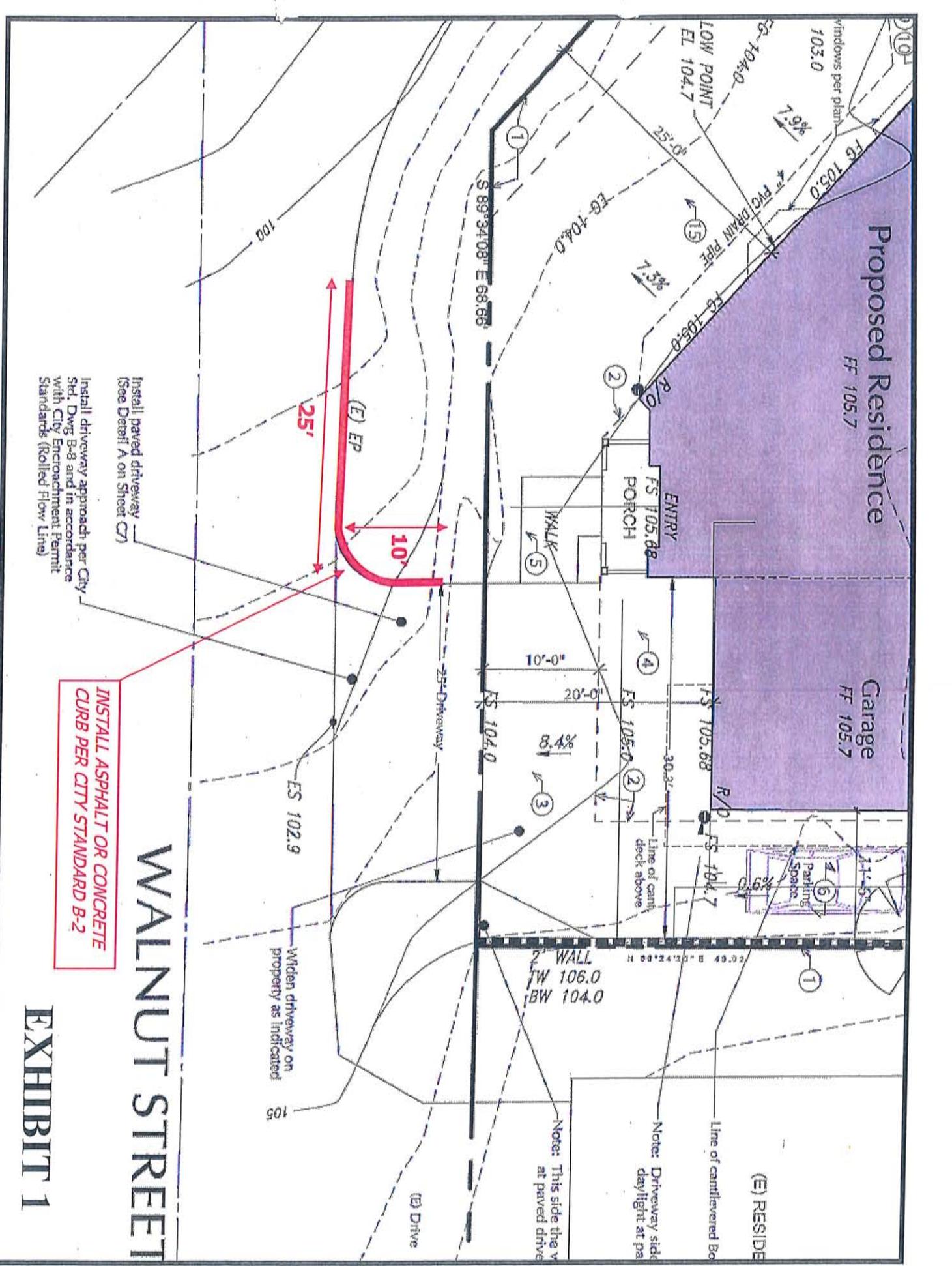
Garage  
FF 105.7

WALNUT STREET

INSTALL ASPHALT OR CONCRETE CURB PER CITY STANDARD B-2

EXHIBIT 1

Install paved driveway (See Detail A on Sheet C7)  
Install driveway approach per City Std. Dwg B-8 and in accordance with City Encroachment Permit Standards (Rolled Flow Line)





**CEQA Determination:** Categorically Exempt, Section 15303(a), Class 3  
**Staff Recommendation:** Conditional Approval  
**Staff Contact:** Whitney McIlvaine, Contract Planner, (805) 772-6211

Chairperson Tefft announced he would need to recuse himself and turned the meeting over to Vice Chairperson Luhr.

McIlvaine presented the staff report.

Commissioner Lucas and McIlvaine discussed the retaining wall. McIlvaine noted the condition is suggested to be revised to say “or other treatment as deemed appropriate by the Planning Commission.”

Commissioner Lucas asked if the condition to plant 3 street trees is a requirement along Main Street or a general requirement to replace trees being lost around town or site specific to this lot. McIlvaine replied it is site specific.

Vice Chairperson Luhr stated the wording on condition 8 was not clear if there is a requirement of 3 trees total or if it is 3 trees in the front and 3 in the exterior side yard setbacks.

Vice Chairperson Luhr and McIlvaine discussed condition 2 under Building.

Vice Chairperson Luhr opened Public Comment period.

Mel Wammack, Applicant, thanked the Commission for its suggestions and has taken them to heart, noting his Architect is here to answer questions.

Betty DeRosa, stated concern for the property values of her home immediately to the north of the project site and the ability to rent it. She stated the project, while compatible with other homes in the area, it is not compatible with the homes directly next to it, noting the house is really large.

Dorothy Cutter, Morro Bay resident, stated the design is very improved but it makes it look more massive. She requested there be no on-street parking on Main Street between Cypress and Walnut as well as no trees in that area.

Alex Beattie, Morro Bay resident, stated the project is too big and bulky. He stated the project should comply with the scenic resource protection policies in the Local Coastal Plan.

Jeff Heller, Morro Bay resident, stated this is the wrong house in the wrong place and wanted to know why there is a public hearing for this project when his remodel project did not require one. He stated he has a problem with the second unit, noting there would be more cars.

Jacob Wilcough, Morro Bay resident, stated there were improvements architecturally, but the house seems out of scale for the lot. He stated concern with the additional parking for the secondary unit.

Jeff Schneidereit, Architect, stated there are no one story restrictions for the lot. He stated the second floor has been set back to give the feeling of less mass, the view from Main Street will not be blocked, and the parking standard has been met.

Mel Wammack, Applicant, clarified what the view of the house from Main Street would look like.

Kathy Kellit, Morro Bay resident, stated she wanted to know what the material would be for the split block retaining wall.

Vice Chairperson Luhr closed Public Comment period.

McIlvaine responded to a couple of questions from the public regarding why there was a public hearing for this item and the parking requirement for the secondary unit.

Commissioner Sadowski and staff discussed what is being done at the staff level to address bulk and scale on projects.

Vice Chairperson Luhr and McIlvaine discussed the zoning definitions regarding front yard and side yard setbacks.

Commissioner Sadowski and Livick discussed the history of the appeal to Coastal Commission of the project at 280 Main.

Commissioner Sadowski stated the Architect did a good job of translating Commission comments from the last meeting and noted the parking is within the parameters.

Commissioner Lucas stated the parking for the second unit does not have a garage and is open, relieving the building's mass and noted that views are protected from the public street.

Commissioner Lucas stated if a 3 dimensional view of the house were inserted onto the picture of the site on Main Street from Mr. Beattie's presentation, it would show that the house to the right would loom larger than the proposed house in terms of roof lines and roof peaks.

Commissioner Lucas stated he does not know where the street trees would be located without affecting views.

Vice Chairperson Luhr concurred with several points Commissioner Lucas made, noting the front porch helps to bring articulation and break down the scale. He stated concern with trees blocking the views and requested the following requirements be included:

- The landscaping plan state native and drought tolerant plants be predominately featured and include a water use schedule; and
- The retaining wall should be covered with a certain percentage of vegetation.

Vice Chairperson Luhr stated he is concerned about sight lines on Cypress and Walnut merging in with Main Street and requested the Engineering Division review the sight lines after the project is completed to determine if no parking zones should be required.

Vice Chairperson Luhr, Commissioner Lucas and Livick discussed the street tree requirement in relation to views and sight distance.

**MOTION:** Commissioner Lucas moved to approve Coastal Development Permit CP0-417 for the construction of a new two-story 2,935 square-foot single-family residence with a two-car garage, an attached secondary unit, and 272 square feet of porch and decking with a third open parking space at 505 Walnut Street including the modifications discussed relative to the retaining wall, landscape plan, and street trees. Commissioner Sadowski seconded the motion and the motion passed unanimously. (3-0)

Vice Chairperson Luhr turned the meeting back over to Chairperson Tefft.

C. UNFINISHED BUSINESS

C-1 Current and Advanced Planning Processing List  
Staff Recommendation: Receive and File

Graham reviewed the work program with the Commissioners.

D. NEW BUSINESS - None

E. DECLARATION OF FURTUE AGENDA ITEMS – None

F. ADJOURNMENT

The meeting adjourned at 7:40 p.m. to the next regularly scheduled Planning Commission meeting at the Veteran's Memorial Building, 209 Surf Street, on Tuesday, October 7, 2014 at 6:00 p.m.

\_\_\_\_\_  
Robert Tefft, Chairperson

ATTEST:

\_\_\_\_\_  
Rob Livick, Secretary



AGENDA NO: B-1  
MEETING DATE: September 16, 2014

# Staff Report

**TO:** Planning Commissioners **DATE:** September 16, 2014  
**FROM:** Whitney McIlvaine, Contract Planner  
**SUBJECT:** Coastal Development Permit (CP0-417) for construction of a new single-family dwelling and a secondary dwelling unit at 505 Walnut Street

**RECOMMENDATION:**  
*CONDITIONALLY APPROVE THE PROJECT* by approving Planning Commission Resolution 19-14, which includes the Findings and Conditions of Approval for the project depicted on site development plans dated August 28, 2014.

**APPLICANT/AGENT:** Mel & Marilyn Wammack / Rob Reynolds

**LEGAL DESCRIPTION/APN:** 066-253-006

**PROJECT SETTING:**  
The project is located in central Morro Bay on the inland side of Main Street in a Single Family Residential zone (R-1). This property is currently an irregularly shaped vacant lot that is approximately 4,534 square feet in size with street frontage on three sides. Surrounding development consists mostly of two-story single-family residences. Houses in the area range in size from under 1,000 square feet to over 3,000 square feet.



Prepared By: \_\_\_\_\_ Department Review: \_\_\_\_\_

**PROJECT DESCRIPTION:**

The Applicant is requesting Planning Commission approval of a Coastal Development Permit for new construction of a single-family dwelling and an attached secondary dwelling unit on a vacant lot at 505 Walnut Street. The project site is within the California Coastal Commission appeal jurisdiction. Revised plans show a new two-story, 2,025 square-foot, single-family residence, a 460 square-foot garage, an attached 450 square-foot secondary unit, a ground-floor porch, and two upper-level decks. An open parking area for the secondary unit is shown on the east side of the garage. Total square footage of the structure is 2,935 plus 272 square feet of porch and deck areas.

**PREVIOUS REVIEW:**

**1. Recommended Architectural Changes:** On August 19, 2014, the Planning Commission continued review of this project with direction to redesign the Main Street façade to be less ponderous and include more articulation, possibly with the addition of a porch on the lower level. Commissioners specifically noted that they were looking for more interest and articulation and not necessarily more size and bulk.

The applicant has submitted revised plans that show a slightly reduced square footage (2,935 versus 2,992); a color change from turquoise to a gray-blue; a reduction in length of the northern building elevation from 66 feet to 56 feet 11 inches on the upper floor; and significant changes to the street facing facades that include a wrap-around porch, a five-sided tower element and a single-story extension for the kitchen. Porch roofing and the cantilevered space above the garage are supported with arched knee bracing.

The exterior design changes are reflected in modified interior floor plans. The square footage of the upper floor has been reduced and the square footage of the first floor has been enlarged. The additional area on the first floor has increase lot coverage from 38.5% to 41.2%, still below the maximum allowed coverage of 45%.

The images below show the previous design on the left and the revised design on the right. Overall, staff feels the changes are an improvement over the original design and in keeping with direction given by the Planning Commission.



Main Street Facade



Main Street Facade

Project compliance with Single Family Residential Zoning Ordinance standards is shown in the following table. The revised plans have a different setback along Main Street and a small increase in coverage.

<b><u>R-1: Single Family Residential Zoning Ordinance Standards</u></b>			
	<b>Standards</b>	<b>8-6-14 Plans</b>	<b>8-28-14 Plans</b>
<b>Front Yard Setback</b>	20 feet	20 feet from Cypress Avenue and Main Street	20 feet from Cypress Avenue
<b>Garage Setback</b>	20 feet	20 feet from Walnut Street	20 feet from Walnut Street
<b>Interior Yard Setback</b>	10% of average width of lot with 10 foot maximum and 5 foot minimum (5 feet)	5 feet	5 feet
<b>Exterior Yard Setback</b>	20% of average width of lot with 10 foot maximum and 5 foot minimum (10 feet)	10 feet from Walnut Street	10 feet from Walnut Street, 12 feet from Main Street
<b>Rear Yard Setback</b>	10% of average depth of lot with 10 foot maximum and 5 foot minimum (8.8 feet)	11 feet 6 inches	11 feet 6 inches
<b>Lot Coverage</b>	45% allowed	38.5%	41.2%
<b>Height</b>	25 feet	24 feet	24 feet
<b>Parking</b>	2 covered and enclosed spaces plus one uncovered space	2 covered and enclosed spaces plus one uncovered space	2 covered and enclosed spaces plus one uncovered space

**2. Possible Intersection Changes:** The Commission also directed staff to review sight distance and parking at Walnut and Main Streets and at Cypress and Main Streets. Public Works Engineering staff have reviewed both intersections and determined there is no sight distance concern at this time, but recommends that any planting within 10 feet of the project's property line along Main Street be no higher than 18 inches and that fencing be prohibited in the exterior yard setback along Main Street. (Planning Conditions 8 and 9 in the Resolution) The project would have the effect of eliminating one informal parking space along the site's Walnut Street frontage. To further control parking, Public Works staff recommends installation of a curb as shown on Exhibit 1.

**ENVIRONMENTAL DETERMINATION:** Pursuant to the California Environmental Quality Act the project is categorically exempt pursuant Section 15303, Class 3 for New Construction or Conversion of Small Structures. The exemption provides for the construction of up to three single-family residential structures in an urbanized area.

**PUBLIC NOTICE:** Notice of this item was published in the San Luis Obispo Tribune newspaper on August 8, 2014 and all property owners of record within 300 feet and occupants within 100 feet of the subject site were notified of the August 19, 2014 public hearing. Because the Commission continued review to date certain, no further public notice was required.

**CONCLUSION:** The project constitutes infill residential development in an urbanized area of the City and meets the development standards of the zoning district, including height, lot coverage, parking and setbacks. The project is not unlike other newer residential construction in the vicinity, which is typically two-story and more than 2,500 square feet in size. Overall, the surrounding neighborhood exhibits a variety of dwelling sizes, architectural styles, and building materials. As revised, the house design is appropriate for its location along this stretch of Main Street, which serves as the southern entry to the City.

Therefore, staff recommends Planning Commission conditionally approve the requested Coastal Development Permit #CP0-417 for new construction of a single-family residence and secondary unit at 505 Walnut.

**ALTERNATIVE ACTIONS:** As an alternative to the recommended action, the Planning Commission may:

1. Deny the project and direct staff to return with a resolution for denial.
2. Continue with direction to staff and/or the applicant.

**EXHIBITS:**

Exhibit A - Planning Commission Resolution 19-14  
Exhibit B - 8-6-14 Plan Reductions  
Exhibit C - 8-28-14 Plan Reductions  
Exhibit D - 8-19-14 Planning Commission minutes  
Exhibit E(1) - Public Works recommended curb  
Exhibit F - 8-19-14 Planning Commission staff report

# EXHIBIT B of EXHIBIT H

## EXHIBIT B of EXHIBIT H

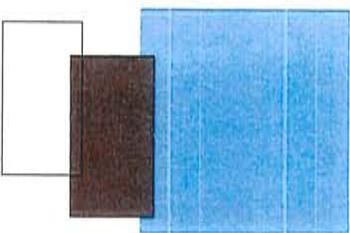


### Materials Legend

- 1. Composition Shingle Roofing  
Woodmore Collection  
Woodcrest/Sycamore
- 2. Eaves and Trim  
BWC-04 Beach House White (Behr)
- 3. Hardy Plank Siding  
P460-3 Soft Turquoise (Behr)
- 4. Wood front doors (dark stain)  
SW 3115 Bistro Walnut
- 5. Vinyl Windows  
Milgard White



4



**RECEIVED**  
**AUG 08 2014**  
 City of Morro Bay  
 Public Services Department

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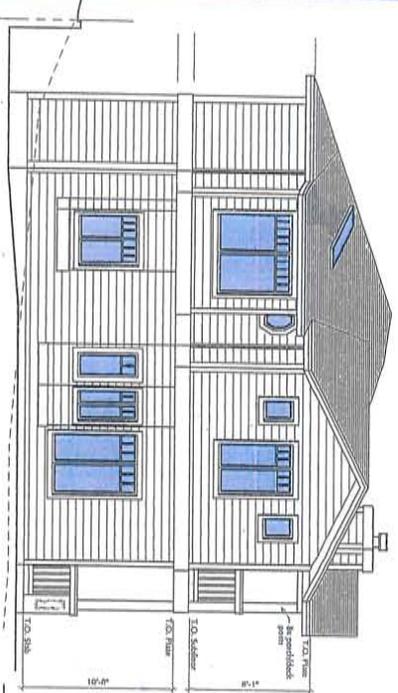
**Wammack Residence**  
 Lot 6, Block 3, Morro Rock Park  
 505 Walnut Ave., Morro Bay, CA  
 Mel & Marilyn Wammack

**Jeff Schneiderit Architect**

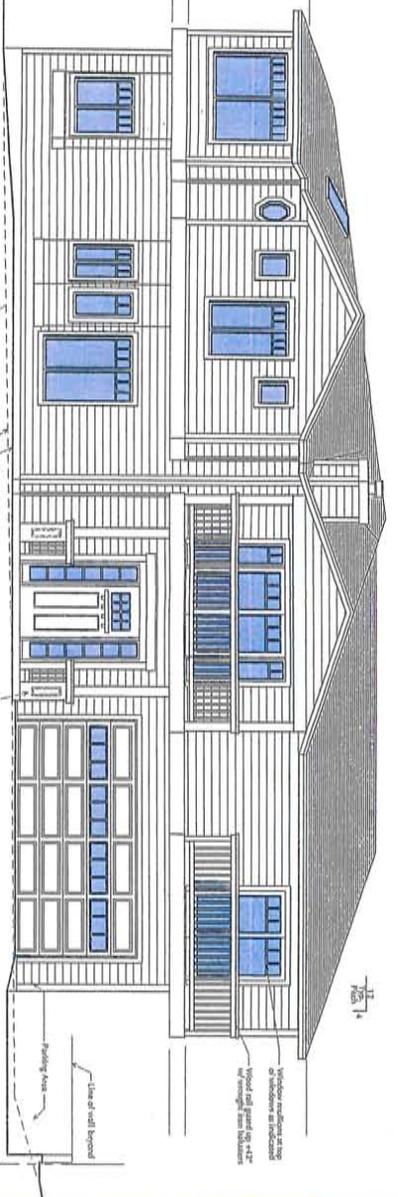
500 Delliver Street  
 Pismo Beach, CA 93449  
 424 652 8034 LA  
 805 773 8333 Pismo  
[www.jschneideritarchitects.com](http://www.jschneideritarchitects.com)

C-23924 Architecture  
 B-724046 Construction  
 LEED AP Sustainability





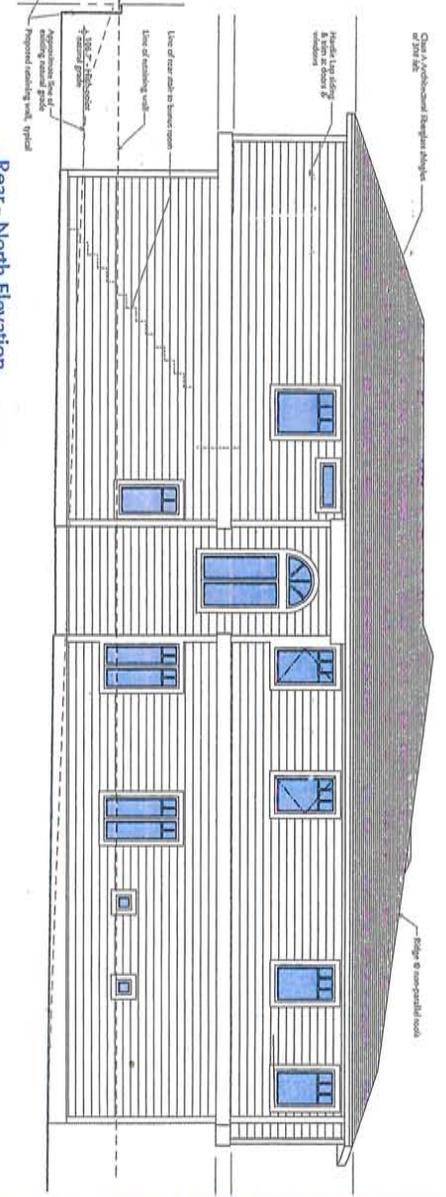
Left - West Elevation



Front - South Elevation

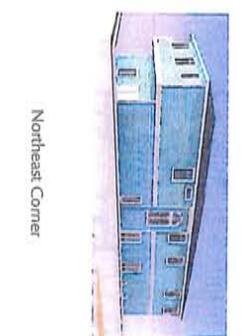


Right - East Elevation

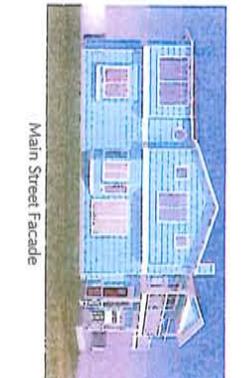


Rear - North Elevation

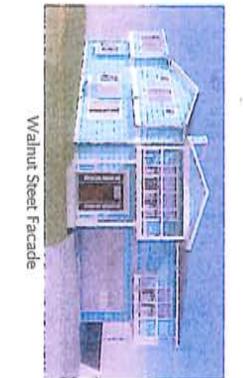
- Materials Legend**
- 1 Composite Shingle Roofing
  - 2 Wood Siding
  - 3 Siding and Trim
  - 4 Vinyl Siding
  - 5 Vinyl Siding
  - 6 Vinyl Siding



Northeast Corner



Main Street Facade



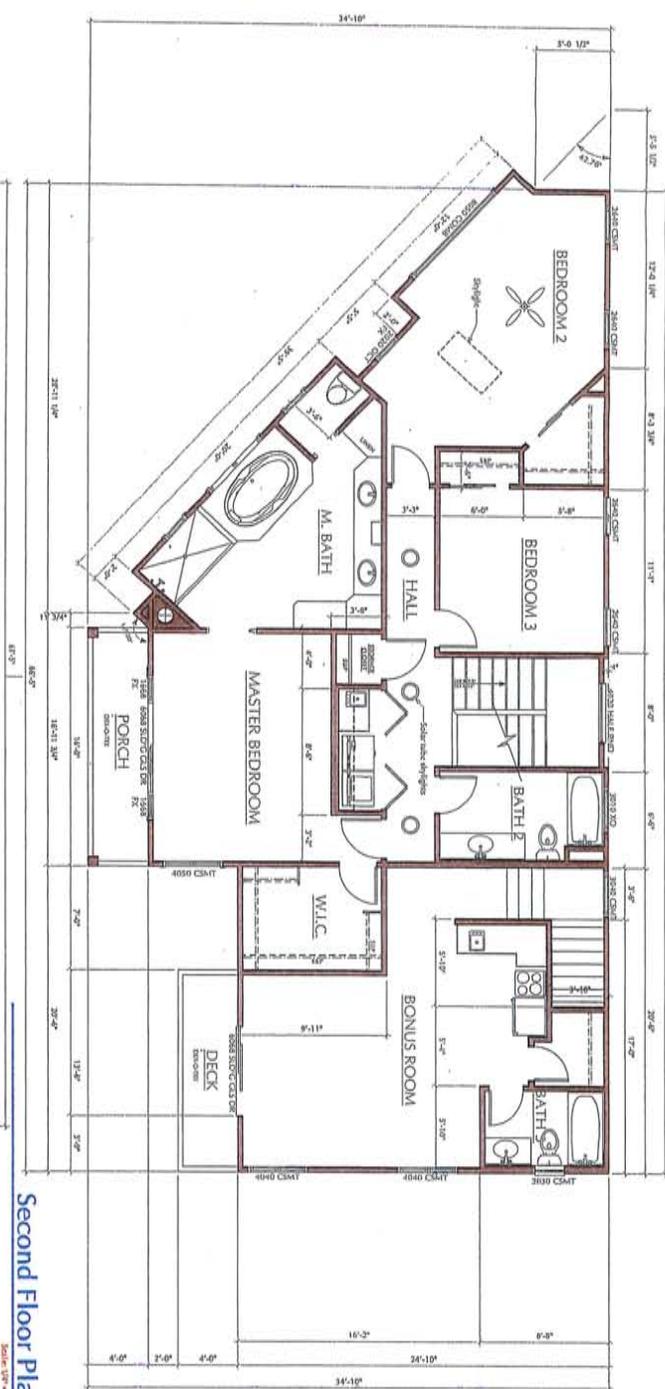
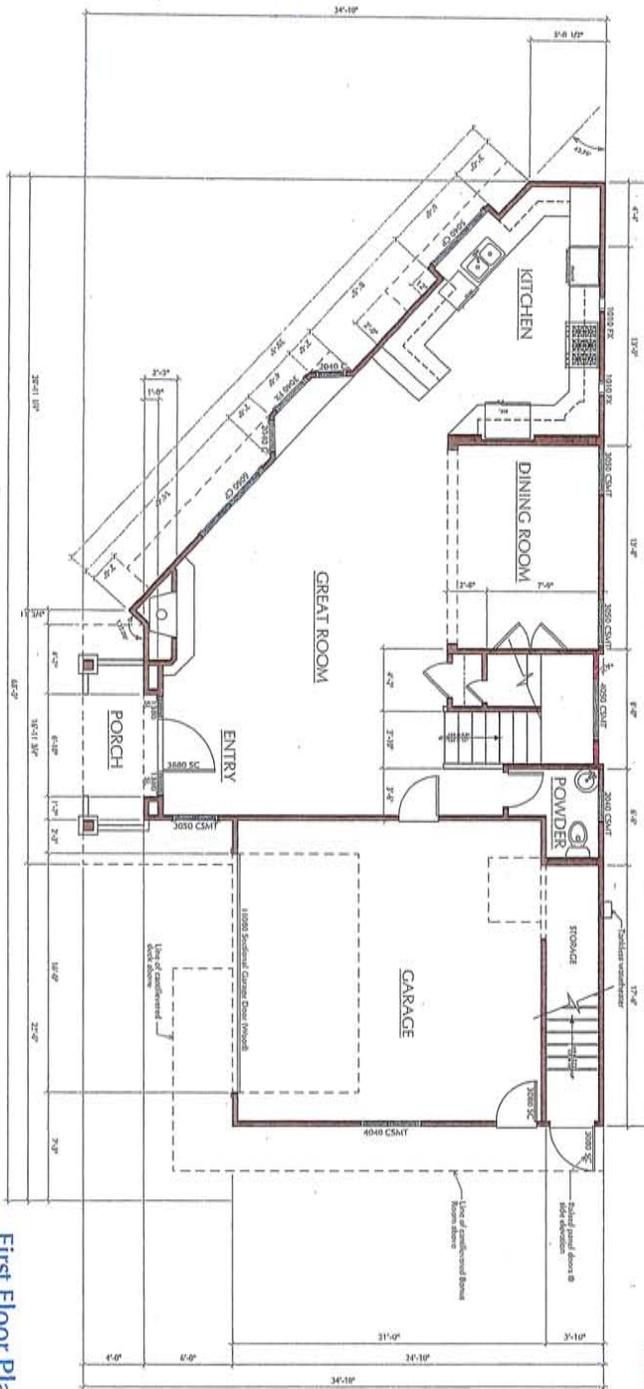
Walnut Street Facade



Walnut Street @ Southeast Corner

Exterior Elevations

Scale: 1/8" = 1'-0"



First Floor Plan  
Scale: 1/8" = 1'-0"

Second Floor Plan  
Scale: 1/8" = 1'-0"





**MOTION:** Vice Chairperson Luhr moved to approve the consent calendar with the correction to the August 5 minutes as noted by Chairperson Tefft. Commissioner Sadowski seconded the motion and the motion passed unanimously. (4-0)

## PUBLIC HEARINGS

### B-1 Case No.: #CP0-417

**Site Location:** 505 Walnut Street, Morro Bay, CA

**Applicant:** Mel & Marilyn Wammack

**Project Description:** Request for a Coastal Development Permit to construct a two-story, 2,120 square-foot primary dwelling, and an attached 442 square-foot secondary unit over a 460 square foot garage on a vacant 4,534 square-foot lot at the corner of Walnut and Main Streets. This project is located in the Coastal Commission appeal jurisdiction on property zoned Single Family Residential (R-1).

**CEQA Determination:** Categorically Exempt, Section 15303(a), Class 3

**Staff Recommendation:** Conditional Approval

**Staff Contact:** Whitney McIlvaine, Contract Planner, (805) 772-6211

Chairperson Tefft stated he has a conflict of interest, noting he will be stepping down and turn the meeting over to Vice Chairperson Luhr. Chairperson Tefft left the dais.

McIlvaine presented the staff report.

Commissioner Lucas and McIlvaine discussed the cantilevers in relation to rear yard setback and lot coverage.

Commissioner Sadowski asked if there are cantilevers on only three sides of the building. McIlvaine replied yes.

Vice Chairperson Luhr and McIlvaine discussed the secondary unit parking and where in the setbacks it is allowed.

Vice Chairperson Luhr and McIlvaine discussed the property to the north and if it would be developed.

Vice Chairperson Luhr and McIlvaine discussed the policies used to review the project.

Vice Chairperson Luhr opened Public Comment period.

Mel Wammack, Applicant, stated the Architect, Builder and he are available for questions.

Jeff Fuller, Morro Bay resident, stated the project is not compatible with the neighborhood, noting it is too large and allows for a secondary unit.

Alex Beady, Morro Bay resident, stated the secondary unit is substandard in size for low income housing and believes it functions as a duplex according to how they are defined in the code.

Martin Moje, Morro Bay resident, expressed concern with parking congestion, EMS access, the secondary unit and size of the building.

Dorothy Cutter, Morro Bay resident, expressed concerns with parking congestion and the house color.

Cathy Kellit, Morro Bay resident, stated she supports the bonus room, but expressed concern with the second unit parking space as configured.

Betty DeRosa, Morro Bay resident, stated the house is too big for the neighborhood and expressed concern with the parking as traffic goes too fast in the area.

Jacob Volcough, Morro Bay resident, expressed concerns with parking and street access, height mass and bulk of the project, and the secondary unit.

Jeff Schneidereit, Architect, stated the Applicant should not be penalized for parking issues from other properties, the massing of the house is consistent with other developed lots in the area, and the height will be offset by site grading.

Mel Wammack, Applicant, stated they have complied with the regulations for the project, and with regard to parking, he suggested painting the curb red.

Marilyn Wammack, Applicant, stated the secondary unit is not intended to be a rental unit but a place to use when family visits, and they are open to changing the house color.

Vice Chairperson Luhr closed Public Comment period.

Commissioner Lucas stated the Applicant has made the front yard setback as large as possible and the parking issues are a legacy of this area. He noted the Walnut side of the house looks fine but the Main Street side is big.

Commissioner Sadowski concurred with Commissioner Lucas regarding the Main Street elevation.

Commissioner Sadowski and McIlvaine discussed how the secondary unit name changed from bonus room to secondary unit.

Vice Chairperson Luhr and McIlvaine discussed minimum lot size for granny units.

Vice Chairperson Luhr, McIlvaine and Livick discussed the setbacks in relation to the 5 foot dedication from the property to Main Street and future public improvements.

Vice Chairperson Luhr stated he would like to see more variation in the material and cladding, noting that if a skirting of stonework were used it would break down the mass and visual height of the building.

Vice Chairperson Luhr expressed concern with sight distance and stated he would like a condition of a no parking zone of 25-30 feet from corner on Walnut and Cypress.

Commissioner Lucas and Livick discussed how Walnut might enter Main when future public improvements are designed for installation.

Commissioner Lucas stated he would be supportive of the 20 feet off the original property line and if there was a porch along the lower level as it would cut the building façade.

Commissioner Lucas stated support to request reconsideration of Main Street elevation and continue the project.

Vice Chairperson Luhr re-opened Public Comment period.

Vice Chairperson Luhr, McIlvaine, Wammack, and Schneiderei discussed the setback off of Main Street.

Vice Chairperson Luhr closed Public Comment period.

**MOTION:** Commissioner Lucas moved to continue the project to the September 16, 2014 Planning Commission meeting with a recommendation the Applicant redesign the Main Street façade taking into account the setbacks and testimony from tonight. Commissioner Sadowski seconded the motion.

Vice Chairperson Luhr clarified to the Applicant and Architect the Commission is looking for more articulation; not more size and bulk.

Vice Chairperson Luhr stated staff should consider no parking zones from the corners of Walnut and Cypress to alleviate some of the traffic hazard.

The motion passed unanimously. (3-0)

Chairperson Tefft returned to the dais and Vice Chairperson Luhr turned the meeting over the Chairperson Tefft.

#### UNFINISHED BUSINESS

C-1 Current and Advanced Planning Processing List  
Staff Recommendation: Receive and File

Graham reviewed the work program with the Commissioners.

#### D. NEW BUSINESS

D-1 Rear-yard Setback Interpretation

Graham presented the staff report.

Chairperson Tefft clarified that this would be guidance for future staff unless the Commission modifies the interpretation.

**MOTION:** Vice Chairperson Luhr moved to adopt PC Resolution No. 20-14. Commissioner Lucas seconded the motion and the motion passed unanimously. (4-0)

D-2 Centennial Stairway Project Concepts

Livick presented the staff report.

Chairperson Tefft, Vice Chairperson Luhr, and Livick discussed the sales agreement relating to who approves what type of lift station to be installed.

Chairperson Tefft clarified the drawings being reviewed are concept only.

Chairperson Tefft and Livick discussed the mid-level landing area and ADA requirements.

Commissioner Sadowski and Livick discussed the timing of installation of the lift in relation to the sale of the property.

Vice Chairperson Luhr stated this has been talked about since the 1970's as being the connection point between the Embarcadero and Downtown and has always been talked about as being a funicular, noting he does not support the concepts brought forward.

Commissioner Lucas stated the idea of a funicular is an event that would draw people, noting that if it has to be an elevator, to make it the most basic steel and glass type, focusing on the view and not another architectural piece in what is one of the best view corridors we have.

Commissioner Sadowski stated we are a tourist area and it should be an event, not a box.

Chairperson Tefft agreed with the other Commissioners regarding the funicular, noting that the design in Exhibit A needs a lot of improvement, and there should be no stop at the mid-level landing.

Chairperson Tefft stated if the City has to go with an elevator that it be somewhere between Exhibit B and C, noting the Centennial Stairway should be preserved.

Livick clarified there was consensus from the Commission:

- A funicular is preferred as this is an important connection between the Downtown and the Embarcadero that should be an event, not a ride in a box;
- If the City had to do an elevator, a minimal approach is best and incorporate the Centennial Stairway; and
- Make sure it is a public feature and does not give the appearance of being part of a private building.

#### E. DECLARATION OF FURTUE AGENDA ITEMS

- Accessory Structure Setbacks

#### F. ADJOURNMENT

The meeting adjourned at 8:00 p.m. to the next regularly scheduled Planning Commission meeting at the Veteran's Memorial Building, 209 Surf Street, on Tuesday, September 2, 2014 at 6:00 p.m.

\_\_\_\_\_  
Robert Tefft, Chairperson

ATTEST:

\_\_\_\_\_  
Rob Livick, Secretary

# EXHIBIT F of EXHIBIT H



AGENDA NO: B-1

MEETING DATE: August 19, 2014

## Staff Report

**TO:** Planning Commissioners

**DATE:** August 19, 2014

**FROM:** Whitney McIlvaine, Contract Planner

**SUBJECT:** Coastal Development Permit (CP0-417) for construction of a new single-family dwelling and a secondary dwelling unit at 505 Walnut Street

**RECOMMENDATION:**

*CONDITIONALLY APPROVE THE PROJECT* by adopting a motion including the following action(s):

A. Adopt Planning Commission Resolution 19-14, which includes the Findings and Conditions of Approval for the project depicted on site development plans dated August 6, 2014.

B.

**APPLICANT/AGENT:** Mel & Marilyn Wammack / Rob Reynolds

**LEGAL DESCRIPTION/APN:** 066-253-006

**PROJECT SETTING:**

The project is located in central Morro Bay on the inland side of Main Street in a Single Family Residential zone (R-1). This property is currently an irregularly shaped vacant lot that is approximately 4,534 square feet in size with street frontage on three sides. Surrounding development consists mostly of two-story single-family residences. Houses in the area range in size from under 1,000 square feet to over 3,000 square feet.



Prepared By: \_\_\_\_\_ Department Review: \_\_\_\_\_

**PROJECT DESCRIPTION:**

The Applicant is requesting a Coastal Development Permit for new construction of a single-family dwelling and an attached secondary dwelling unit on a vacant lot at 505 Walnut Street. The project site is within the California Coastal Commission appeal jurisdiction. Projects located within the appeal jurisdiction are required to obtain a Coastal Development Permit from the Planning Commission. Plans show a new two-story, 2,090 square-foot, single-family residence, a 460 square-foot garage, an attached 442 square-foot secondary unit, and two upper-level decks. An open parking area for the secondary unit is shown on the east side of the garage.

<b><u>Adjacent Zoning/Land Use</u></b>			
North:	R-1, Low/Medium Residential	South:	R-1, Low/Medium Residential
East:	R-1, Low/Medium Residential	West:	R-1/PD, Low/Medium Residential/Planned Development

<b><u>Site Characteristics</u></b>	
Site Area	4,534 square feet
Existing Use	Vacant
Terrain	Slopes roughly 7.5% towards the southwest
Archaeological Resources	No known archaeological resources exist on the site and the site is not within close proximity of a known site
Access	Walnut Street / Main Street / Cypress Avenue

<b><u>General Plan, Zoning Ordinance &amp; Local Coastal Plan Designations</u></b>	
General Plan/Coastal Plan Land Use Designation	Low to Medium Density Residential (4-7 units/acre)
Base Zone District	R-1, Single Family Residential
Zoning Overlay District	N/A
Special Treatment Area	N/A
Combining District	N/A
Specific Plan Area	N/A
Coastal Zone	Within the Coastal Appeals Jurisdiction

**PROJECT ANALYSIS:**

Project compliance with Single Family Residential Zoning Ordinance standards is shown in the following table. Additional analysis is provided below.

<b><u>R-1: Single Family Residential Zoning Ordinance Standards</u></b>			
	<b>Standards</b>	<b>Proposed</b>	<b>Complies?</b>
<b>Front Yard Setback</b>	20 feet	20 feet from Cypress Avenue and Main Street	Yes
<b>Garage Setback</b>	20 feet	20 feet from Walnut Street	Yes
<b>Interior Yard Setback</b>	10% of average width of lot with 10 foot maximum and 5 foot minimum	5 feet	Yes
<b>Exterior Yard Setback</b>	20% of average width of lot with 10 foot maximum and 5 foot minimum	10 feet from Walnut Street	Yes
<b>Rear Yard Setback</b>	10% of average depth of lot with 10 foot maximum and 5 foot minimum	11 feet 6 inches	Yes
<b>Lot Coverage</b>	45% allowed	38.5%	Yes
<b>Height</b>	25 feet	24 feet	Yes
<b>Parking</b>	2 covered and enclosed spaces plus one uncovered space	2 covered and enclosed spaces plus one uncovered space	Yes

**Street Frontage and Dedication**

The project is located on the northeast corner of Main and Walnut Streets. The lot also fronts on Cypress Avenue. The project is required to dedicate 5 feet of property along Main Street to enable enough room for future frontage improvements. Final plans will be revised to simply lengthen the parallel line delineating the dedication through to the western property boundary. No additional dedication along Cypress is required. A new driveway from Walnut Street will provide access to the garage and the open parking space for the secondary unit.

**Setbacks**

Zoning Ordinance Section 17.12.370 defines “front lot” as the narrowest dimension of a lot fronting on a street. Therefore, the front setback is measured from Cypress Street.

Plans show a 20-foot setback from Cypress and Main Streets. Walnut Street conforms to the maximum exterior side-yard setback requirement of 10 feet.

### **Secondary Unit**

The project includes a 442 square-foot secondary unit above the garage. The secondary unit conforms to provisions of Section 17.48.320 of the Zoning Ordinance, including size, architectural compatibility with the primary unit, and site development standards, such as height and setbacks. One additional parking space is required and provided.

### **Parking and Driveway**

Garage parking for two cars is proposed for the main dwelling. Plans show parking for the secondary unit adjacent to the garage in the rear setback. The space is between the house and a retaining wall and accessed via the driveway.

Chapter 17.44 of the Zoning Ordinance requires single-car garage and carport parking spaces to be 11' x 20'. Because the proposed outdoor space is between a retaining wall and the house, staff recommended the same 11-foot minimum width parking space dimension. This minimum is reflected on the plans.

The Zoning Ordinance allows for a residential driveway width greater than 20 feet to avoid awkward vehicle maneuvers. Plans show a driveway width of approximately 25 feet to provide viable access to the secondary unit parking space.

### **Neighborhood Compatibility Policies**

The General Plan discusses protection of neighborhood character as an issue in the Visual Resource and Scenic Highway Element, noting that, "(1) New residences and new residential additions are often out of scale and character with other residences in the vicinity. (2) The current allowable height and bulk for residential development is not appropriate for some portions of the community." (p.IV-12)

General Plan Land Use Element policy LU-15 states, "The present human scale and leisurely, low intensity appearance of Morro Bay should be maintained through careful regulation of building height, location and mass."

*The proposed building meets the height and setback requirements for projects in the R-1 zone. Siting the building toward the northeast corner of the site reduces visual impact on the streetscape. Building mass is discussed below.*

### **Scenic Resource Protection Policies**

The Coastal Land Use Plan (LCP) contains numerous policies protecting public views from scenic corridors and public recreational areas. LCP Policy 12.01 requires development to be sited and designed to protect views to and along the ocean and scenic

and coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. The LCP's highly scenic areas have an additional standard, but the proposed home is not located in a City designated highly scenic area.

*The project is not in a designated scenic area, but there are designated scenic areas and views nearby. The site could be characterized as "coastal" due to its proximity to the bay. Grading is proposed to create a level building pad and replace retaining walls. Architectural compatibility with the surrounding area is discussed below.*

Zoning Ordinance Section 17.48.190 Protection of visual resources and compatible design states, "New development shall project and, where feasible, enhance the visual quality of the surrounding area. New development may be permitted only if the siting and design meet the following standards:

- A. Protection of public views: significant public views to and along the coast are protected.

*There are limited views of the bay along Main Street in the project vicinity. This stretch of Main Street is not designated as scenic in the LCP. The project is on the inland side of Main Street, which reduces potential impacts on water views.*

- B. Natural landform protection: alterations to natural landforms are minimized.

*The site does not contain any significant natural landforms. Preliminary grading plans estimates the project will involve roughly 60 cubic yards of cut and fill to create a level building pad and provide for other site improvements. The finish floor would be at an elevation of 105.7feet, which is the average natural grade of the site. The maximum cut would be 3.7 feet. The maximum fill would be 2.5 feet. Currently there are retaining walls along the north and east sides of the site, indicating some previous grading. New retaining walls are proposed. The new wall along the north side will be located roughly 3 feet further north to correspond with the actual location of the property boundary.*

- C. Compatibility: the development is visually compatible with the character of the surrounding area and any design themes adopted for the area by the city.”

*There are no adopted design themes applicable to this site. Architectural compatibility is discussed below.*

### **Architectural Compatibility**

The project is not unlike other newer residential construction in the vicinity, which is typically two-story and more than 2,500 square feet in size. Overall, the surrounding neighborhood exhibits a variety of dwelling sizes, architectural styles, and building materials. Some issues specific to this project are:

Color and Materials: Proposed colors are a bright, saturated turquoise for the main body of the house and a white trim. A less bright hue might be more appropriate. Materials called out on the plans include Hardie lap siding and trim, mullioned windows, architectural composition shingles, and wrought iron balusters and wood rail guards on the decks. There is no specific material called out for the retaining walls. Incorporating split face block into the design would add visual interest. Staff understands the applicant also intends to add fencing on top of the retaining wall. Any fencing is subject to conformance with Zoning Ordinance Section 17.48.100.

Siting: The residential project would be prominently located on an up-sloping corner lot along Main Street. With 2,992 square feet of enclosed space and 170 square feet of porch and deck space, this would be one of the larger structures in the area. The project site will tend to amplify the structure’s apparent size and bulk.

Massing: The second story of the structure is larger than the ground floor. It cantilevers over the first floor in several locations with 110 square feet of additional enclosed space and two upper story decks totaling 118 square feet. Staff is concerned this gives the building a top-heavy appearance. However, there are numerous examples of cantilevered second-story elements in the vicinity. The project will be required to plant 3 street trees since it fronts on three streets. Trees and other landscaping will help reduce the apparent mass of the building.

Articulation: The north wall is effectively a single plane, approximately 65 feet long. The use of lap siding, window trim, and the wide horizontal banding, together with the 4-inch inset at the stairwell, will provide some relief in terms of shadow detail. Commissioners may wish to specify a few additional measures break up the massing of this elevation.

Lighting: Exterior lighting is not shown on the plans. Staff recommends that all exterior lighting be shielded so that the light source is not directly visible from off site.

**ENVIRONMENTAL DETERMINATION:** Pursuant to the California Environmental Quality Act the project is categorically exempt pursuant Section 15303, Class 3 for New Construction or Conversion of Small Structures. The exemption provides for the construction of up to three single-family residential structures in an urbanized area.

**PUBLIC NOTICE:** Notice of this item was published in the San Luis Obispo Tribune newspaper on August 8, 2014 and all property owners of record within 300 feet and occupants within 100 feet of the subject site were notified of this evening's public hearing and invited to voice any concerns on this application.

**CONCLUSION:** The project constitutes infill residential development in an urbanized area of the City and meets the development standards of the zoning district, including height, lot coverage, parking and setbacks. The project would not have significant adverse impacts on visual resources since the development is not located within a designated scenic area, but in an existing residential area with other similar residential developments.

Therefore, staff recommends Planning Commission conditionally approve the requested Coastal Development Permit #CP0-417 for new construction of a single-family residence and secondary unit at 505 Walnut.

**ALTERNATIVE ACTIONS:** As an alternative to the recommended action, the Planning Commission may:

1. Deny the project and direct staff to return with a resolution for denial.
2. Continue with direction to staff and/or the applicant.

**EXHIBITS:**

Exhibit A - Planning Commission Resolution 19-14  
Exhibit B – Graphics/ Plan Reductions



**AGENDA NO: C-1**

**MEETING DATE: November 12, 2014**

# Staff Report

**TO: Honorable Mayor and City Council      DATE: November 7, 2014**

**FROM: Rob Livick, PE/PLS - Public Services Director/City Engineer**

**SUBJECT: Review of Report for New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina by John F Rickenbach Consulting and Adoption of Resolution 77-14 stating preference for New WRF site location.**

## RECOMMENDATION

Staff recommends the Council review the report, take public comment and provide any direction to staff; then continue this item to the December 9, 2014 meeting to take final action including the adoption of Resolution 77-14, modified as necessary to reflect the additional information, received regarding site preference.

## ALTERNATIVES

1. Based on the information available, make the final site preference selection to locate the new WRF at the Rancho Colina site by adopting Resolution 77-14 as presented.
2. Based on the information available, make the final site preference selection to locate the new "regional" Wastewater Treatment Plant at the CMC site, and direct staff to begin work on the required draft agreements needed to secure the site as a viable location to treat and dispose of Morro Bay's wastewater; and direct staff to bring back a modified Resolution for approval.

## BACKGROUND/DISCUSSION

The attached report from John F Rickenbach (JFR) Consulting is an evaluation of the Regional CMC Facility vs Rancho Colina sites. Details relating to cost and design based on Carollo Engineers' detailed evaluation of the CMC site are not yet available; however, other factors influencing the decision regarding site selection have been detailed in the report. A contract with Carollo Engineers was executed on September 30, 2014 followed by a project kick off meeting that was held with Carollo, City and CSD staff along with the City's consultants, Rickenbach and Nunley in attendance. At the kick off meeting, schedule and data needs were discussed. Among the data needs for Carollo to evaluate the existing excess capacity in the existing CMC WWTP was process data from the operator of the CMC WWTP. On October 20, 2014, the Headquarters staff from the California Department of Corrections and Rehabilitation (CDCR) convened a conference call with

**Prepared by: RL      Dept. Review: RL**

**City Manager Review: \_\_\_\_\_**

**City Attorney's Review: \_\_\_\_\_**

City, CSD, and Regional Board staff to discuss the CMC option and the institutional issues with a regional facility. Also at that meeting, CDCR staff verbally authorized the release of the CMC WWTP process data to Carollo Engineers. Progress updates from Carollo will be transmitted to the City and CSD for their review as their analysis proceeds.

Preliminary information from Carollo Engineers indicates the following:

- Existing WWTP does not have sufficient capacity for either Morro Bay or Cayucos while still accommodating the existing contractual obligations.
- Significant upgrades will be required at the existing facility including two to three additional oxidation ditches and clarifiers.
- Doubling of the Tertiary Filtration and UV disinfection systems will be required.
- The existing improved site may not accommodate the improvements.
- Solids dewatering could remain the same with operational changes; further analysis is required.

The Water Reclamation Facility Citizens Advisory Committee (WRFCAC) met on November 5, 2014, for a presentation of the draft and incomplete report for the New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina by John F Rickenbach Consulting. The WRFCAC recommends the City Council delay their decision on the site preference until the complete report is available and the WRFCAC has had an opportunity to review and make their final recommendations to the City Council. Staff anticipates by holding a special WRFCAC meeting on December 3, 2014; this will allow the WRFCAC recommendation on site preference be transmitted to City Council prior to the December 9, 2014 meeting. WRFCAC also opined, with the City Council making the final site preference decision at the December 9, 2014 meeting, it would allow the new City Councilmembers to express their positions on site selection.

As part of its December 2013 and May 2014 site recommendations, the City Council acknowledged the possible merit of pursuing a regional facility which could serve multiple agencies, citing the potential benefits of sharing the cost of construction, operation and maintenance with partner agencies, should a suitable working framework be established.

The report also draws on information previously developed in support of the City's December 2013 Options Report, which did not analyze a regional facility at CMC, but examined a City only facility at that location. The new report considers the possible benefits of cost sharing among agencies at a regional facility, and compares other key issues, including reclamation potential, possible benefits to the City's water supply, logistical challenges, and permitting considerations.

## **CONCLUSIONS**

While the JFR report makes a compelling argument that the optimal site for the benefit of Morro Bay, and our CSD partners, is the Rancho Colina site; staff opines that the Council should continue this item until the Carollo work product is complete in order to have a

complete picture regarding site selection. This opinion is consistent with the recommendations adopted by the WRFCAC at their November 5, 2014 meeting.

### **ATTACHMENTS**

1. [Report](#) from JFR dated November 7, 2014.
2. Letter form WRFCAC Chairman, John Diodati dated November 7, 2014
3. Technical Memoranda from MKN Associates dated November 6, 2014

**RESOLUTION NO. 77-14**

**A RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF MORRO BAY, CALIFORNIA,  
REGARDING THE LOCATION PREFERENCE FOR THE SITING OF A NEW  
WATER RECLAMATION FACILITY**

**THE CITY COUNCIL**  
City of Morro Bay, California

**WHEREAS**, the City of Morro Bay has an existing Wastewater Treatment Plant that requires replacement; and

**WHEREAS**, it has been determined to be in the best interest of Morro Bay to construct a new Water Reclamation Facility that complies with the January 8, 2013 California Coastal Commission's actions; and

**WHEREAS**, it is in the best financial interest of the community to minimize the major maintenance and repair costs at the existing wastewater treatment plant; and

**WHEREAS**, on February 25, 2014, the City Council resolved to have a new Water Reclamation Facility operational prior to the expiration of the discharge permit for the existing wastewater treatment plant, being five years more or less; and

**WHEREAS**, on May 13, 2014, the City Council reviewed the report from John F. Rickenbach Consulting (JFR) regarding recommended Water Reclamation Facility (WRF) sites and reclamation; and

**WHEREAS**, on November 12, 2014, the City Council reviewed the report from JFR Consulting entitled of *Report for New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina*; and

**WHEREAS**, the Comparative Site Analysis Report is incomplete and lacks some technical information regarding the preliminary design for both the CMC and Rancho Colina facilities due to Carollo Engineering report not yet being available; and

**WHEREAS**, at their November 5, 2014 meeting, the City's Water Reclamation Facility Citizens Advisory Committee (WRFCAC) recommended the City Council delay their decision regarding site selection until after the report from Carollo Engineering is complete and the WRFCAC can make a recommendation to the City Council; and

**WHEREAS**, the JFR Consulting report makes a compelling argument the optimal site, for the benefit of Morro Bay, is the Rancho Colina site; without the Carollo Engineering work product.

**NOW, THEREFORE, BE IT RESOLVED**, by the City Council of the City of Morro Bay, California, as follows:

**SECTION 1:** The City Council provides the following direction to City staff:

- A. The City Council has reviewed the report entitled *Report for New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina* dated November 7, 2014 and accepts its conclusions and recommendations.
- B. Begin the Facilities Master Planning and Environmental Review to construct a Water Reclamation Facility at the Rancho Colina site in accordance with the Five-Year schedule previously adopted.

**PASSED, APPROVED, AND ADOPTED**, by the City of Morro Bay City Council, at a regular meeting held on this 12th day of November, 2014 by the following vote:

AYES:

NOES:

ABSENT:

---

Jamie L. Irons, Mayor

ATTEST:

---

Jamie Boucher, City Clerk

***New Water Reclamation Facility Project***

**Comparative Site Analysis: Regional  
CMC Facility vs. Rancho Colina**

***Preliminary Draft Report***



*Submitted to:*  
**City of Morro Bay**  
**Department of Public Services**

**November 7, 2014**



**John F. Rickenbach Consulting**  
7675 Bella Vista Road  
Atascadero, California 93422

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# Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina

## *Preliminary Draft Report*

### **City of Morro Bay New Water Reclamation Facility Project**

*Prepared for:*

**City of Morro Bay**  
595 Harbor Street  
Morro Bay, California 93442

*Prepared by:*

**John F. Rickenbach Consulting**  
7675 Bella Vista Road  
Atascadero, California 93422

*In association with:*

Michael K. Nunley & Associates

November 7, 2014

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### Appendices

- *Appendix A: Letter from San Luis Obispo County to CDCR (October 29, 2013)*
- *Appendix B: Capacity Evaluation of the California Men's Colony Wastewater Treatment Plant (Carollo Engineers, November 2014) - TBA*
- *Appendix C: Hydrologic Evaluation of the Potential Benefits to the City Water Supply from Reclaimed Water Use in the Chorro Valley and Morro Valley (Cleath-Harris Geologists, November 2014)*
- *Appendix D: Water Supply Cost Analysis (MKN and Associates) - TBA*
- *Appendix E: Regulatory Implications of Discharge for the Future City of Morro Bay Water Reclamation Facility (Larry Walker Associates, September 2014)*
- *Appendix F: Initial Findings on Grants and Strategy (Kestrel Consulting, September 2014)*



# City of Morro Bay New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina

## 1. Purpose of this Report

As part of its December 2013 and May 2014 site recommendations, the City Council acknowledged the possible merit of pursuing a regional facility that could serve multiple agencies, citing the potential benefits of sharing the cost of construction, operation and maintenance with partner agencies, if a suitable working framework could be established. This report presents the findings of the extent to which the City's participation in a regional facility would be comparatively preferable to developing a new facility at the Council's previously recommended Rancho Colina site. This report draws on several new studies, including the following:

1. *Regulatory Implications of Discharge for the Future City of Morro Bay Water Reclamation Facility* (Larry Walker Associates, September 2014)
2. *Hydrologic Evaluation of the Potential Benefits to the City Water Supply from Reclaimed Water Use in the Chorro Valley and Morro Valley* (Cleath-Harris Geologists, October 2014)
3. *Initial Findings on Grants and Strategy* (Kestrel Consulting, September 2014)
4. *Capacity Evaluation of the California Men's Colony Wastewater Treatment Plant* (Carollo Engineers, November 2014)

This report also draws on information previously developed in support of the City's December 2013 *Options Report*, which did not analyze a regional facility at CMC, but examined a City-only facility at that location. The new report considers the possible benefits of cost-sharing among agencies at a regional facility, and compares other key issues, including reclamation potential, possible benefits to the City's water supply, logistical challenges, and permitting considerations.

## 2. Executive Summary

This report presents the findings of the extent to which the City's participation in a regional facility at California Men's Colony would be preferable to developing a new facility at the City Council's preferred Rancho Colina site. While both sites are potentially suitable for a new regional WRF, the **Rancho Colina** site is considered better overall. Key considerations in this determination include:

- Long-term benefits of water reuse in Morro Valley exceed those in the Chorro Valley for the following reasons:
  - Siting in the Morro Valley provides an opportunity to optimize reuse of State Water to



restore a severely depleted groundwater basin that already experience agricultural demands that exceed the basin's safe yield (Cleath, 2014);

- The City can likely improve the reliability of its existing appropriated water right and acquire additional water rights based on the reclaimed water used to recharge the basin;
- Once the basin is restored and operated in a sustainable fashion, the City gains the ability to reduce its reliability on State Water and use a less expensive water supply to significantly reduce water costs to rate payers;
- The Rancho Colina site is much closer to both the existing Morro Bay Desalination Plant and the Ocean Outfall, both of which provide vital infrastructure support to direct agricultural and future potable water reuse;
- The Rancho Colina site and City water distribution system are within 2 miles of both the Whale Rock and Chorro Valley Turnout, thereby enabling broader distribution of reclaimed or potable City water throughout San Luis Obispo County. The CMC WWTP is a similar distance from both pipelines, so that site does not have an advantage relative to proximity to major water conveyance facilities.
- Recharge of the Morro Valley aquifer provides three secondary benefits by:
  - Reducing the risk of seawater intrusion into the City well fields (Cleath, 2014)
  - Increased pumping which could remediate existing nitrate contamination in the basin because of the unique hydrogeographic conditions at "the Narrows" (Nitrate Study, Cleath, 2014)
  - Direct or indirect groundwater recharge of the aquifer through either percolation ponds or stream discharge which could potentially enhance aquatic habitat in both Morro and Little Morro Creeks
- The City's 5-Year Goal is not achievable at the CMC site, for the following reasons:
  - Neither CDCR nor the County appear likely to make expansion of the WRF facility at CMC a priority in their 5-year capital improvement program;
  - Pursuit of a regional facility at CMC would require extensive study and multiple state agency approvals, which may take at least a year or longer to even determine feasibility. If the State denies the project concept, the City would need to pursue a different site.
  - A multi-agency framework for operation, maintenance, cost-sharing, and water rights would need to be developed at CMC, which would take considerable time.
- Rancho Colina has highly motivated private property owner, willing to work with the City, and there are no agency-related constraints to transferring ownership or operation to the City, which will save considerable time. Conversely, the CMC site is currently encumbered by an existing State Bond, which could significantly complicate property transfer/acquisition.



- **COST CONCLUSIONS TO BE DETERMINED PENDING COMPLETION OF CAROLLO REPORT**
- The City will have more flexibility at a “greenfield”, or undeveloped, site to pursue innovative treatment approaches, energy-efficient technologies or alternative energy elements such as solar panels, composting, and other City priorities identified during the public workshops in 2013, rather than if they are a partner in the expansion of the existing CMC plant.
- Although a new WRF at CMC could improve the City’s water supply from its wells Chorro Valley wells, the City would also benefit from a WRF in the Morro Valley indirectly by creating an additional water supply that could benefit growers in the Morro Valley and improve the utility of the City’s wells in that valley. In addition, some of the City’s theoretical water supply gain in the Chorro Valley from a CMC site could be offset by minimum streamflow requirements in Chorro Creek, or complications related to achieving water quality goals in that basin.

**Table ES-1** summarizes the major findings of the report relative to the key issues and questions included in the analysis:

<b>Table ES-1. Summary of Report Findings</b>		
<b>Key Issue or Question</b>	<b>Major Findings</b>	<b>Better Site</b>
<b>A. What are the unique <i>regional</i> benefits associated with constructing a regional facility at the CMC site instead of a facility at Rancho Colina? How do these relate to the City’s stated goals for the new WRF?</b>	<ul style="list-style-type: none"> <li>• The CMC’s primary unique regional advantage is that it would combine all key agencies (State, County, Morro Bay, and CSD) into a single facility, thus reducing long-term administrative permitting issues with respect to the RWQCB. This benefit, however, presumes that the substantial administrative challenge of having the State and County lead this effort can be overcome. At the same time, RWQCB staff acknowledged that there would not be any other obvious unique regional benefit with respect to the CMC site.</li> <li>• Rancho Colina’s unique regional benefits have to do with economics, particularly with respect to agriculture. Avocados dominate the Morro Valley, and they are a significant geographic component of this an important regional crop. By making reclaimed water available to Morro valley growers, the potential economic benefit is higher, especially in the context of the current situation, where growers have severely cut back trees due to lack of available water.</li> <li>• There is no locational advantage for either site relative to their proximity to the existing regional water distribution network. However, from a cost standpoint it is more advantageous to locate the WRF closer to the primary wastewater sources (rather than the ultimate water users), and in that respect, Rancho Colina is much better.</li> <li>• Overall, while both sites have good regional potential, the comparative unique regional benefits are better at Rancho Colina, especially when viewed through the lens that developing a workable multi-agency framework and expanded facility at CMC is a remote possibility over the next several years. In contrast, the regional benefits of a new plant at Rancho Colina could likely be realized sooner, while existing regional benefits at CMC (where the State and County are currently served) can continue as is.</li> </ul>	Rancho Colina
<b>B. Are there potential cost savings for the City if it participates in a regional facility as</b>	<ul style="list-style-type: none"> <li>• TBD</li> </ul>	TBD



<b>Table ES-1. Summary of Report Findings</b>		
<b>Key Issue or Question</b>	<b>Major Findings</b>	<b>Better Site</b>
<p>compared to Rancho Colina? How will the construction and operation of ancillary facilities the City would need (such as a raw sewage conveyance pipeline from CMC to the City) affect the cost to the City? How do the capital costs compare, as well as the lifecycle costs, of both alternatives?</p>		
<p><b>C. Are there unique water supply benefits for the City associated with the CMC site as compared to Rancho Colina? How does the future potential for direct potable reuse factor into this?</b></p>	<ul style="list-style-type: none"> <li>Overall, both sites have a similar level of benefit to City water supplies.</li> <li>The CMC Site presents the highest total benefit (950 AFY) to the City water supply during a drought year. During normal and wet years, over 60% of the City and CSD's treated wastewater would continue to flow to the ocean.</li> <li>The Rancho Colina Site presents the highest water supply benefit (900 AFY) to the City water supply during normal and wet years.</li> <li>The Rancho Colina Site with direct agricultural reuse and wet weather disposal through the ocean outfall presents the least effluent permitting challenges. Should the CSD choose to become a customer of the City, there could be an additional 225 AFY available resulting in a total of 1,125 AFY.</li> <li>If streamflow augmentation at Morro Creek were pursued, the permitting challenges and future regulatory risk would likely be less than those at Chorro Creek according to the Discharge Options report (LWA, 2014). The amount of water supply benefit would be similar to that at the CMC Site.</li> </ul>	<p>CMC and Rancho Colina are similar overall, but each has unique considerations</p>
<p><b>D. What are the water reclamation opportunities for agricultural use from a regional facility at the CMC site, and how do these compare to Rancho Colina?</b></p>	<ul style="list-style-type: none"> <li>In all, it is estimated that about 70% of the irrigated agricultural land in the Morro Valley sits at lower elevation than the Rancho Colina site, or about 700 acres, nearly all of which is within two miles of the City, and even closer than that to the WRF site. This compares to about 545 irrigated acres in the Chorro Valley that stand below the elevation of the CMC site, about 3-4 miles downstream from the CMC site, and about 1.5 to 2 miles upstream from the City. Generally, higher elevation difference between water customers and the reclaimed water supply will result in higher capital and power costs.</li> <li>In summary, there is about 25% more accessible (lower elevation) irrigated agricultural acreage in the Morro Valley than in the Chorro Valley, and it is generally much closer to both the City limits and the proposed WRF site, which has positive ramifications relative to reclamation pipeline infrastructure cost.</li> <li>Overall, while both valleys have substantial irrigable acreage, there are greater opportunities in the Morro Valley, near the Rancho Colina site, as well as greater demand for irrigation water in that valley, which has been historically pumped into overdraft.</li> </ul>	<p>Rancho Colina</p>
<p><b>E. Are there unique regulatory or logistical constraints that may limit potential water supply or reclamation benefits of a regional facility at the CMC site? How does that compare to Rancho Colina?</b></p>	<p>The following are substantial logistical constraints at the CMC site:</p> <ul style="list-style-type: none"> <li>The transfer of operations of the current facility from the State (CDCR) to the County;</li> <li>CDCR's current lack of interest in effecting a transfer since this would</li> </ul>	<p>Rancho Colina</p>



<b>Table ES-1. Summary of Report Findings</b>		
<b>Key Issue or Question</b>	<b>Major Findings</b>	<b>Better Site</b>
	<p>not be major, long-term program that would not meet any agency goals or priorities, as confirmed by CDCR staff;</p> <ul style="list-style-type: none"> <li>• The fact that multiple state agencies would need to study and approve a potential transfer and involvement of municipal customers such as Morro Bay and CSD, which will take considerable time;</li> <li>• The County's lack of urgency and/or staff availability in leading the effort to investigate and operate a regional facility;</li> <li>• The need to establish a multi-party agreement among potential water supply beneficiaries for reclaimed water that is discharged to Chorro Creek;</li> <li>• A lack of a coordinated effort and differing goals between the City of Morro Bay and CSD relative to moving forward with a new WRF; and</li> <li>• The fact that the four potential partner agencies have not engaged in any preliminary coordination efforts toward a potential working framework, an effort that would need to be led by the County.</li> <li>• Collectively, these interagency logistical issues present significant challenges, and raise substantial concerns that a new regional facility can be built and operated at the CMC site in the near future.</li> </ul> <p>The following issues apply to the Rancho Colina site:</p> <ul style="list-style-type: none"> <li>• The possible need to establish a multi-party agreement among potential water supply beneficiaries for reclaimed water that is discharged to Morro Creek, if reclaimed water is not stored in percolation ponds or offsite ponds for potential agricultural use;</li> <li>• Pipeline infrastructure associated with the project that may be within Caltrans rights-of-way would require an encroachment permit from that agency.</li> <li>• Overall, the Rancho Colina site can be much more realistically accomplished within the framework of the City's goals related to timing, water supply benefits, and reclamation potential.</li> </ul>	
<b>F. Are there physical site constraints at CMC that may limit project design flexibility? Will a regional facility likely be an expansion of the existing facility or will an entirely new facility be required?</b>	<ul style="list-style-type: none"> <li>• TBD</li> </ul>	TBD
<b>G. What are the environmental issues that may be of concern to the Coastal Commission or the general public at the CMC site as compared to Rancho Colina?</b>	<ul style="list-style-type: none"> <li>• Overall, neither site has a particular advantage from the standpoint of environmental issues that may be of concern to the Coastal Commission.</li> <li>• Each site is far from the coast and separated by intervening topography, so a new WRF at either location will not be visible from the coast or block coastal access.</li> <li>• Neither site is subject to coastal hazards because of their elevation and distance from the ocean or estuary.</li> </ul>	Both sites are similar



<b>Table ES-1. Summary of Report Findings</b>		
<b>Key Issue or Question</b>	<b>Major Findings</b>	<b>Better Site</b>
	<ul style="list-style-type: none"> <li>The most developable portions of both sites do not contain designated ESHA, although there is ESHA on the margins of both Chorro and Morro Creek.</li> <li>The entire CMC site is considered prime farmland, although the existing wastewater plant location is not in agricultural production. The most developable portion of the Rancho Colina site does not contain prime soils, although the lower portion of the property is considered prime if irrigated and drained. The Rancho Colina site supports grazing activities.</li> <li>Neither site supports known cultural resources, but there is the potential to do so at either location because of known prehistoric human habitation in the area. Pipeline infrastructure from the Rancho Colina site would traverse a known cultural resource site, CA-SLO-165, which may result in impacts that require mitigation.</li> <li>The Rancho Colina site is substantially closer to the City's existing infrastructure network than the CMC site, and thus development at that location may use somewhat less energy—which translates into lower greenhouse gas emissions.</li> </ul>	
<p><b>H. How will the discharge limitations and design goals of the treatment facility differ at the CMC and Rancho Colina sites? How will the treatment facilities differ as a result?</b></p>	<ul style="list-style-type: none"> <li>Overall, the CMC site presents greater permitting challenges than development at the Rancho Colina site, which will have a direct adverse impact on the cost of the facility at that location.</li> <li>The CMC wastewater treatment plant discharge presents the most stringent regulatory requirements and greatest risk for additional requirements in the future. These have a direct impact on the cost to construct and operate the treatment facility, in addition to the City's ability to anticipate and plan for future costs.</li> <li>Stakeholders such as the Morro Bay National Estuary Program and regulatory agencies with jurisdiction over aquatic habitat and endangered species must be consulted prior to planning an expansion at CMC. Their input could impact permitting requirements, as well as ability to redirect treated effluent in the future if a different direct reuse opportunity is identified (for example, the City of San Luis Obispo's attempts to expand its recycled water program).</li> <li>A Rancho Colina facility that incorporates direct reuse of treated water with wet weather disposal through the ocean outfall (or via percolation ponds if appropriate sites are identified) presents the least discharge permit challenges and requires fewer onsite plant treatment facilities.</li> <li>A recycled water program (including agreements with users, capital investment in pumping and pipelines, and ongoing operation and maintenance) that complies with Title 22 requirements will be required to implement this strategy and must be factored into the site selection decision. The current recommendation, in order to comply with the City Council's 5-year timeline, is to work on this long-term planning and design effort in concert with planning, design, and construction of the Phase 1 WRF project if the Rancho Colina site is selected.</li> </ul>	



<b>Table ES-1. Summary of Report Findings</b>		
<b>Key Issue or Question</b>	<b>Major Findings</b>	<b>Better Site</b>
<b>I. Is the City's 5-Year timeframe goal achievable at the CMC site? What studies, permitting requirements, or logistical challenges may affect achieving this goal?</b>	<ul style="list-style-type: none"> <li>Because of a variety of logistical constraints, it is not realistically possible to achieve the City's 5-year goal at the CMC site.</li> <li>At the Rancho Colina Site, because of a willing and cooperative property owner, and the fact that neither the State nor the County would be involved in the ownership or operation of the facility, the City's 5-year goal may be achievable.</li> </ul>	Rancho Colina
<b>J. What would the City's role be in constructing and operating a regional facility at CMC? How will an interagency framework affect the City's ability to achieve its stated goals?</b>	<ul style="list-style-type: none"> <li>The City would own a facility at Rancho Colina but would likely be a customer or non-majority partner at CMC.</li> <li>For a CDCR-owned facility at CMC, the City and/or CSD would still be responsible for constructing and maintaining pipeline infrastructure to and from the site. This complex arrangement could lead to conflict among the agencies relative to shared responsibilities in the event of a breakdown in the system.</li> <li>Developing a project at the Rancho Colina site would allow the City to direct the project and meet stated City goals. Participating in a regional CMC project will turn over control to CDCR and unless City objectives align with those of CDCR, those desired project elements may not necessarily be included.</li> </ul>	Rancho Colina
<b>K. Does either site have comparative advantage relative to securing possible funding (grants and loans) for a new regional reclamation facility?</b>	<ul style="list-style-type: none"> <li>Since either project can be tied into water supply benefits, both could pursue similar grant and loan programs.</li> <li>The Rancho Colina site could have a slight edge over the CMC Regional site since improving quality and supply of groundwater in the Morro Valley could address a disparity between existing safe yield and basin demands, reduce risk of seawater intrusion, and help export nutrients and salt from the Morro Valley groundwater basin.</li> <li>CDCR could have access to various state funding sources for the Regional CMC site. However, since the plant upgrade would not address any agency priorities it is unlikely that they would assist with providing funds to upgrade the facility. Since the County would not take over the CMC WWTF, according to CDCR staff, County resources are not likely to be different than those that would be available to support a Rancho Colina site (e.g., coordination of Integrated Regional Water Management Plan-related funding).</li> </ul>	Both sites are similar
<b>OVERALL</b>		<b>Rancho Colina</b>



## 2. Background

In 2013, the City of Morro Bay examined many potential sites for building a new WRF, which included the CMC site among six others. To inform that process, there were several public workshops and stakeholder interviews, which culminated in the release of the *First Draft Options Report* on October 29, 2013. That report found that the CMC site was the lowest ranked among the seven potential sites, but this ranking was based on the assumption that the City would be building a facility at that location on its own, without any participation from other potential partner agencies. This conclusion drew criticism from some, but was based on the fact that the City and Cayucos Sanitary District (CSD) were at that time pursuing separate paths toward locating a suitable site to replace the existing Wastewater Treatment Plant site, which had been rejected by the California Coastal Commission in January 2013. At that time, the CSD's publicly stated desire was to conduct an independent analysis of project alternatives that would be most beneficial to CSD ratepayers.

### County Coordination with CDCR – Late 2013

The same day as the release of the *First Draft Options Report*, the San Luis Obispo County Public Works Department sent a letter to the California Department of Corrections and Rehabilitation (CDCR) indicating its interest in, and making an argument for, the potential transfer of the existing water and wastewater operations for the CMC facility from the State to the County (**Appendix A**). In that letter, the County stated its primary objectives in effecting this transfer would be to:

1. *Ensure reliability of service; and*
2. *Enhance emergency responsiveness*

In the first case, these objectives related to enhancing the County's ability to supply water within its existing distribution network. In support of the first objective, the County cited concerns with the State's ability to efficiently operate and maintain the facility. In the case of the second, the County argued that under County control, the facility would have access to various County water supplies in the event of an emergency, including Nacimiento water, rather than relying on State Water, which is the facility's current supply, and considered at-risk given the current drought situation.

The County also cited two secondary objectives:

1. *Capital project planning and implementation; and*
2. *Local needs and regulatory alignment*

In the case of the first of these, it was argued that under County control, the CMC operations would benefit from the County's AAA bond rating and its superior ability to secure funding for large capital projects.

Note that neither of the County's two primary objectives nor its first secondary objective had anything to do with the City of Morro Bay, but rather to enhance County operations and public works infrastructure. Another secondary objective, however, noted that as an ancillary benefit, it would be potentially beneficial to seek Morro Bay's and CSD's participation in an expanded wastewater treatment facility, primarily to lower costs to all participating agencies. Although no studies, cost sharing estimates, or related information was included to support this argument, as a concept it was stated that



this information would need to be provided as “part of the project alternatives analysis that Morro Bay and Cayucos will need to update.” Thus, the County presumed that Morro Bay and Cayucos would—whether independently or together—prepare studies for a concept that may or may not be in either’s interest relative to addressing either agency’s goals, including those relative to minimizing costs and timing.

In this latter objective to include Morro Bay and CSD into this “regional facility” concept, the letter stated that this arrangement “may be preferable to both the Regional Water Board and the California Coastal Commission,” although it should be noted that neither agency’s board had taken a position on this issue at the time the letter was written, and have not since. In the *Fine Screening Analysis* (Dudek, November 2011), the CCC suggested potential support for a facility located in the Morro Valley, and did not comment on the CMC site.

The County acknowledged the potential difficulties in coordinating with CDCR to transfer control to the County and expand operations to include other agencies such as Morro Bay and CSD. The letter acknowledged that CDCR has not always benefitted from such transfers in the past, as well as other issues: 1) new regulatory mandates could increase costs to all parties involved; 2) there would be challenges in implementing a workable multi-agency framework; 3) the potential transfer of equipment and some CMC employees to the County, addressing equitable salary and benefits; and 4) various security issues related to CMC operations.

In summary, the letter presented the County Public Works Department’s desire to take control of the CMC facility from the State, and to the extent it might be beneficial to include other agencies in this effort (such as Morro Bay and CSD), to do so. There were no supporting studies, data, or other documentation provided to assist CDCR in its evaluation of this proposal. What seemed certain was that if this transition were to occur, the County would need to lead the effort.

In that letter, the County stated that there was to have been a meeting with CDCR on November 8, 2013 to discuss this proposal further. It is not certain if this meeting ever took place. Then-Director Paavo Ogren, the author of the letter, has since left the County. Deputy Director Mark Hutchinson, who has since taken charge of this effort for the County, does not recall if this meeting ever took place (personal communication, email of October 15, 2014). Thus, it appears uncertain CDCR ever seriously evaluated this possibility, and it appears that neither the County nor the State followed up with each other in a meaningful way after that letter to further the discussion.

### **City Council Actions and Coordination with Partner Agencies, 2013-14**

The City Council considered the *Options Report* at hearings on November 12 and December 10, 2013. The *Options Report* did not consider the regional concept at CMC, since it had just been suggested in writing by the County only days before.

At the November 12, 2013 Council meeting, one member of the public expressed support for the CMC site and its potential for expansion. Councilmember Christine Johnson, citing the County’s October 29 letter to the State, suggested that City staff talk to County staff about this possibility. Councilmember Noah Smukler echoed this idea, suggesting an investigation of sharing costs at that site.



It was in that environment that the City Council adopted the *Second Draft Options Report* on December 10, 2013. Based on the evidence presented, the Council chose the Morro Valley as the highest-ranking location for citing a new WRF to serve the City, and confirmed its goals related to the WRF. It also directed staff to further investigate the top three sites in the Report, for the purpose of establishing the best overall location for a new WRF. In the *Second Draft Options Report*, the CMC site continued to rank last as a City-only facility, since circumstances relative to that site had not changed since October, other than the letter sent from the County to the State, apparently without response.

In February 2014, the City Council established the additional goal to complete the WRF within 5 years of selecting a specific site. The 5-year goal was driven by several factors, including: 1) the excessive cost of operating a 60+ year old plant that has deferred major process rehabilitation or replacement while a new plant has been in development; 2) the need to define a primary site so that a project description could be finalized as a first step to pursuing drought grant funding while it is still available; 3) a settlement agreement timeline which dictated completion of a new treatment facility by 2014; and 4) construction cost escalation, which continues to increase as the economy improves.

On March 21, 2014, City staff coordinated a meeting at the Regional Water Quality Control Board (RWQCB) that included key staff from County Public Works, RWQCB, and CSD to discuss the County's progress on the transfer of the CMC site to the County, and the possible investigation of including the City and CSD in a regional facility at that location. RWQCB Executive Officer Ken Harris led off the meeting indicating his support for the regional facility concept at that location, citing the possibility that funds might be available for this, and that future state regulations would encourage direct potable reuse of treated water that may result from such a facility. He also stressed the importance of defining the project description quickly to "get in line" early for funding opportunities that may be available as a result of the drought.

As he stated in his letter of October 29, 2013, Paavo Ogren suggested that such a facility could reduce costs for Morro Bay and CSD, but did not have any studies to support this assertion. The consensus at this meeting was that more study would need to be done relative to what it would take to expand the existing plant, but the County indicated it had neither the staff nor money to conduct this investigation. Both the RWQCB and the County agreed it would make sense for the County to operate such a facility, if it were to be built. The County did not report on any further discussions or negotiations with the State regarding a potential facility transfer at this meeting.

On May 13, 2014, the City Council chose the Rancho Colina site as its preferred option, based on the *Report on Reclamation and Council Recommended WRF Sites* (JFR Consulting, May 2014). At the same time, based on the March 21 meeting between the City, County, RWQCB, and CSD, it also directed further study of the regional concept at the CMC site. It also directed staff to coordinate with and seek financial contribution to this study from other interested agencies, including the County, RWQCB, and CSD.

### **Investigation of the CMC Site as a Regional Facility – Summer and Fall 2014**

In May 2014, Paavo Ogren resigned from his position as the County's Public Services Director to become General Manager at Oceano Community Services District. No replacement was immediately named, but Deputy Director Mark Hutchinson took control of issues related to the CMC facility. In July 2014, Mark Hutchinson contacted CDCR regarding whether it was interested in pursuing the transfer of the CMC



facility to the County. CDCR did not indicate a high level of interest at that time. This was the first apparent contact from County staff to CDCR since October 2013.

During the summer of 2014, City consultants began investigating the CMC site for its regional potential and the City's possible participation in such a facility. The supporting studies that inform the investigation focus on a variety of issues, including cost, logistics, design, water rights, environmental concerns, financing, timing, and interagency coordination, the results of which are included in this report.

The underlying assumptions of this investigation are that: 1) the County has been working with CDCR to effect a transfer of the CMC site to the County; 2) CDCR is willing to do this; 3) that such a transition can occur in a timely manner to be consistent with the City's stated 5-year goal; and 4) that the County is willing and able to prioritize the design, construction and operation of this expanded facility in a manner consistent to meet the needs of the City and CSD. If any of these assumptions prove to be false, this would potentially eliminate the CMC site as a suitable location to meet the City's timing goals for a new WRF.

### **Interagency Coordination - October 2014**

At the October 9, 2014 JPA meeting between the City and CSD, Ken Harris of the RWQCB again spoke in strong support of the CMC site as a regional facility. The County's Mark Hutchinson, however, while indicating support for the concept, admitted the CMC project is not a high County priority, and that there is neither sufficient staff nor money to move forward on this any time soon. As he noted, if the idea were to go forward in a short time frame, it would have to be done without the County's leadership. Note that according to the County's letter of October 29 to CDCR, this fact by itself could seriously hamper the potential regional use of this facility:

*"Utilizing CMC facilities as a regional treatment plant has been part of recent discussion, but it is our understanding that CDCR cannot provide municipal services [emphasis added]. As a result, if this option is beneficial, then it is likewise our understanding that transitioning operations to the County will provide the ability for the treatment plant to serve local needs." (Letter from County Public Works to CDCR, 10-29-13)*

On October 15, 2014, City staff engaged in a discussion with CDCR's Jeff Stanley, who indicated that there have been no meaningful recent discussions with the County to effect a possible transfer of the CMC facility to the County, and that this is not something CDCR is particularly interested in at the State level. Even if a transfer process were to begin today, it would take at least 2 to 5 years to complete before any further work related to project design could begin. In addition, CMC just recently upgraded its facility to better accommodate its current users and address effluent permit violations from the past several years, so CDCR has no desire to further modify this plant in the near future.

On October 20, 2014, City staff coordinated a meeting among CDCR, RWQCB, and CSD for the purpose of coming to a clear understanding among all parties about the whether there is any realistic potential of a transfer of the facility from the State to County, and the potential for a regional facility to be built at that location. County Public Works Department staff was also invited to the meeting, but could not participate citing lack of time and available staff.



In that meeting, CDCR staff led by Associate Director Fred Cordano confirmed that there has been little coordination with the County in the past year, consistent with what is discussed above. Although not opposed to expanding its existing facility to accommodate other regional partners, it will not be actively pursuing this course of action, since it recently upgraded its facility to improve its existing operations to meet RWQCB requirements. At this point, CDCR's primary interest with the CMC site is the extent to which any action there could improve its ability to improve the reliability of its long-term water supplies. CDCR also confirmed that if a regional wastewater plant would go forward, it would retain ownership of the facility, even if the County were to assume operations. The County could not comment on this perspective, because no County staff were present at the meeting. In addition, CDCR stated that it would retain control of the facility only, and that it would be the responsibility of the various municipal partners to extend pipeline infrastructure to and from the site, including the construction, operation and maintenance of these offsite facilities (which would include the raw wastewater pump station, approximately 8 miles of force main, and approximately 8 miles of brine disposal pipeline).

CDCR also stated that there would be numerous internal logistical challenges for such a facility to move forward. For one, CDCR would not be the only state agency that would need to approve such a concept, which would also require review and approval from the State Department of General Services and State Public Works Board. This process would require extensive study and review, which CDCR staff suggested might take a year or more just to determine whether or not the State would be supportive of this concept.



## 4. Key Issues and Questions

The December 2013 *Options Report* compared the general suitability several sites, but did not consider the possibility of a regional facility in the analysis. The criteria for evaluating the regional question are related to, but somewhat different than, those included in the *Options Report*. The key questions and issues to address the regional issue are as follows:

- A. What are the unique *regional* benefits associated with constructing a regional facility at the CMC site instead of a facility at Rancho Colina? How do these relate to the City's stated goals for the new WRF?
- B. Are there potential cost savings for the City if it participates in a regional facility as compared to Rancho Colina? How will the construction and operation of ancillary facilities the City would need (such as a raw sewage conveyance pipeline from CMC to the City) affect the cost to the City? How do the capital costs compare, as well as the lifecycle costs, of both alternatives?
- C. Are there unique water supply benefits for the City associated with the CMC site as compared to Rancho Colina? How does the future potential for direct potable reuse factor into this?
- D. What are the water reclamation opportunities for agricultural use from a regional facility at the CMC site, and how do these compare to Rancho Colina?
- E. Are there unique regulatory or logistical constraints that may limit potential water supply or reclamation benefits of a regional facility at the CMC site? How does that compare to Rancho Colina?
- F. Are there physical site constraints at CMC that may limit project design flexibility? Will a regional facility likely be an expansion of the existing facility or will an entirely new facility be required?
- G. What are the environmental issues that may be of concern to the Coastal Commission or the general public at the CMC site as compared to Rancho Colina?
- H. How will the discharge limitations and design goals of the treatment facility differ at the CMC and Rancho Colina sites? How will the treatment facilities differ as a result?
- I. Is the City's 5-Year timeframe goal achievable at either the CMC or Rancho Colina site? What studies, permitting requirements, or logistical challenges may affect achieving this goal?
- J. What would the City's role be in constructing and operating a regional facility at CMC? How will an interagency framework affect the City's ability to achieve its stated goals?
- K. Does either site have comparative advantage relative to securing possible funding (grants and loans) for a new regional reclamation facility?



## 5. WRF Sites Under Consideration

The analysis compares two sites relative to their suitability as a regional water reclamation facility. **Figure 1** shows the two sites in their regional context. These are described below.

### CMC Wastewater Site

The CMC Wastewater site consists of two adjacent parcels. The existing CMC wastewater treatment facility is located on a small portion of a 249-acre parcel (APN 067-051-006), generally on the low-lying area south of Chorro Creek, about 5 miles east of the Morro Bay city limit along Highway 1. It is adjacent to, and on a separate parcel from, another 119-acre parcel (APN 073-221-028) located on the Cuesta College campus, which was the focus of the December 2013 *Options Report*. **Figure 2** shows this site in the context of existing development and surrounding land uses.

This site is adjacent to Chorro Creek, and is relatively close to other tributary drainages. With the exception of a small area in the western part of the site designated AG (Agriculture), the site is designated as PF (Public Facility) under the County's General Plan. The southerly parcel on the site includes an existing wastewater treatment plant that serves the California Men's Colony, while the northerly parcel is currently developed with several facilities, including a small airstrip and supporting buildings.

The State of California Department of Corrections and Rehabilitation (CDCR) owns the site. The current treatment plant and the majority of the site is within the Coastal Zone. The current facility is within the Coastal Zone. The study site is about 190 to 200 feet above sea level.

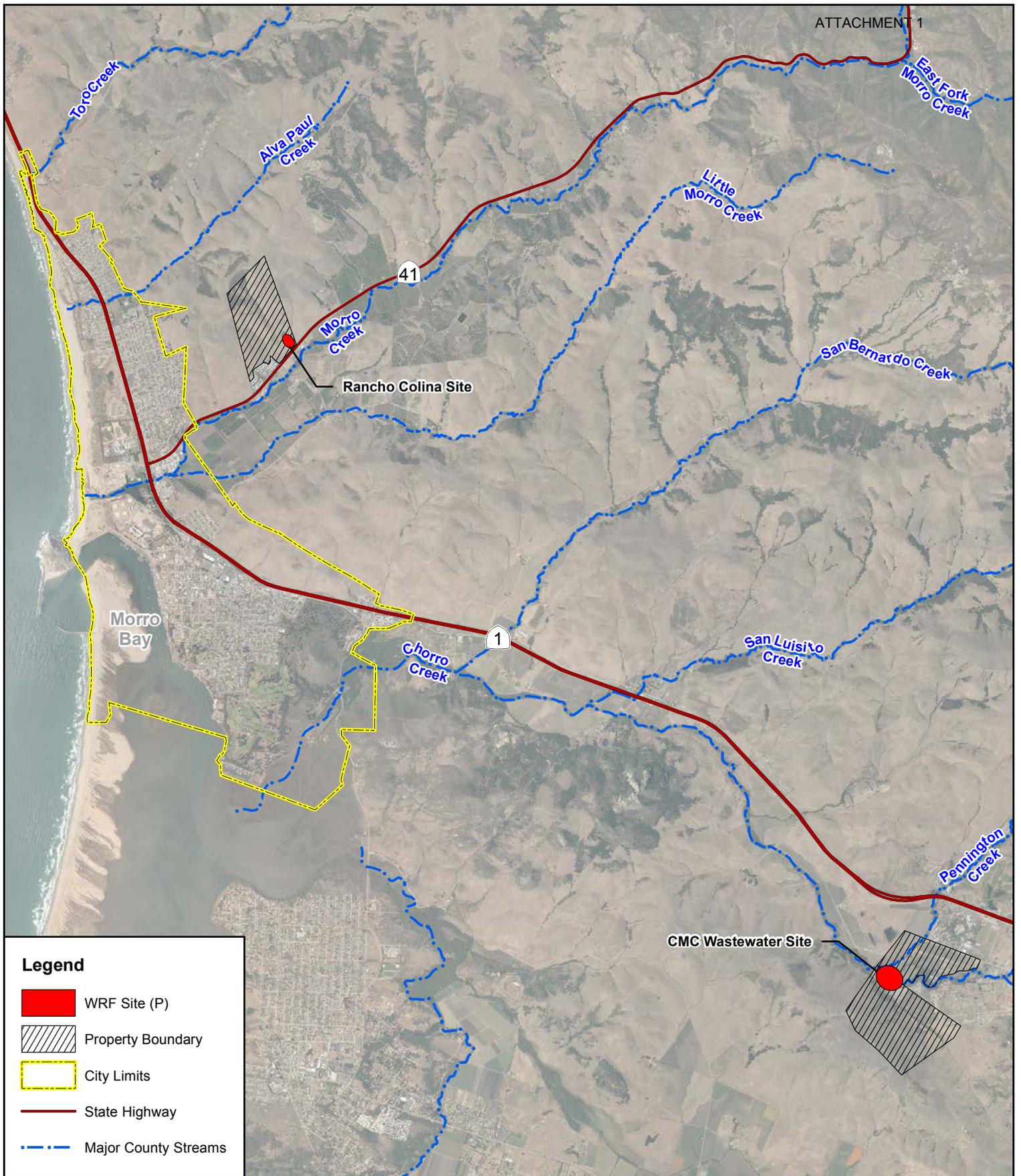
### Rancho Colina Site

The 187-acre Rancho Colina Site (APN 073-085-027) is located about a mile east of the Morro Bay city limits, just north of and adjacent to Highway 41. The property also extends across the highway to the south, and is adjacent to Morro Creek (**Figure 3**).

With the exception of the southernmost portion of the property, the site is designated AG (Agriculture) under County jurisdiction. The southernmost portion of the site is designated a REC (Recreation). The site is entirely in the Coastal Zone.

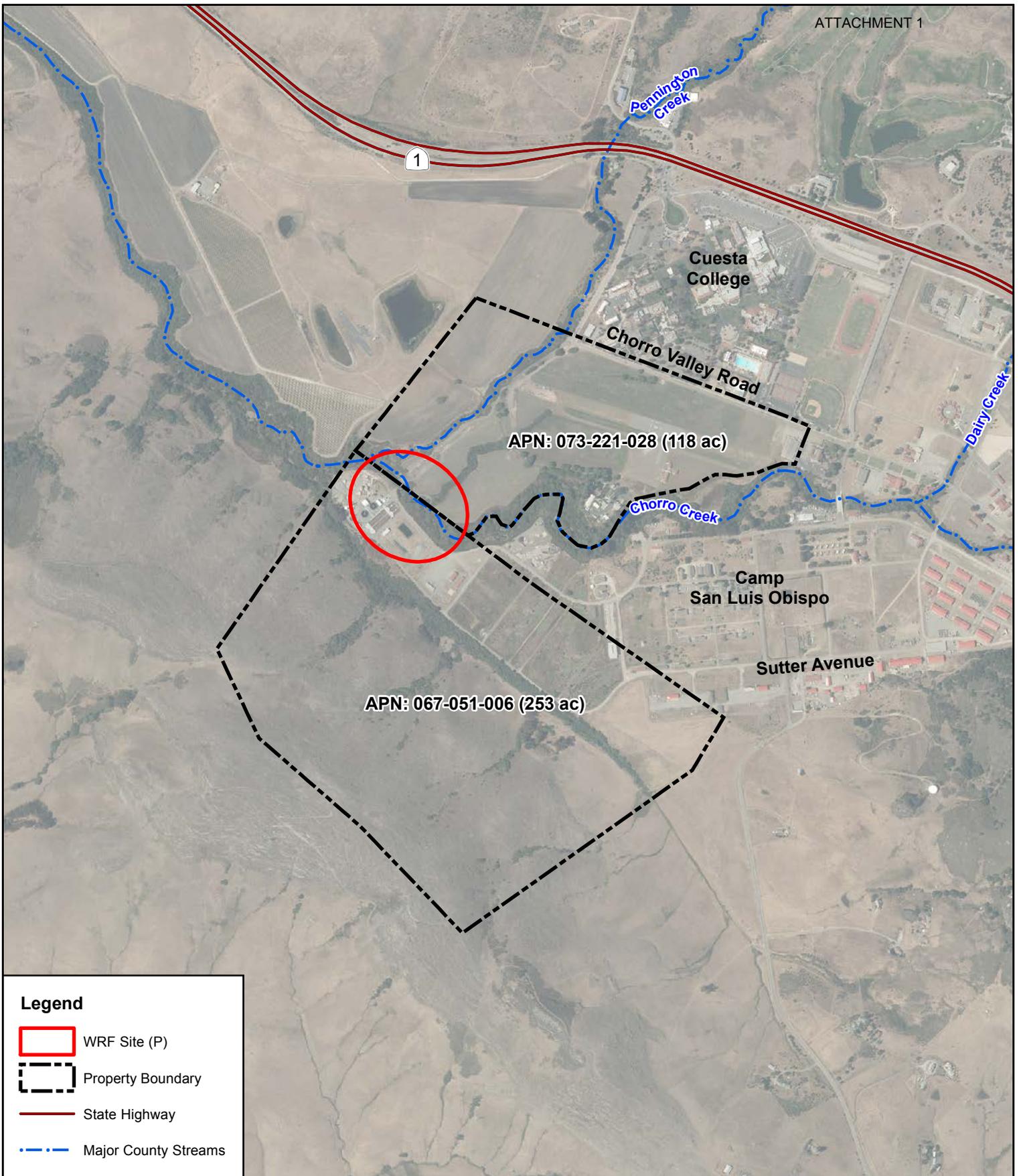
The site is currently developed with several facilities, including a single-family home occupied by the property owner, and by an existing wastewater treatment facility constructed in 1971, which serves the nearby Rancho Colina residential community. The focus of this report is on a roughly 10 to 15-acre area in the lowest portion of the property, generally in the vicinity of the location of the existing WWTP, but could be expanded as appropriate. The study site is about 150 to 160 feet above sea level.





**Figure 1: Overview of Study Sites**

Note: Basemap data obtained from County of San Luis Obispo GIS

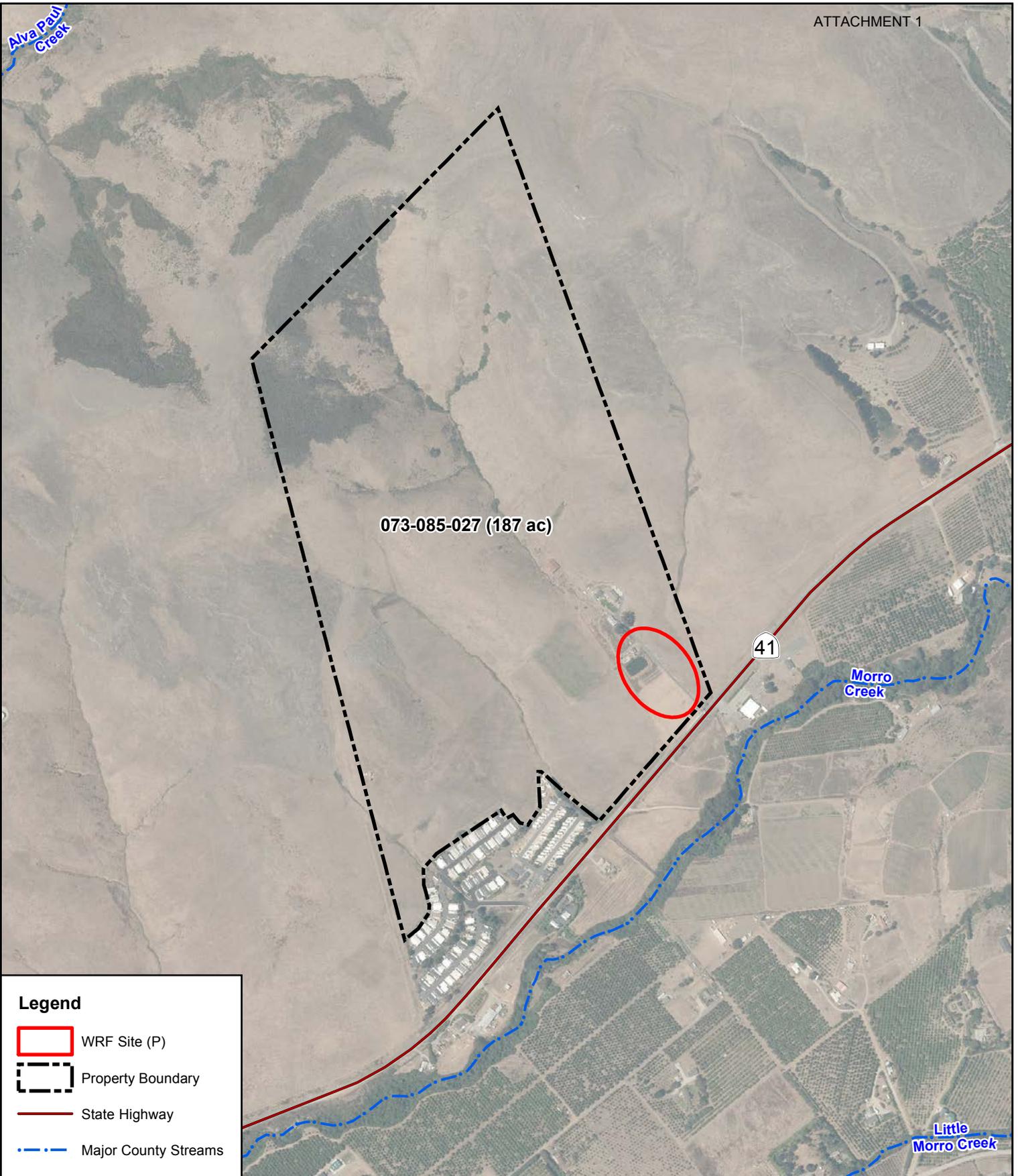


**Legend**

-  WRF Site (P)
-  Property Boundary
-  State Highway
-  Major County Streams

**Figure 2: Regional CMC Facility**

Note: Basemap data obtained from County of San Luis Obispo GIS



**Legend**

-  WRF Site (P)
-  Property Boundary
-  State Highway
-  Major County Streams

**Figure 3: Rancho Colina Site**

Note: Basemap data obtained from County of San Luis Obispo GIS



## 6. Comparative Site Analysis

The following analysis compares the two sites based on the key issues and questions described in Section 3 of this report.

### A. What are the unique *regional* benefits associated with constructing a regional facility at the CMC site instead of a facility at Rancho Colina? How do these relate to the City's stated goals for the new WRF?

**Why This Issue is Important.** While the *Options Report* considered the issues associated with pursuing a City-only new WRF, other agencies have expressed the desire to develop a regional wastewater treatment facility if found to be beneficial to those agencies. This concept has the potential support of the Executive Director of the Regional Water Quality Control Board (RWQCB), and has most closely been associated with the CMC site, a location that was rejected in the *Options Report* if the City were to pursue the development of that site on its own. The merits of the CMC location as a regional site are addressed below.

In general, potential regional benefits would fall under one of three categories:

- **Administrative.** This concept addresses the potential benefits of pursuing a single multi-agency facility at the CMC site rather than two facilities—one at Rancho Colina, and the continuing use of the CMC site.
- **Regional Water Supply and Distribution.** While potential water supply benefits to the City are discussed previously, this concept considers whether the location of either site offers an advantage relative to potential regional distribution of reclaimed water. Specifically, is either site closer to existing pipeline infrastructure that would allow for possible out of basin water transfers that could serve others in the region beyond the City of Morro Bay.
- **Economic.** Does either site offer long-term regional economic advantages? Possible advantages might include being able to use reclaimed water on higher value crops. Another potential advantage would be cost savings in the construction, maintenance and operation of such a facility and related pipeline conveyance infrastructure relative to affected ratepayers. Finally, would a regional multi-agency facility at either location offer economic advantages relative to the ability to secure funding (grants and loans) to build and operate the facility?

**Comparative Site Analysis.** The following discussion compares the sites with respect to the suitability as a regional facility, and the relative advantages of each.

### CMC Wastewater Site

From a locational standpoint, this site has potential as a regional facility, since it is centrally located with respect to several potential users, including the California Men's Colony, City of Morro Bay, Cuesta College, Cayucos, and various property owners in the Chorro Valley. Specific advantages associated with



the CMC site are discussed below:

*Administrative.* If the existing CMC facility were expanded to accommodate Morro Bay and Cayucos, it would allow for the existing Morro Bay/CSD WWTP to be retired without the need to find a brand new site, or to operate two facilities. In this case, all players would operate under a single permit at the CMC site, which would likely be a long-term administrative advantage for permitting agencies such as the RWQCB. In the short-term, developing a workable multi-agency framework to construct and operate the expanded facility may be potentially problematic. This would be particularly true if the State Department of Corrections and Rehabilitation (CDCR), who operates the current facility, does not take a substantial leadership role in the development and operation of such a facility. (See Sections 6.E. and 6.I. for further discussion of this issue.)

Similarly, if the facility is to be transferred to the County, it is uncertain whether the County would be willing or able to take on a leadership role in the near-term, since County staff has gone one record indicating that they do not have sufficient staff to lead this effort right now, and that other major infrastructure projects (such as the Los Osos Wastewater Treatment Plant) have higher priority.

That said, if these substantial obstacles can be overcome, in the long-term it may be administratively less complex to operate one facility instead of two.

Permitting from the RWQCB could be facilitated to some extent if this site were chosen. The RWQCB's Executive Officer has been consistently supportive of this location as a regional facility, citing the need to "look 75 years down the road." Although he has not defined what this means, he has implied that it refers to the concept that a state-of-the-art facility that serves multiple beneficiaries in the region would be preferable to outdated facilities that do not accomplish this goal. Although he has pledged his personal support and cooperation to facilitate permitting at this location, his board has not taken a position about the regional benefits of this site or any other, and it is unclear if that agency would be similarly supportive of any other site that accomplishes regional objectives consistent with RWQCB goals.

In a meeting with CDCR, City of Morro Bay staff, and CSD staff on October 20, 2014, RWQCB staff acknowledged that there appeared to be no obvious relative regional advantage of the CMC site over the Rancho Colina site, except to the extent that all potential partner agencies would be concentrated at a single location, which may potentially allow for some cost-sharing and would minimize the number of permits required. RWQCB staff also acknowledged challenges with expanding the CMC facility associated with meeting certain potential water quality objectives in Chorro Creek included in the existing permit for the existing CMC facility.

*Regional Water Supply and Distribution.* Some have expressed that the CMC facility would be relatively conducive to distributing reclaimed water throughout the region, as appropriate. The key question here is the relative proximity of the facility to existing pipeline infrastructure that could be used to convey treated water to potential users outside the immediate vicinity.

Two regional water conveyance systems operate in the vicinity of CMC site, Morro Bay, and Cayucos: the Whale Rock Reservoir Water System and Chorro Valley Turnout. Whale Rock Reservoir stores approximately 40,660 AF and is located approximately 1 mile east of Cayucos and is jointly owned by the City of San Luis Obispo, CMC, and Cal Poly. CMC and the City of Morro Bay have a mutual aid agreement



related to water resources in the event of an emergency. The City of Morro Bay can receive Whale Rock water that is treated at the CMC Water Treatment Facility and routed through the Chorro Valley Water System pipeline to the City's Kings Tank.

The Chorro Valley Turnout conveys State Water from the Coastal Branch of the State Water Pipeline to CMC, the County Operations Center on Kansas Avenue, Cuesta College, and the City of Morro Bay. It delivers 2,338 AFY during years when the State Water can allocate 100% of contractors' contracted amounts. The Turnout terminates at the City of Morro Bay's water system as shown on **Figure 4**.

Both pipelines are located approximately 1.5 miles to the northeast of the existing CMC WWTP on the north side of Highway 1. The Whale Rock pipeline passes through the City of Morro Bay near Highway 1 to Cayucos, approximately 1.5 miles southwest of the proposed Rancho Colina site, and the Chorro Valley Turnout terminates at the City's Kings Tank within City boundaries.

There are connections between the two pipelines. For example, Whale Rock water can be treated at the CMC Water Treatment Plant and conveyed through the Chorro Valley Turnout.

Since both proposed sites are located within 2 miles of the Whale Rock pipeline, and the Chorro Valley Turnout terminates at the City's water distribution system, either site could be incorporated into regional water delivery systems in the future if direct potable reuse is pursued.

*Economic Issues.* In addition to the cost of constructing and operating the facility (which is addressed elsewhere), there are several other issues that relate to the long-term economic health of the region. The first relates to long-term pumping costs. As a general concept, it would be cheaper to transport treated water long distances within the region than untreated wastewater, which includes solids that would require substantially more energy to pump, and will also require a higher level of pipeline maintenance to prevent clogging. Thus, a site that minimizes the distance between wastewater generators and the treatment facility would be preferable from the perspective of long-term economic and energy sustainability. Assuming that treated water would be potentially available throughout the region via an existing pipeline network, the relative economic advantage of locating a facility near to regional water users is comparatively less.

#### *Issues Related to Pumping Costs*

In a regional facility, residents of the City of Morro Bay would be the largest single group of wastewater generators; the City has a population of roughly 10,000, which does not include visitors to the City's hotels, shops and restaurants. Cayucos would contribute an additional population of about 2,500. The California Men's Colony has a population of about 5,000. While Cuesta College has a student population of about 11,000, this population is transient and effectively substantially less than that number if normalized to a full-time population. Thus, if the facility were to include users from each of these agencies, the greatest economic advantage would be if the facility were relatively closer to Morro Bay and Cayucos.



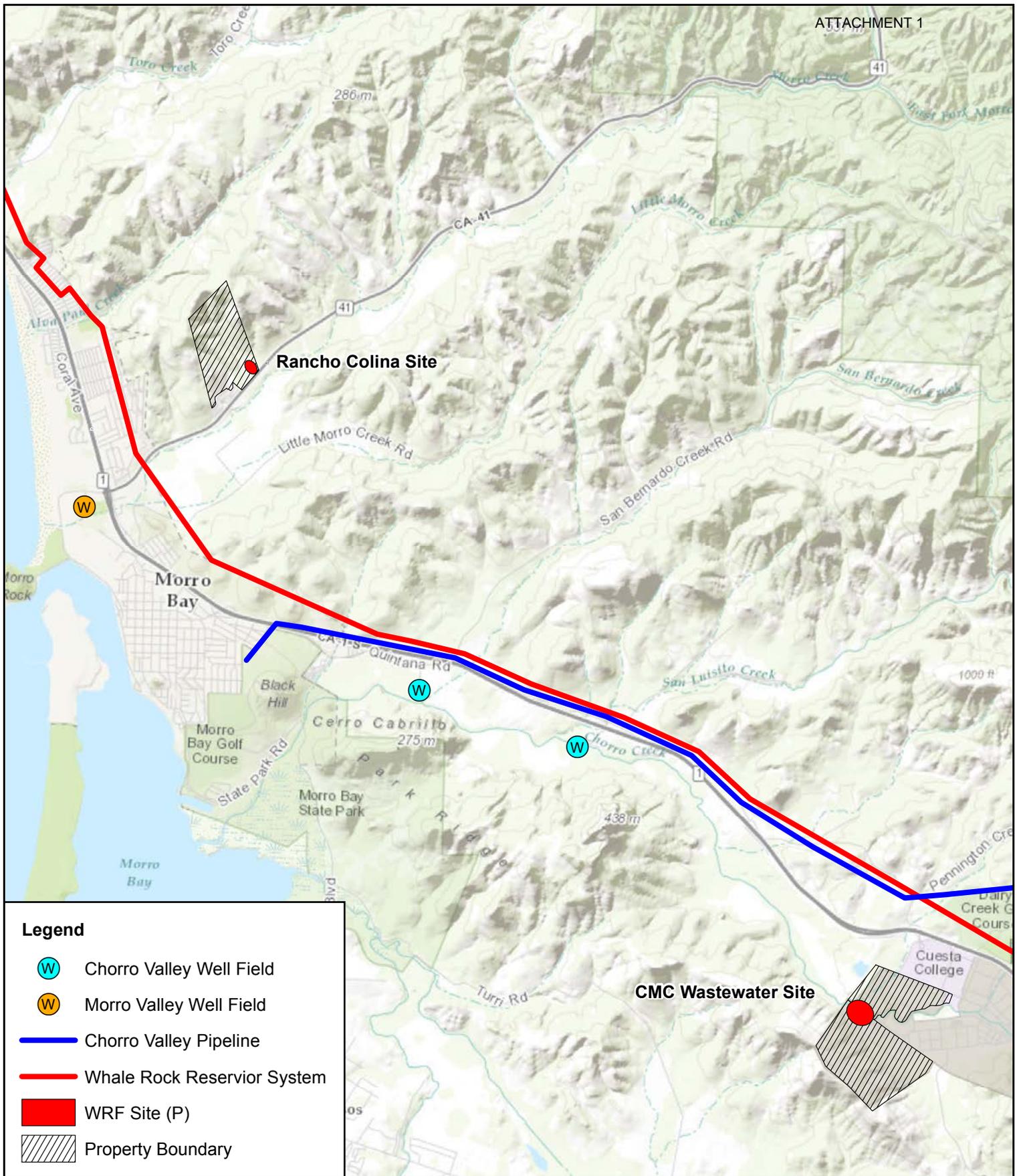


Figure 4: Regional Pipelines

Note: Basemap data obtained from ESRI



Another way to put it, the CMC site is about 6 linear miles from Morro Bay, and over 11 miles from Cayucos—even farther from each when actual pipeline routes would need to be considered (the most feasible pipeline route from CMC to Morro Bay is along a proposed regional bike path about 8.1 miles). Thus, the majority of the permanent population that such a facility would serve would be anywhere from 6 to over 11 miles from the treatment facility. This would result in substantial and permanent pumping costs to serve these two communities if they were partners in a regional facility at this location.

On the other hand, the current CMC site makes logical sense to serve the population of the Men's Colony and Cuesta College, since it is relatively close to both facilities. It is adjacent to Cuesta College, and about 3 miles downstream of the Men's Colony. Adding the combined flows of Morro Bay and Cayucos, whose combined population is more than twice that of the Men's Colony, but whose location is also more than twice as far, would greatly minimize the economic benefits of such a multi-agency regional facility, at least to Morro Bay and Cayucos.

#### *Agriculture and Crop Valuation*

Another aspect of potential regional benefits are those associated with crop valuation. If a regional facility could provide reclaimed water to an area with the greatest acreage—and highest value—crops, there would be a potentially higher regional economic benefit. As noted in **Tables 1** through **3** (and summarized below), there is more high value agricultural acreage in the Morro Valley than in the Chorro Valley:

- Chorro Valley: 546 irrigated acres; 128 potentially irrigated acres
- Morro Valley: 1,080 irrigated acres

Development at the CMC site would be more beneficial to crops in the Chorro Valley than the Morro Valley, because of the proximity of the facility to nearby agriculture. However, there is less irrigated agriculture in the Chorro Valley, and crops there generally have a lower value per acre. In addition, there is a less acute need to find additional water to irrigate crops in the Chorro Valley as compared to the Morro Valley. In general, most mixed crops that might be grown in the Chorro Valley have a per acre value between \$5,000 and \$9,000, which is less than the per acre value of avocados (\$9,549), which is the mainstay of the Morro Valley.

Mixed vegetable crops, such as what is typically grown in the Chorro Valley, range in value from \$400 to \$650 per ton. Broccoli and cauliflower are somewhat higher, ranging in value from \$850 per ton (cauliflower) to \$987 per ton (broccoli). Typical mixed vegetable crop values range from \$5,900 to \$9,500 per acre, which for the most part are high volume crops ranging from 10 to 25 tons per acre. Based on the potential irrigable area of 674 acres, this translates to a potential crop value ranging from roughly \$4 million to \$6 million. Reclaimed water, if it can be applied to any or all of this acreage, would help realize this potential value. That said, it is not known what the cost of reclaimed water to the growers might be, which would offset some of the potential economic benefit of the reported crop values. In addition, as noted before, it is likely that since there is less demand for water related to agricultural irrigation in the Chorro Valley, the net potential economic benefit would be less.

**Table 1** shows the values for irrigated crops that might be potentially grown in the Chorro or Morro Valleys:



<b>Crop</b>	<b>Tons/acre</b>	<b>Value/ton</b>	<b>Value/acre</b>
Avocados	4.935	\$1,935.00	\$9,549.23
Bell pepper	14.044	\$655.88	\$9,211.18
Bok choy	15.654	\$576/11	\$9,018.43
Broccoli	6.041	\$987.59	\$5,966.03
Cabbage	24.652	\$351.81	\$8,672.82
Cauliflower	11.231	\$849.79	\$9,543.99
Lettuce, head	14.346	\$366.54	\$5,258.38
Lettuce, leaf	13.756	\$493.07	\$6,782.67
Napa cabbage	20.545	\$412.19	\$8,468.44
Oranges	14.293	\$332.00	\$4,745.28

*Source: 2013 Annual Report, SLO County Department of Agriculture.*

## **Rancho Colina Site**

Like the CMC site, Rancho Colina has potential as a regional facility, since it is centrally located with respect to several potential users, including the City of Morro Bay and CSD, and various property owners in the Morro Valley. Specific advantages associated with the Rancho Colina site are discussed below:

*Administrative.* If the Rancho Colina site were designed as a regional facility to accommodate the flows from both Morro Bay and Cayucos, it would allow for the existing Morro Bay/CSD WWTP to be retired. Under this scenario, the existing CMC site would continue to operate and serve the Men’s Colony, Cuesta College, and County Operations Center. In effect, the same agencies in the region would be served, but through two smaller regional facilities than one larger one at the CMC site. This arrangement would be potentially less advantageous to the RWQCB, who would need to permit two facilities rather than one. Setting aside the previously-described administrative obstacles to developing a multi-agency framework under the guidance of the State and County, it may be administratively less complex to operate one facility instead of two.

That said, RWQCB staff has acknowledged that there appeared to be no obvious relative regional advantage of the CMC site over the Rancho Colina site, except to the extent that all potential partner agencies would be concentrated at a single location, which may potentially allow for some cost-sharing and would minimize the number of permits required, noting further that there would be no land acquisition costs at the CMC site. RWQCB staff also acknowledged challenges with expanding the CMC facility associated with meeting certain potential water quality objectives in Chorro Creek included in the existing permit for the existing CMC facility. This latter challenge would not be an issue at the Rancho Colina site if a combination of reuse and discharge options include direct agricultural reuse, ocean outfall (during wet weather), and/or percolation ponds. A discharge to Morro Creek would have more permitting constraints, but less so than a Chorro Creek discharge since the creek is an impaired water body as discussed in other sections of this report.

*Regional Water Supply and Distribution.* Some have expressed that the CMC facility would be relatively conducive to distributing reclaimed water throughout the region, as appropriate. The key



question here is the relative proximity of the facility to existing pipeline infrastructure that could be used to convey treated water to potential users outside the immediate vicinity.

Please refer to the discussion under the CMC site. Since both proposed sites are located within 2 miles of the Whale Rock pipeline, and the Chorro Valley Turnout terminates at the City's water distribution system, either site could be incorporated into regional water delivery systems in the future if direct potable reuse is pursued.

*Economic Issues.* As noted in the analysis of the CMC site, a location that minimizes the distance between wastewater generators and the treatment facility would be preferable from the perspective of long-term economic and energy sustainability. Assuming that treated water would be potentially available throughout the region via an existing pipeline network, the relative economic advantage of locating a facility near to regional water users is comparatively less.

#### *Issues Related to Pumping Cost*

In a regional facility, residents of the City of Morro Bay would be the largest single group of wastewater generators; the City has a population of roughly 10,000, which does not include visitors to the City's hotels, shops and restaurants. Cayucos would contribute an additional population of about 2,500. The California Men's Colony has a population of about 5,000. While Cuesta College has a student population of about 11,000, this population is transient and effectively substantially less than that number if normalized to a full-time population. Thus, if the facility were to include users from each of these agencies, the greatest economic advantage would be if the facility were relatively closer to Morro Bay and Cayucos.

The Rancho Colina site is about a mile from the City limits, and about six miles from Cayucos (following road rights-of-way). This is substantially closer than the CMC site is to either agency, and thus the cost of pumping untreated wastewater from those locations would be substantially less. This would result in substantial and permanent pumping costs to serve these two communities if they were partners in a regional facility at this location.

#### *Agriculture and Crop Valuation*

As noted previously, there is more high value agricultural acreage in the Morro Valley than in the Chorro Valley:

- Chorro Valley: 546 irrigated acres; 128 potentially irrigated acres
- Morro Valley: 1,080 irrigated acres

Development at the Rancho Colina site would be more beneficial to crops in the Morro Valley than the Chorro Valley, because of the proximity of the facility to nearby agriculture. There is substantially more irrigated agriculture in the Morro Valley, and crops there generally have a higher value per acre, typically avocados, which have a reported average 2013 value of about \$9,500 per acre. And, as noted above, there is higher agricultural demand for water in the Morro Valley, as evidenced by the fact that extensive groundwater pumping in this basin exceeds the basin's safe yield, which ultimately led growers to imported water in trucks, a practice that is no longer allowed.

Approximately 56 parcels ranging in size up to 450 acres include substantial irrigated portions, the largest of which is about 248 acres on a parcel owned by Morro Ranch Co. LLC. Most irrigated areas within these parcels range from 10 to 35 acres, and are generally planted in avocados. In all, there are



about 1,080 acres in the Morro Valley in current or recent irrigated production, the vast majority of which are within about 1.5 miles of the Rancho Colina site, and ranging from 0.1 to 3 miles from the City limits. A few irrigated areas are somewhat farther, up to about 4.5 miles from the City up Highway 41. This compares favorably to the Chorro Valley, where most growers that could potentially use reclaimed water range from 1.5 to 5 miles to the CMC site. Thus, the likely cost of reclaimed water, based on the cost of needed pipeline infrastructure, would likely be less in the Morro Valley.

Based on the value of avocados, the 1,080 irrigable acres have a potential value of about \$10.5 million, or roughly double the value of the irrigable crops in the Chorro Valley. Thus, the relative benefit of using reclaimed water for agricultural use can be best realized in the Morro Valley, and thus from the Rancho Colina site. The cost to growers for buying the reclaimed water would need to be factored out of the benefit. That said, the reclaimed water cost would likely be relatively lower in the Morro Valley, because the distance of extending needed infrastructure would likely be less, given the relative proximity of growers to the site in comparison to those in the Chorro Valley with respect to the CMC site.

It should be noted that avocados are the County's fifth highest cash crop, and about 20% of the total acreage is in the Morro Valley. Thus, it is a regional concern that in 2014, faced with an extended drought and lack of water, many Morro Valley growers severely cut back their avocado trees to reduce pressure on the trees. This effectively reduced their potential short-term productivity of these lands, which will not fully recover until there is a reliable long-term source of water. A new WRF at Rancho Colina could likely help restore this critical component of this important regional crop.

**Summary and Conclusions.** In general, either site can and should be viewed as having a potential regional benefit, since either can serve multiple agencies, and provide water reuse benefits to multiple parties. The specific findings are summarized below:

- The CMC's primary unique regional advantage is that it would combine all key agencies (State, County, Morro Bay, and CSD) into a single facility, thus reducing long-term administrative permitting issues with respect to the RWQCB. This benefit, however, presumes that the substantial administrative challenge of having the State and County lead this effort can be overcome. At the same time, RWQCB staff acknowledged that there would not be any other obvious unique regional benefit with respect to the CMC site.
- Rancho Colina's unique regional benefits have to do with economics, particularly with respect to agriculture. Avocados dominate the Morro Valley, and they are a significant geographic component of this an important regional crop. By making reclaimed water available to Morro Valley growers, the potential economic benefit is higher, especially in the context of the current situation, where growers have severely cut back trees due to lack of available water.
- There is no locational advantage for either site relative to their proximity to the existing regional water distribution network. However, from a cost standpoint it is more advantageous to locate the WRF closer to the primary wastewater sources (rather than the ultimate water users), and in that respect, Rancho Colina is much better.
- Overall, while both sites have good regional potential, the comparative unique regional



benefits are better at Rancho Colina, especially when viewed through the lens that developing a workable multi-agency framework and expanded facility at CMC is a remote possibility over the next several years. In contrast, the regional benefits of a new plant at Rancho Colina could likely be realized sooner, while existing regional benefits at CMC (where the State and County are currently served) can continue as is.

**B. Are there potential cost savings for the City if it participates in a regional facility as compared to Rancho Colina? How will the construction and operation of ancillary facilities the City would need (such as a raw sewage conveyance pipeline from CMC to the City) affect the cost to the City? How do the capital costs compare, as well as the lifecycle costs, of both alternatives?**

**Why This Issue is Important.** Keeping costs low was by far the most commonly cited issue expressed at public workshops during the preparation of the *Options Report*. Key components of include capital outlay, operation and maintenance (O&M), and user costs. Unlike capital costs, O&M would be an ongoing cost through the life of the facility. But for many, the key concern is this: what would be the increased cost to ratepayers as reflected in their monthly bill?

Cost is a function of many factors, some of which are not necessarily site dependent. These include the availability of financing or grants, interest rates, and the design and construction of the WRF facility itself. These also include whether other partner agencies will be involved to share project costs and benefits. The construction of a regional facility, where costs are shared among multiple agencies, has the potential to provide cost savings in a way that a City-only facility would not. The degree of savings (if any) would be a function of the actual cost of such a facility, the maintenance responsibilities of partner agencies, and the nature of the cost-sharing agreement among those agencies.

Overall cost is sensitive to the location and configuration of the site, including the following:

- *Proximity to the City's existing wastewater conveyance system;*
- *Proximity to reclamation or water reuse opportunities;*
- *Site elevation (and intervening topography between the site and the City);*
- *Site size and configuration;*
- *Presence of environmental factors that may require special permitting;*
- *The relationship between the City and the property owner during negotiations related to site acquisition and/or use.*

**Methodology.** This analysis is based on a report analyzing the design and cost implications of a regional facility at the CMC site prepared by Carollo Engineers. The cost and design assumptions included in that report were then applied to the Rancho Colina site to allow for a direct comparison of the two locations. The full Carollo report is included as **Appendix B. [CAROLLO REPORT IS NOT COMPLETE AT THIS TIME, AND WILL BE INCLUDED WHEN AVAILABLE.]**

**Comparative Site Analysis.** The following discussion compares the site-oriented factors that



relate to cost, and focuses on the key differences among the sites that might lead to potential savings at one site or another.

## CMC Wastewater Site

[ANALYSIS AND RESULTS TBA BASED ON CAROLLO REPORT]

## Rancho Colina Site

[ANALYSIS AND RESULTS TBA BASED ON CAROLLO REPORT]

**Summary and Conclusions.** [SUMMARY TO BE INCLUDED PENDING COMPLETION OF CAROLLO REPORT] Also please refer to **Table 6** in Section 7 of this report, *Summary and Conclusions*, for a locational comparison of all water resource-related issues, including those discussed in this portion of the analysis.

### **C. Are there unique water supply benefits for the City associated with the CMC site as compared to Rancho Colina? How does the future potential for direct potable reuse factor into this?**

**Why This Issue is Important.** Until the late 1990s, the City of Morro Bay had relied completely on groundwater from wells in both the Chorro Valley and Morro Valley. Increasing limitations on the use of groundwater, including a Regional Board-mandated requirement to maintain a minimum streamflow in Chorro Creek, the potential for seawater intrusion, and contamination of a City well in the Morro basin, prompted the City to acquire State Water in the late 1990s. Today, except for the limited use of groundwater wells as needed, and the potential for a small amount of water from its desalination plant, the City of Morro Bay is currently almost completely dependent on State Water for its long-term supplies. The City typically receives 95% of its supply from State Water and the remainder from Morro Valley wells that are treated for nitrate removal at the City Water Treatment Plant. Now with the reliability of State Water in question, and historic limitations on the use of groundwater, finding new sources to augment existing supply supplies is highly desirable. A new WRF is potentially a large part of this solution, either by creating a new source of water that can be reclaimed for non-potable uses such as agriculture and landscaping, and/or potentially by recharging groundwater basins to make existing City wells more reliable.

A new WRF in either the Morro Valley or Chorro Valley have some potential opportunity to help augment existing water supplies. However, the nature and degree of potential opportunities in these areas differs. In the Chorro Valley, existing City wells could potentially be enhanced if a new WRF is located there. However, there are more agricultural reclamation opportunities in the Morro Valley. In terms of potential direct reuse of water, should regulations change to allow this to occur, both Chorro



Creek and Morro Creek offer opportunities in this regard.

This section explores issues related to augmenting the City's existing water supply, either through groundwater recharge, or potential direct reuse of water discharged to creeks.

In order to analyze and present a comparison of the water supply benefits that are unique to both sites, Cleath-Harris Geologists (CHG) performed an analysis of the maximum water supply benefit at each site. The full report is included in **Appendix C**, and forms the basis of the analysis included below.

To address the relative cost for this water supply on an AFY basis, the JFR project team also developed a preliminary cost for delivery of that water (including wastewater conveyance, treatment, discharge or conveyance of treated effluent, and potable water treatment facilities. The objective of potable water treatment is match the City's current water quality and to comply with state drinking water regulations.

The following assumptions were required to analyze the water supply benefit from discharge to Chorro Creek at the Regional CMC Site:

1. *The City will need to obtain the rights from SWRCB to pump a quantity equivalent to the City's discharge at the CMC outfall.*
2. *The resulting increase in streamflow will be available at the Chorro Creek wells for extraction. In other words, it is assumed percolation through the stream bed in the vicinity of the City wells will eventually reach the City wells and not travel elsewhere.*
3. *Both the City and CSD will discharge at the Regional CMC Site and water from both agencies will be available for the City's use.*
4. *Future regulations related to contaminants of emerging concern (CMCs) in wastewater will not affect the City's ability to discharge at CMC and draw reclaimed water through the Chorro Valley wellfields.*
5. *Opportunities for direct reuse of wastewater by agricultural users in the Chorro Valley were not considered in this analysis, but are discussed in Section 6.D of this report.*

The following assumptions were required to evaluate the maximum benefit to the City's Morro Valley wells via direct delivery of reclaimed wastewater, reduced pumping by upstream agricultural users, and in-lieu recharge of the City wells.

1. *Pumping by agricultural users will be reduced at a 1:1 ratio to recycled water delivery, and agricultural users will provide their own reservoir storage or onsite water management in exchange for low water rates.*
2. *The Cleath-Harris study assumed that only the City will convey wastewater to Rancho Colina, which is a worst case assumption from a City benefit perspective. The CSD is assumed not to be included since they had concluded the Regional CMC Site was their preference. That said, the Cleath analysis was expanded by the JFR project team to include CSD, in order to evaluate the impact of partnering with CSD to develop a regional facility.*
3. *No seasonal reservoir storage or percolation would be provided. The benefit will be higher if seasonal storage or percolation is available during wet weather months when irrigation demand is limited.*
4. *Direct discharge to Morro Creek was not considered, but could also increase the water supply benefit. Less information is available on the relationship between Morro Creek streamflow and*



*water availability at the Morro Valley wells than at Chorro Creek, since the City has been monitoring flow at Chorro Creek for over 4 years. However, it is known that Morro Valley has an area downstream of Rancho Colina that would allow percolation into groundwater.*

### ***Comparative Site Analysis.***

## **CMC Wastewater Site**

In order to evaluate the maximum benefit of water supply from streamflow augmentation at the CMC Regional Site, the existing availability and quality of groundwater and projected impact of new City/CSD were considered as discussed below.

*Availability and Quality of Groundwater.* The CMC Regional Site discharges upstream of the City's Chorro Valley wellfields. Eight wells located in two fields were noted as having TDS levels that can range from 470 to 1,200 mg/L (2005 Draft UWMP) and nitrates that exceed state drinking water regulations. Periodic high iron and manganese levels were also noted. The Chorro Valley wells are located approximately 3 miles from the City's water treatment plant and cannot feed directly into the distribution system without nitrate reduction in order to comply with drinking water regulations. A nitrate removal facility will be required to utilize the Chorro Valley wellfields and is discussed in Section 6.B. of this report.

The City can only pump water from Chorro wells when creek levels reach 1.4 cubic feet per second (1.4 CFS) and can only extract 1,142.5 AFY according to their water supply permit.

*Projected Water Supply Impact of Streamflow Augmentation at CMC Regional Site.* CHG applied combined City and CSD flows to historical flow records along Chorro Creek in order to assess potential benefit of increased flows during normal years and also during the past few years of drought. CHG used both a constant monthly delivery rate based on 1.5 MGD average annual flow (1,680 AFY) and varied monthly flows to determine how seasonal plant flow variations would impact the availability of water. Based on the assumptions discussed earlier in this report, CHG concluded the following:

- Assuming 1,680 AFY of wastewater is treated and discharged to Chorro Creek, a long-term average, maximum benefit of 560 AFY would be available at the Chorro wells.
- Up to 1,000 AFY would be available during drought years.
- The percentage of available discharge is expected to vary from 505 AFY during normal years to a drought year "maximum" of 950 AFY.

## **Rancho Colina Site**

In order to evaluate the maximum benefit to the City's water supply from direct reuse of wastewater from a Rancho Colina site by upstream agricultural users, the existing availability and quality of groundwater, and projected impact of new City flows were considered as discussed below.

*Availability and Quality of Groundwater.* Four active City wells are located within the Morro Valley groundwater basin. Since nitrates exceed state drinking water regulations, the wells have been directed to the City's Water Treatment Plant, which performs reverse osmosis treatment. The Draft



2005 Urban Water Management Plan noted that seawater intrusion had occurred in the past within the basin. The City's Morro Valley wells are located closer to the ocean than the Chorro Valley wells, increasing the risk of seawater intrusion if they are pumping when groundwater levels are already low.

The City's water supply permit limits extractions to 581 AFY at a limit of 1.2 cfs.

*Projected Impact of New City Flows.* CHG analyzed the amount of "in-lieu" recharge to the City's wells that would be available if upstream agricultural users receive direct deliveries of recycled water from the Rancho Colina site. They concluded the following:

- Assuming a 1.1 MGD average annual flow from the Rancho Colina site, excluding CSD, approximately 1,265 AFY of reclaimed wastewater would be available. If CSD were included, this would increase to 1,680 AFY.
- Over 1,500 AFY of demand is available within the Morro Valley upstream and downstream of the Rancho Colina site based on water usage factors for avocados that were developed in the San Luis Obispo County Master Water Plan.
- Due to lower demand during wet weather months, only 1,105 AFY would be applied for agricultural users without CSD and 1,330 AFY would be available with CSD.
- Assuming users apply the full 1,105 AFY without CSD, and discontinue pumping Morro Valley groundwater by the same quantity, the downstream benefit would be 320 AFY during drought and over 900 AFY during normal to wet years. With CSD, 1,330 AFY would be applied with a drought benefit of 545 AFY and normal to wet year benefit of 1125 AFY.

As shown above, adding flows from CSD would help meet dry weather irrigation demands and would increase the amount of water that could be directly reused. This would also increase the amount of water available at the City wells.

If streamflow augmentation were pursued, seepage through Morro Creek would recharge the Morro Valley groundwater basin and increase the flow that could be extracted from the City wells. The level of benefit to City wells would be similar to that at the Regional CMC Site during drought conditions.

Another important consideration at this location is that in-lieu recharge or direct streamflow augmentation will likely reduce seawater intrusion.

**Summary and Conclusions.** The following summarizes the major points from the analysis presented above:

- Overall, both sites have a similar level of benefit to City water supplies.
- The CMC Site presents the highest total benefit (950 AFY) to the City water supply during a drought year. During normal and wet years, over 60% of the City and CSD's treated wastewater would continue to flow to the ocean.
- The Rancho Colina Site presents the highest water supply benefit (900 AFY) to the City water supply during normal and wet years. Should the CSD choose to become a customer of the City, there could be an additional 225 AFY available resulting in a total of 1,125 AFY.



- The Rancho Colina Site with direct agricultural reuse and wet weather disposal through the ocean outfall presents the least effluent permitting challenges.
- If streamflow augmentation at Morro Creek were pursued, the permitting challenges and future regulatory risk would likely be less than those at Chorro Creek according to the Discharge Options report (LWA, 2014). The amount of water supply benefit would be similar to that at the CMC Site.

**Table 2** summarizes the approximate cost per AF for the long-term water supply benefit estimated by CHG. **Appendix D** includes the assumptions that were applied to this evaluation:

[APPENDIX D AND TABLE 2 TBA PENDING COMPLETION OF CAROLLO REPORT]]

Please refer to **Table 6** in Section 7 of this report, *Summary and Conclusions*, for a locational comparison of all water resource-related issues, including those discussed in this portion of the analysis.

#### **D. What are the water reclamation opportunities for agricultural use from a regional facility at the CMC site, and how do these compare to Rancho Colina?**

**Why This Issue is Important.** The City's current Local Coastal Plan/General Plan requires a new wastewater facility that meets a minimum goal of reclaiming at least 770 acre-feet per year (AFY) of wastewater to offset agricultural or golf course water use, consistent with relevant provisions of the Coastal Act. As stated in Land Use, Open Space and Conservation Element Program 80.1:

*The City should implement the proposed wastewater reclamation program to provide an additional 770 acre-feet per year of water supply for agricultural and golf course purposes, thereby relieving the groundwater basin of this demand. Although not presently contemplated, the reclamation program could be expanded to provide additional quantities of reclaimed wastewater.*

Program 80.2 calls for new facilities that implement reclamation goals:

*The City should provide recharge facilities to collect storm water which normally flows out to sea, for recharge to groundwater basin. Such recharge programs would allow storage of additional quantities of water in the groundwater basin each year.*

While this program does not directly require recharge of treated wastewater, developing percolation ponds (similar to stormwater retention facilities) would be another approach for recharging groundwater. Percolation requires appropriate site conditions that would allow treated wastewater to migrate to deep aquifer storage without being diverted to the ocean or surface waters by the presence of an impermeable soil layer (e.g., clay or bedrock). At this time, an appropriate site has not been



identified but it is assumed that potential percolation facilities could be identified during development of the City's Master Reclamation Plan.

Morro Bay is currently mostly dependent on State Water for its long-term supplies (see discussion of groundwater issues in Item 6.B. above), so finding new sources to augment existing supplies is highly desirable. A new WRF is potentially a substantial part of this solution, either by creating a new source of water that can be reclaimed for non-potable uses such as agriculture and landscaping, or potentially by recharging groundwater basins to make existing City wells more reliable.

**Methodology.** This section describes the assumptions in the analysis and recycled water opportunities available in the region.

### Potential Recycled Water Opportunities

The primary uses for recycled water, as discussed in this report, include:

- Direct reuse for irrigation or other applications; and
- Indirect reuse through either streamflow augmentation or groundwater recharge.

The following describes potential sites for the application of recycled water in Morro Bay and the surrounding region. This is based on both a literature review and original research. Our team, led by Michael K. Nunley Associates (MKN), reviewed previous recycled water studies for the City of Morro Bay (City) and Cayucos Sanitary District (CSD) Wastewater Treatment Plant (WWTP), including:

- *Cayucos/Morro Bay Comprehensive Recycled Water Study*, Carollo Engineers, October 1999
- *2012 Recycled Water Feasibility Study*, Dudek, Draft March 9, 2012

These reports investigated the feasibility of implementing a recycled water program. Both studies included identification of potential water reuse opportunities in the Cayucos and Morro Bay areas and review of the water demands and water quality requirements.

In addition, our team conducted original research, reviewing parcels in both the Morro and Chorro Valleys for their potential for irrigated agriculture.

In general, the use of reclaimed water in the region centered on Morro Bay area could be applied to one or more of the following:

- Irrigated Agriculture
- Streamflow Augmentation in Creeks
- Landscaping, Parks, and Golf Courses
- Groundwater Recharge

Each of these has its own water quality requirements, which are summarized in the December 2013 *Options Report*. Of the sites described in the May 2014 *Report on Reclamation*, over 90% would require wastewater treatment to disinfected tertiary levels, including all agricultural irrigation sites; in addition, salt-sensitive crops such as avocados would also need advanced treatment for salt removal. For this report, we intend to focus on the agricultural irrigation opportunities, which comprise most of the sites.



In summary, there are substantial reclamation opportunities in region surrounding the City, mostly concentrated in the Morro Valley in the form of irrigated agriculture (primarily avocados, and also some row crops), but there are also some opportunities in the Chorro Valley as well. There are important though less plentiful opportunities within the City itself as well as in Cayucos, primarily related to landscaping and parks.

**Comparative Site Analysis.** The following discussion compares the reclamation opportunities related to irrigated agriculture at the two sites.

### **CMC Wastewater Site**

One of the major potential customers that has been identified near CMC is the County's Dairy Creek Golf Course. The CMC WWTP has delivered an average of 188 AFY to Dairy Creek Golf Course over the past 10 years, according to County staff. Based on discussions with County staff, the total water usage at Dairy Creek Golf Course is approximately 250 to 275 AFY. Therefore, only an additional 62 to 87 AFY could be used.

The May 2014 *Report on Reclamation* noted that there were only two major parcels in the Chorro Valley that provided potential targets for agricultural reclamation. That report generally focused on land closer to the City, because the nearest site under consideration in that report (Tri-W) was at the eastern edge of the City, rather than several miles up the valley. In that case, it made little sense to focus on reclamation sites that required extensive infrastructure to be extended upstream and away from the City.

Now, because of the CMC site's relative upstream location compared to what had been analyzed before, it makes more sense to more fully consider the lands between that site and the City.

The CMC site is approximately 6 linear miles from the City of Morro Bay. Chorro Creek traverses the valley between the site and the City. In addition to the two large parcels previously identified (owned by Morro Bay Ranch and the State of California), other portions of this area are within active agricultural use, which present potential opportunities for the use of reclaimed water. In general, these areas include smaller parcels, or small portions of larger parcels, most of which include active irrigated areas less than 15 acres. One parcel includes about 30 active acres, and another might include about 68 acres. These parcels are located in the general vicinity between Canet Road/San Luisito Creek Road and San Bernardo Road, about 3 to 4 miles down the valley from the CMC site, and about 1.5 to 2.5 miles up the valley from the eastern City limit. These reclamation opportunities are at generally lower elevation than the CMC site (which is about 190 feet above sea level), although some irrigated agriculture up Nicola Ranch Road is at relatively higher elevation (250 to 300 feet).

In all about 545 acres in the Chorro Valley downstream from the CMC are in active irrigation, and have the highest potential for reclamation.

There are also many other properties in the Chorro Valley that are not in agricultural use, but are relatively flat, open, and otherwise exhibit characteristics that make them potential reclamation targets if they were cultivated. This include about 17 smaller parcels (2 to 20 acres in size) either near Chorro Creek Road, San Bernardo Creek Road, Canet Road, or San Luisito Creek Road. Within these parcels, about 128 acres appear suitable for irrigated agriculture. However, many have existing constraints,



including onsite residences, small parcel sizes, or in the case of two larger parcels near Chorro Creek owned by the State Department of Fish and Wildlife, may not be suitable for agriculture because of their potential as habitat mitigation sites.

**Tables 3 and 4** summarize the potential reclamation opportunities in the Chorro Valley, which are shown on **Figure 5**.

<b>Table 3. Chorro Valley Irrigated Agriculture (or fallow irrigated ag)</b>				
<b>Owner</b>	<b>Parcels</b>	<b>Total Acres</b>	<b>% Irrigated</b>	<b>Irrigated Acres</b>
Morro Bay Ranch	1	303.67	85.0%	258.12
State of California	1	438.93	32.0%	140.46
Roy Jensen *	1	9.78	100%	9.78
Morro Bay Ranch *	1	309.13	5%	15.46
Edward Perry *	1	57.11	5%	2.86
Edward Perry *	1	60.10	50%	30.05
Robert Armstrong *	1	32.13	25%	8.03
State of California (Fish and Wildlife) *	1	252.01	5%	12.60
John Maino *	1	85.74	80%	68.59
<b>TOTAL</b>	<b>9</b>	<b>1,548.60</b>	<b>35.3%</b>	<b>545.95</b>
<i>* Previously unreported parcels are in the vicinity of Canet, San Luisito Creek, or San Bernardo Creek Roads. These were not shown before because they were upstream from the Tri-W site, which was examined in the May 2014 siting study, but are downstream from the CMC site.</i>				

<b>Table 4. Chorro Valley Parcels Not in Crop Production, but with Irrigation Potential</b>				
<b>Owner</b>	<b>Parcels</b>	<b>Total Acres</b>	<b>% Irrigation Potential</b>	<b>Potential Irrigated Acres</b>
<i>Parcels near Chorro Creek Road <sup>1</sup></i>				
John Pagent	1	10.09	90%	9.08
State of California (Fish and Wildlife)	2	43.97	80%	35.18
Valentina Cottini	1	6.22	80%	4.98
<i>Subtotal</i>	<i>4</i>	<i>60.28</i>		<i>49.23</i>
<i>Parcels near Canet, San Luisito Creek, or San Bernardo Creek Roads <sup>2</sup></i>				
Randolph Rogers	1	11.54	75%	8.66
George Ross	1	8.37	75%	6.28
Teresa Stoner	1	14.42	75%	10.82
Tony Gairan	1	2.92	90%	2.63
Steven Williams	1	11.56	40%	4.62
Karl Schenk	1	3.16	60%	1.90
Domingos Garcia	1	1.94	10%	0.19
Evelyn Caligari	1	20.45	95%	19.43
John Fox	1	2.01	10%	0.20



<b>Table 4. Chorro Valley Parcels Not in Crop Production, but with Irrigation Potential</b>				
<b>Owner</b>	<b>Parcels</b>	<b>Total Acres</b>	<b>% Irrigation Potential</b>	<b>Potential Irrigated Acres</b>
Michael Ness	1	2.81	90%	2.53
Aaron Bento	1	10.25	90%	9.23
Edward Allred	1	3.22	75%	2.42
Tony Gairan	1	13.26	75%	9.95
<i>Subtotal</i>	<i>13</i>	<i>105.91</i>		<i>78.83</i>
<b>TOTAL</b>	<b>17</b>	<b>166.19</b>	<b>77%</b>	<b>128.07</b>
<p><i>Note: None of these parcels are in active irrigated agriculture, nor appear to have been in the recent past. However, they include open lands that are potential suitable for agricultural production, if the property owner opts to do so.</i></p> <ol style="list-style-type: none"> <li><i>1 The two parcels owned by Cal Fish and Wildlife adjacent to Chorro Creek are large enough, but may not be suitable for irrigated agriculture if they are used for habitat-related mitigation purposes.</i></li> <li><i>2 Previously unreported parcels are in the vicinity of Canet, San Luisito Creek, or San Bernardo Creek Roads. These were not shown before because they were upstream from the Tri-W site, which was examined in the May 2014 siting study, but are downstream from the CMC site.</i></li> </ol>				

### **Rancho Colina Site**

The Rancho Colina Site is located in the Morro Valley, which supports extensive irrigated agricultural uses, primarily avocados, but also some citrus and row crops. In 2014, faced with an extended drought and lack of water, many growers severely cut back their avocado trees to reduce pressure on the trees. This effectively reduced their potential short-term productivity of these lands, which will not fully recover until there is a reliable long-term source of water.

Approximately 57 parcels ranging in size up to 450 acres include substantial irrigated portions, the largest of which is about 248 acres on a parcel owned by Morro Ranch Co. LLC. Most irrigated areas within these parcels range from 10 to 35 acres, and are generally planted in avocados. In all, there are about 1,080 acres in the Morro Valley in current or recent irrigated production, the vast majority of which are within about 1.5 miles of the Rancho Colina site, and ranging from 0.1 to 3 miles from the City limits. A few irrigated areas are somewhat farther, up to about 4.5 miles from the City up Highway 41.



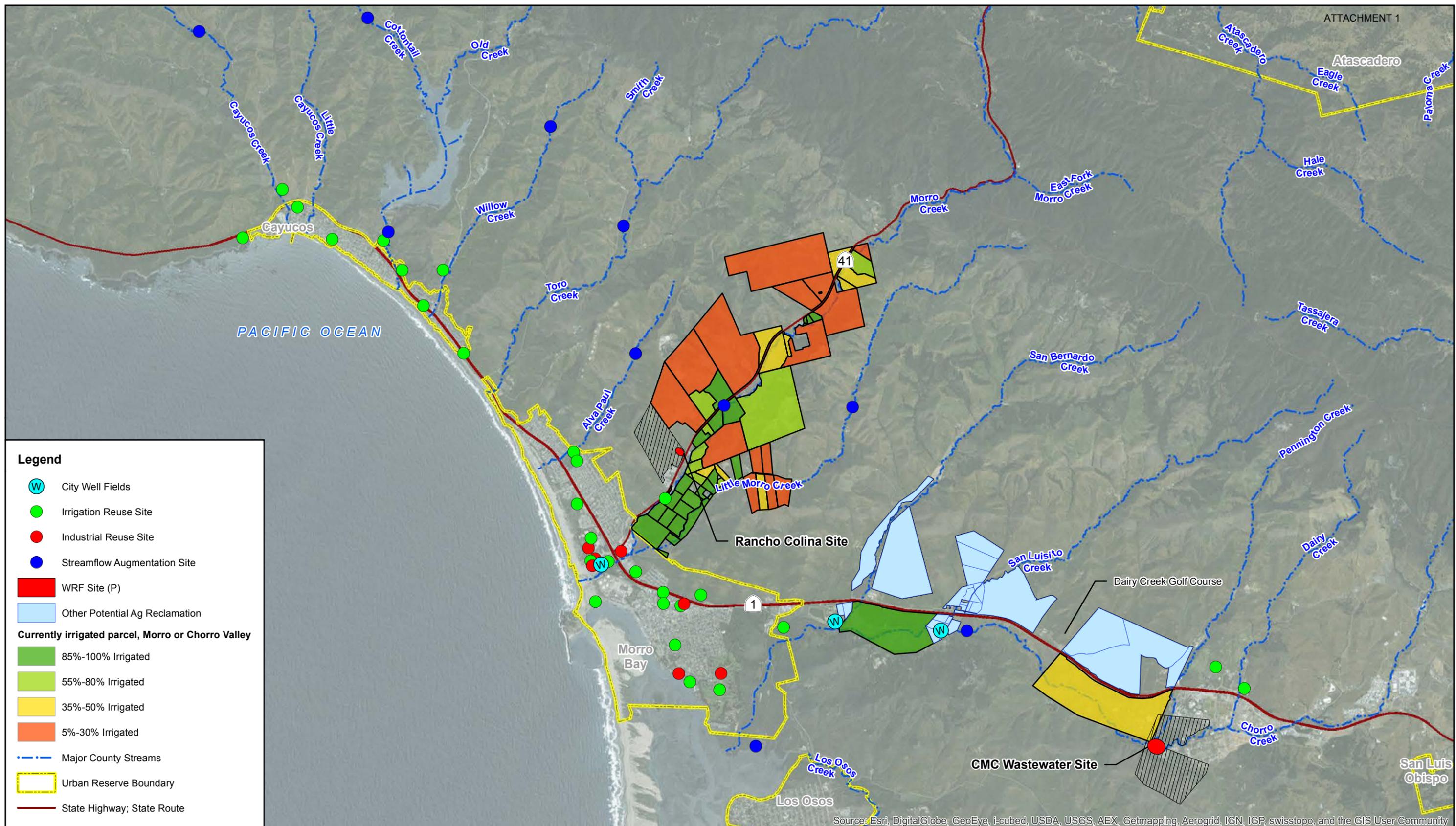


Figure 5: Regional Reclamation Opportunities

**Table 5** summarizes the potential reclamation opportunities in the Morro Valley, which are shown on **Figure 1**.

<b>Table 5. Morro Valley Irrigated Agriculture</b>				
<b>Owner</b>	<b>Parcels</b>	<b>Total Acres</b>	<b>% Irrigated</b>	<b>Irrigated Acres</b>
Morro Ranch Co. LLC	1	349.46	71.0%	248.12
Morro Creek Ranch	5	345.07	57.2%	197.46
Howard H. Hayashi	2	82.14	95.5%	78.42
Dwain Davis et al	1	98.43	38.3%	37.70
Susan Beasley et al	1	33.15	100.0%	33.15
Mary Flavan	1	43.69	75.0%	32.77
Paul Madonna et al	2	143.80	21.4%	30.72
James Shanley et al	1	111.65	26.2%	29.25
Evangeline D. Parker	2	46.58	50.0%	23.29
Neil R. Nagano et al	1	23.28	100.0%	23.28
Judith E. Hull	2	113.91	18.7%	21.29
Randy & Joanne Kann	1	21.06	95.0%	20.01
Dale E. Guerra	2	366.16	5.5%	20.00
Manuel S. & Amparo G. Haber	1	19.57	98.0%	19.18
Patrick N. Nagano et al	1	20.10	94.0%	18.89
Richard B. Kitzman et al	1	19.19	92.0%	17.65
Steve J. and Barbara J. Erden	1	19.96	87.0%	17.37
Scott T. Mather et al	1	19.70	86.0%	16.94
Kathleen E. Cirone et al	1	36.09	45.5%	16.42
James M. Dunn Family Ranches	3	663.65	2.5%	16.29
Gary H. Evans	1	151.30	10.0%	15.13
Eileen M. Giannini	2	15.54	90.4%	14.04
William Limon et al	3	14.05	92.9%	13.05
Frederick Harpster Sr.	1	31.35	41.0%	12.85
Larry Johnson et al	1	38.61	27.0%	10.42
Merriam J. Urquhart et al	1	11.11	90.0%	10.00
Teri A. Keyser	1	18.09	54.0%	9.77
Kenneth H. Macintyre et al	1	10.79	90.0%	9.71
Joseph M. Spellacy	2	52.73	17.2%	9.07
Steven B. Victor et al	1	9.89	90.0%	8.90
Lyle C. Foster et al	1	176.35	4.5%	7.94
Gregory J. Frye et al	1	29.10	27.0%	7.86
John J. Heitzenrater et al	1	11.96	58.0%	6.94
Richard P. Sauerwein et al	2	9.70	67.3%	6.53
Dana & Valerie Putnam	1	12.15	33.0%	4.01
Norman A. & Angia M. Martignoni	1	12.26	31.0%	3.80
Richard Lyons	1	9.04	42.0%	3.80
Kurt E. Steinmann	1	15.15	25.0%	3.79
Margaret G. French	1	40.00	6.0%	2.40
Mary Nagano et al	1	1.28	80.0%	1.02



<b>Table 5. Morro Valley Irrigated Agriculture</b>				
<b>Owner</b>	<b>Parcels</b>	<b>Total Acres</b>	<b>% Irrigated</b>	<b>Irrigated Acres</b>
Ronald L. Kennedy et al	1	1.30	30.0%	0.39
<b>TOTAL</b>	<b>57</b>	<b>3,248.39</b>	<b>33.2%</b>	<b>1,079.62</b>
<i>Note: This includes acreage that is potentially irrigated even if currently out of production. For example, in 2014 many avocado growers in the Morro Valley cut their trees because of extreme drought conditions, effectively removing them from production for an estimated 3-5 years after water becomes reliably available.</i>				

The Rancho Colina site stands at an average elevation of about 160 feet above sea level. Most reclamation parcels in the Morro Valley are below this elevation, even some of the areas upstream, since the site sits about 50 vertical feet above the elevation of Morro Creek from a cross-sectional line down the access driveway to the site. Highway 41 reaches an elevation of 160 feet about 0.5 miles from the end of the accessway northeastward on Highway 41, just past Calle La Palta. Generally speaking, irrigated agriculture on the north side of the highway going east from Calle La Palta will be at higher elevation than the Rancho Colina site. On the south side of the highway (closer to Morro Creek), parcels beyond 0.75 miles from the end of the Rancho Colina site access driveway are at higher elevation. Relative elevations are important because less power would be required to provide water to customers who are at lower elevations than the Rancho Colina site. This would result in lower capital and ongoing operating costs and will be one of the considerations during development of the Master Reclamation Plan.

**Summary and Conclusions.** The following summarizes the major findings of this analysis:

- In all, it is estimated that about 70% of the irrigated agricultural land in the Morro Valley sits at lower elevation than the Rancho Colina site, or about 700 acres, nearly all of which is within two miles of the City, and even closer than that to the WRF site. This compares to about 545 irrigated acres in the Chorro Valley that stand below the elevation of the CMC site, about 3-4 miles downstream from the CMC site, and about 1.5 to 2 miles upstream from the City. Generally, higher elevation difference between water customers and the reclaimed water supply will result in higher capital and power costs.
- In summary, there is about 25% more accessible (lower elevation) irrigated agricultural acreage in the Morro Valley than in the Chorro Valley, and it is generally much closer to both the City limits and the proposed WRF site, which has positive ramifications relative to reclamation pipeline infrastructure cost.
- Overall, while both valleys have substantial irrigable acreage, there are greater opportunities in the Morro Valley, near the Rancho Colina site, as well as greater demand for irrigation water in that valley, which has been historically pumped into overdraft. Based on the water demand estimates presented in the report, nearly all of the City and CSD’s reclaimed wastewater could be delivered within a 3 to 4-mile long corridor of Highway 41.

Specific issues related to cost and benefits associated with providing water to agricultural parcels are described in Sections 6.A. and 6.B., which relate to potential regional benefits and comparative costs, respectively.



**E. Are there unique regulatory or logistical constraints that may limit potential water supply or reclamation benefits of a regional facility at the CMC site? How does that compare to Rancho Colina?**

**Why This Issue is Important.** A variety of regulatory or logistical challenges could make accessing potential water supply or reclamation benefits potentially problematic. There are legal constraints related to discharging into surface waters, some of which affect accessing potential groundwater supplies. There are minimum streamflow requirements associated with Chorro Creek before water can be accessed for other purposes, imposed to protect habitat within that watershed. Many drainages are protected as Waters of the United States or Waters of the State, the alteration of which would be limited by the conditions of a permit. Water rights are an important issue to consider, as there may be multiple claims on treated water that is produced from a regional facility. Another type of challenge would be legal framework under which a new facility would be built and operated. When multiple partner agencies are involved, an agreement among the agencies would be required. The complexity of such an agreement could adversely affect the timing of project implementation.

**Comparative Site Analysis.** The following discussion compares the sites with respect to this key issue.

**CMC Wastewater Site**

**Interagency Coordination and Timing.** As described in the introduction to this report, other agencies have expressed interest in pursuing a regional facility at the CMC site, notably the RWQCB's Executive Director, the Cayucos Sanitary District, and at one time, San Luis Obispo County Public Works Department. However, the County's interest appears to have waned in the past year, as personnel changed and priorities shifted to other major capital projects.

In recent months, the County has not prioritized the construction of a regional facility, nor has County staff expressed any urgency in doing so. This is underscored by the fact that while County staff has been cooperative with the City in this current study effort, the County expressed no desire to pay for or lead any of the necessary technical studies related to studying the issue. Relative to project timing, in a September 23, 2014 email to City Public Services Director Rob Livick, SLO County Deputy Public Works Director Mark Hutchinson stated that *"transferring all or a portion of the operation of utility services in the Chorro Valley to the County involves a process timeline that far exceeds the timeline established for addressing the current wastewater treatment situation in Morro Bay/Cayucos."* The County's inability to prioritize and provide leadership at this time is problematic for the City if it hopes to achieve its 5-year operational goal, since it will depend on County actions to move the project forward.

A larger issue is that the State Department of Corrections and Rehabilitation (CDCR) does not appear to be interested in the concept at this time. While not averse to the idea in the long-term, CDCR's Fred Cordano explains that for the State to even seriously consider the concept, there would first need to be extensive study and ultimately approval from the State Public Works Board and Department of General Services, in addition to the CDCR. This process would be lengthy, and would likely take at least one to two years, possibly longer.



The fact that there appears to be little current coordination or interest from two of the major players (the State is the current facility owner and operator, and the County would likely become the new operator) presents a major obstacle to realizing this concept in the near future. In addition, current regulations do not permit the State to provide municipal services, so either the County would need to be involved in the operation, or the regulations would need to change. Neither outcome is likely to occur in the near future, especially in the context of the City's stated 5-year goal.

The RWQCB's Executive Officer has pledged support to help facilitate a potential transfer of operations to the County and ultimately the permitting of a regional facility at this location. Nevertheless, the RWQCB's ability to effectively accomplish this is somewhat limited, since they are a regulatory agency charged with permitting and protecting water quality, rather than a municipality or land use authority in the business of operating public works infrastructure and providing municipal services.

The lack of leadership and/or interest at the State or County level for this concept is a major constraint. Even if this could be overcome, a multi-agency agreement relative to the operation of the expanded facility, and ultimately the water supply benefit the results from its operation, would need to be put in place. Such an agreement would need to involve CDCR, the County, the City of Morro Bay, CSD, and other users of the CMC facility. There have been no preliminary discussions among these agencies regarding the nature of such an agreement, which would need to address issues related to the construction, operation, maintenance, the extension of pipeline infrastructure, and allocating fair share costs for capital improvements. It would also need to address water rights, and the amount of reclaimed water that can be used by the various partner agencies. Other potential claimants might include intervening property owners between the CMC site and the City's Chorro Valley wellfield. In addition, the Department of Fish and Wildlife could determine that some or all of an increased streamflow in Chorro Creek would be needed to support potential benefits to aquatic habitat that relies on a reliable water supply. If this is the case, some of the potential perceived benefit to water municipal supplies may not be realized, and it is likely to take a multi-agency agreement to determine the appropriate level of water use for the various agencies. This crucial logistical hurdle will likely take significant time and study before an agreement can be reached.

The City of Morro Bay and CSD currently have a joint agreement to operate the existing City/CSD wastewater treatment plant located in Morro Bay. Very recent efforts to cooperate on a new facility notwithstanding, the fact that the City and CSD embarked on separate paths in 2013 to investigate sites for a new facility underscores that the two agencies' goals may be substantially different, and that it may be difficult to reach a mutual agreement on relative cost-sharing responsibilities at a regional CMC facility.

Overall, interagency coordination issues are a substantial logistical constraint that would affect the City's ability to realize any water supply and/or reclamation benefits from a regional facility at the CMC site, and would adversely affect the City's 5-year goal.

Water Rights. Water rights would be a significant concern for development at the Regional CMC site. Agreements among the City, CDCR, CSD, and other wastewater customers of the CMC facility would be required to protect the City's ability to withdraw their discharge at their Chorro Valley wells. Based on a preliminary review, it appears the City may be able to obtain a permit or rights for ownership of the water that it would introduce to Chorro Creek (and the City's wellfields) via the WWTP outfall.



The ownership of CSD's wastewater, and other wastewater, may also be claimed by each of those agencies and use by the City will likely require agreements.

Once this additional water is regularly applied to the creek, and riparian habitat is enhanced by higher year-round flows, resource agencies may prevent the City from withdrawing this flow for other reuse opportunities similar to the requirements imposed on the City of San Luis Obispo and the discharges to San Luis Obispo Creek from their Water Resource Recovery Facility.

*Streamflow Discharge Requirements and Limitations.* Section 6.H. discusses discharge requirements for Chorro Creek. As described in the LWA Report, discharge to Chorro Creek represents the most challenging and highest future regulatory risk of the proposed discharge methods and locations (ocean outfall, percolation ponds, Morro Creek, and Chorro Creek).

*Caltrans Encroachment.* Development of a new WRF would not affect nor encroach upon Caltrans property. However, some of the pipeline infrastructure between the site and the City may need to be constructed adjacent to Caltrans right-of-way (Highway 1), either for conveying wastewater from the City, or to distribute recycled water to potential users in the region. This would require working cooperatively with Caltrans and the need to acquire an encroachment permit.

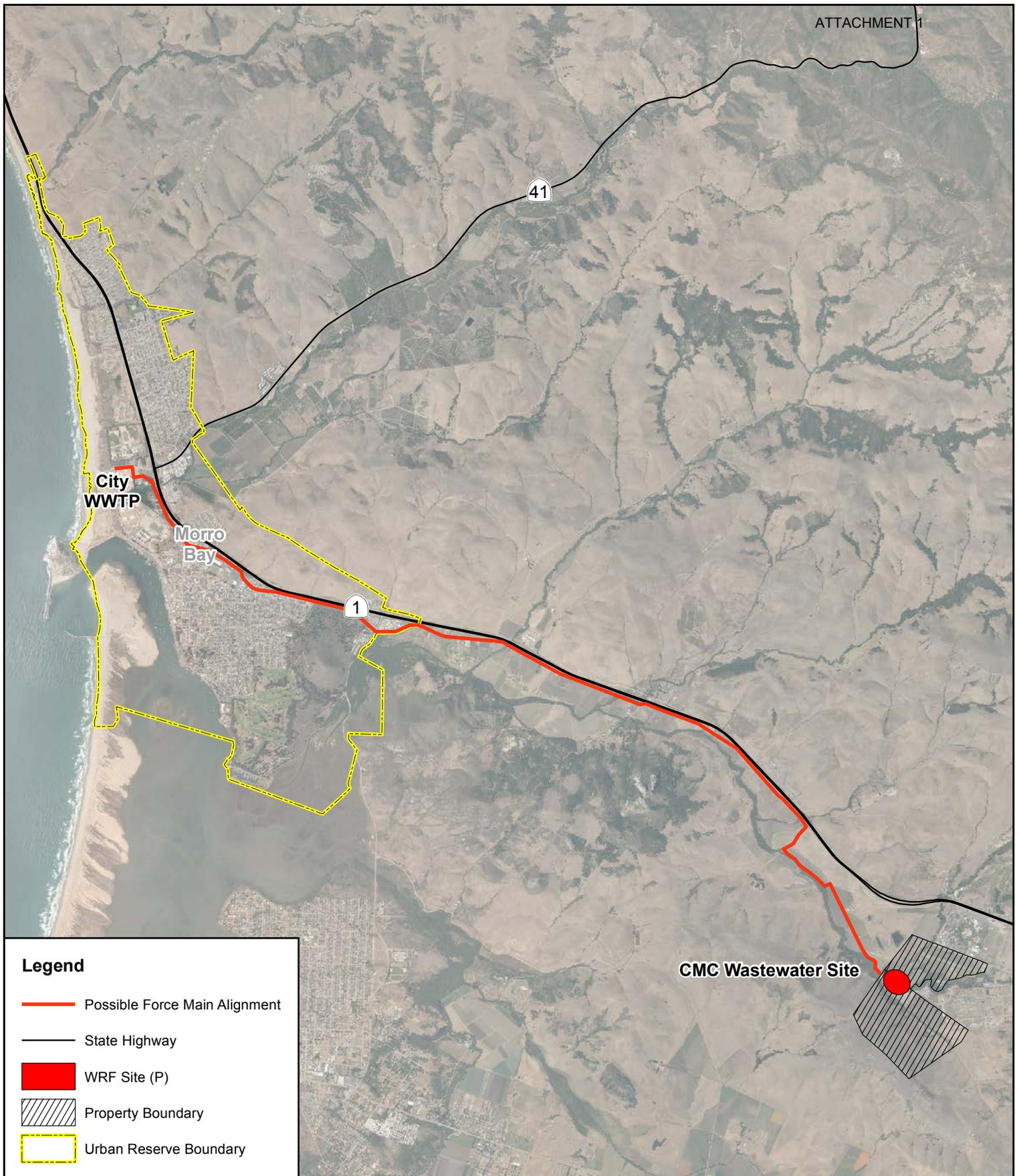
A proposed regional bike path route has been identified that could serve as an alignment for a raw sewage force main to CMC. This route would minimize the need for encroachment permits from Caltrans. This alignment is shown on **Figure 6**.

*Environmental and Other Regulatory Permitting.* In general, there is little difference in the environmental permitting steps involved at the CMC site and the Rancho Colina site. The basic steps include site and pipeline easement acquisition, a preliminary project design, CEQA evaluation, other regulatory agency permitting requirements, revised project design that responds to the CEQA and permitting process, City and Coastal Commission approval, and construction.

All project-related activities must be considered in the CEQA document for this project (likely an Environmental Impact Report or EIR). This would include steps ranging from property acquisition, property design, grading, construction and operation. The facility planning and preliminary design must be completed before CEQA so that project definition is developed in sufficient detail for thorough environmental impact analyses. While the CEQA process and must be completed before resource agency permitting can be completed (since resource agencies will rely on the CEQA document), the permit process can be initiated during the CEQA process, which should likely save some time in the overall project implementation timeframe.

Note that if federal funding is involved, the project would also be subject to the requirements of the federal National Environmental Policy Act (NEPA). If so, the project could be evaluated in a joint CEQA/NEPA document, but this would likely take more time than if the project were subject only to CEQA.





**Legend**

-  Possible Force Main Alignment
-  State Highway
-  WRF Site (P)
-  Property Boundary
-  Urban Reserve Boundary

**Figure 6: Possible CMC Force Main Alignment**

Note: Basemap data obtained from County of San Luis Obispo GIS

The site is sufficiently large to be able to locate the new WRF outside Waters of the United States, Waters of the State of California, and other resources under federal or state regulatory protection. However, discharge into Chorro Creek as part of the reclamation effort will require a permit that complies with the RWQCB Waste Discharge regulations.

Other key permitting agencies potentially include the U.S. Army Corps of Engineers (pursuant to Section 404 of the Clean Water Act), Regional Water Quality Control Board (NPDES permit; meeting Porter-Cologne Act requirements; Section 401 certification), California Department of Fish and Wildlife (Streambed Alteration Agreement). Although the permit process for these actions may be initiated during the CEQA process, their completion will depend to a large extent on agency evaluation and acceptance of the final CEQA document. If there are disagreements between permitting agencies and the City, it may require additional supplemental CEQA studies to satisfy resource permitting agency concerns.

As described in the *Options Report*, other key permitting agencies for this site include:

- California Environmental Protection Agency, Department of Toxic Substances Control (Site Assessment / Remedial Action Plan)
- California Coastal Commission / San Luis Obispo County Department of Planning & Building (Local Coastal Plan Amendment)
- California Department of Transportation (Caltrans Encroachment Permit)
- San Luis Obispo County Air Pollution Control District (SLOCAPCD)

In addition, several site surveys, studies and other activities will be needed in support of the permit application and CEQA process. These are the likely studies needed at this site:

- Jurisdictional Determination (Waters of the United States and State of California)
- Focused Special-Status Species Surveys
- Biological Assessment
- Prepare Habitat Mitigation and Monitoring Plan (if any)
- Hydrologic and Hydraulic Analysis
- Phase I Archeological Survey (Section 106)
- Phase I / II Site Assessment
- Site Remediation (if necessary as a result of the Phase I/II Site Assessment)
- Air Quality Tech Report
- CDP/CUP Permit Application Review
- CEQA Documentation

The final step in the regulatory process, which depend on the completion of the above steps, include:

- LCP Amendment



## Rancho Colina Site

Interagency Coordination and Timing. The Rancho Colina site is privately-owned, and the property owner has expressed a high level of interest in working with the City to develop a new WRF at this location. Thus, it is possible to design and construct a facility at this location without the need to enter into any cooperative agreements with partner agencies, including the State or County. In the event that Cayucos Sanitary District wishes to work with the City to build, operate, and maintain the facility, or simply to be a customer of the City to serve the needs of the CSD, a framework for an agreement between the two agencies would need to be developed. The fact that there is already a framework for an agreement at the existing WWTP, and that both agencies have recently expressed the desire to work cooperatively at whatever location is chosen, suggests that such an agreement can be reached.

Interagency coordination issues at this location do not pose a substantial constraint.

Water Rights. As at CMC, water rights would be a significant concern for development at Rancho Colina. In this case, however, the County and State would not be parties to such an agreement, and there are substantially fewer property owners in the Morro Valley between the site and the City who might have claim to water discharged into Morro Creek, since it is much closer to the City.

Streamflow Discharge Requirements and Limitations. There is currently no minimum streamflow requirement for Morro Creek, although there is the potential, as with Chorro Creek, for the Department of Fish and Wildlife to require a minimum flow for the purpose of maintaining aquatic habitat if that agency determines that there is a potential benefit to habitat. While an agreement for the use of water discharged to Morro Creek would likely be needed, such an agreement would likely be less complex than one for Chorro Creek, for the reasons described above.

Section 6.H. of this report discusses possible discharge requirements for Morro Creek.

In Morro Valley, reclaimed water could be put into percolation ponds, or be used directly on agricultural parcels rather than discharged into Morro Creek. At this time, no studies have been conducted to identify appropriate sites for percolation so it is unknown if percolation is a viable option. This will be explored in the Master Reclamation Plan. If this approach were used, then there would be no need to enter into a multi-party agreement related to surface water rights. This approach would be logistically much less complex than an agreement that would need to be reached at the CMC site.

Caltrans Encroachment. As at CMC, development of a new WRF at Rancho Colina would not affect nor encroach upon Caltrans property. However, some of the pipeline infrastructure between the site and the City may need to be constructed adjacent to Caltrans right-of-way (Highway 41), either for conveying wastewater from the City, or to distribute recycled water to potential users in the region. As at CMC, this would require working cooperatively with Caltrans and the need to acquire an encroachment permit.

Environmental and Other Regulatory Permitting. In general, there is little difference in the environmental permitting steps involved at the CMC site and the Rancho Colina site. Please see the discussion under the CMC site. One addition step at the Rancho Colina site would potentially be annexation approval from the San Luis Obispo Local Agency Formation Commission (LAFCo), if the site is



to be annexed to the City. This process would not substantially affect the schedule, if consultation with LAFCo is begun early in the process, and fully addressed in the CEQA document.

**Summary and Conclusions.** There are substantially more logistical and regulatory constraints at the CMC site related to the development and operation of a new WRF, as well as to realizing potential water supply or reclamation benefits for the City. These are summarized below:

- The transfer of operations of the current facility from the State (CDCR) to the County;
- CDCR's current lack of interest in effecting a transfer since this would not be major, long-term program that would not meet any agency goals or priorities, as confirmed by CDCR staff;
- The fact that multiple state agencies would need to study and approve a potential transfer and involvement of municipal customers such as Morro Bay and CSD, which will take considerable time;
- The County's low prioritization of a regional WRF coupled with lack of staff availability in leading the effort to investigate and operate a regional facility;
- The need to establish a multi-party agreement among potential water supply beneficiaries for reclaimed water that is discharged to Chorro Creek;
- A lack of a coordinated effort and differing goals between the City of Morro Bay and CSD relative to moving forward with a new WRF; and
- The fact that the four potential partner agencies have not engaged in any preliminary coordination efforts toward a potential working framework, an effort that would need to be led by the County.
- Collectively, these interagency logistical issues present significant challenges, and raise substantial concerns that a new regional facility can be built and operated at the CMC site in the framework of the City's goals related to timing, water supply benefits, and reclamation.

Development at Rancho Colina faces significantly fewer and far less complex logistical or regulatory challenges. Key findings include:

- The possible need to establish a multi-party agreement among potential water supply beneficiaries for reclaimed water that is discharged to Morro Creek, if reclaimed water is not stored in percolation ponds or offsite ponds for potential agricultural use;
- Pipeline infrastructure associated with the project that may be within Caltrans rights-of-way would require an encroachment permit from that agency.
- Close proximity to the existing ocean outfall for use in the event there is an emergency need and for brine disposal to meet customers' salt objectives.



- Overall, the Rancho Colina site can be much more realistically accomplished within the framework of the City's goals related to timing, water supply benefits, and reclamation potential.

**F. Are there physical site constraints at CMC that may limit project design flexibility? Will a regional facility likely be an expansion of the existing facility or will an entirely new facility be required?**

***Why This Issue is Important.***

***Methodology.***

***Comparative Site Analysis.*** The following discussion compares the sites with respect to this key issue.

**CMC Wastewater Site**

[ANALYSIS AND RESULTS TBA BASED ON CAROLLO REPORT]

**Rancho Colina Site**

[ANALYSIS AND RESULTS TBA BASED ON CAROLLO REPORT]

***Summary and Conclusions.***

**G. What are the environmental issues that may be of concern to the Coastal Commission or the general public at the CMC site as compared to Rancho Colina?**

***Why This Issue is Important.*** The California Coastal Commission denied the development of a new WRF at the location of the existing WWTP largely because of its potential inconsistency with Coastal Act and LCP policies. These were discussed in extensive detail in the *Options Report*. A project that is consistent with Coastal policies would achieve the following:

- *Avoid Coastal Hazards*



- *Avoid Steep Slopes and High Elevation*
- *Promote Public Access/Recreation*
- *Minimize Visual Impacts*
- *Sustainable Use of Public Resources*
- *Avoid Environmentally Sensitive Habitat Areas (ESHA)*
- *Avoid Cultural Resources*
- *Avoid Agricultural Resources*
- *Promote Coastal Dependent Development*
- *Minimize Greenhouse Gas Emissions*

**Comparative Site Analysis.** The following discussion compares the sites with respect to this key issue.

### **CMC Wastewater Site**

Both sites are in the Coastal Zone, so both will require approval of the Coastal Commission. The CMC site is far from the ocean, so coastal issues related to access, visual impacts and coastal hazards do not apply. At the same time, the CMC site assumes that reclaimed water would be discharged in to Chorro Creek, which drains directly into the Morro Bay estuary. Thus, the Coastal Commission will look closely at issues related to the health of the estuary, which is addressed to a large extent by the RWQCB's discharge permit requirements and TMDLs prepared for Chorro Creek.

A site-specific analysis of key coastal issues is included below.

*Coastal Proximity and Access.* The site is about 4.7 miles from the Morro Bay estuary, and about 6.5 miles from the ocean, separated from all coastal features by intervening topography. The site is between 180 and 230 feet above sea level. It is not subject to coastal hazards such as tsunami and possible sea-level rise. A project at this location would not impede coastal access, or otherwise affect future development along the coastline.

*Visual Impacts.* There are no visual impacts relative to the coast, since the site cannot be seen from the ocean or estuary, nor would development on the site block views of these features. The most developable portion of the site is about 0.6 miles from Highway 1, and can be seen from a short segment of that roadway. However, intervening structures on the Cuesta College campus, as well as trees associated with drainages near the site would likely screen the facility to a large extent. Visual impacts from public viewing areas would be minimal, and no constraints to development at this site are anticipated.

*Biological Resources/ESHA.* ESHA is designated on the northern portion of site associated with Chorro Creek pursuant to the County's LCP; however, this consists of a small portion of the overall site, and can be avoided through design. The site is not identified in the County's General Plan under its "Sensitive Resource Area" Combining Designation.

Based on a search of the California Natural Diversity Data base (CNDDDB), the following special status species have the potential for occurring on this site (list status shown in parentheses):



Plants

- Arroyo de la cruz manzanita (1B.2)
- Miles' milk vetch (1B.2)
- San Joaquin spearscale (1B.2)
- LaPanza mariposa lily (1B.2)
- Cambria morning glory (4.2)
- San Luis Obispo sedge (1B.2)
- San Luis Obispo owl's clover (1B.2)
- Congdon's tarplant (1B.2) (CNDDDB onsite occurrence recorded)
- Brewer's spineflower (1B.3)
- Betty's dudleya (1B.2)
- Mouse-gray dudleya (1B.2)
- Blochman's dudleya (1B.2)
- Jones' layia (1B.2)
- San Luis Obispo modarella (1B.2)
- Adobe sanicle (1B.1)
- Most beautiful jewel flower (1B.2)

Invertebrates

- San Luis Obispo pyrg (SA)

Fish (in Chorro Creek, not on site itself)

- Tidewater goby (FE, CSC)
- Steelhead (FT, CSC) (CNDDDB onsite occurrence recorded)

Amphibians

- California red-legged frog (FT, CSC)

Reptiles

- Silvery legless lizard (CSC)
- Pacific pond turtle (CSC)
- Blainville's horned lizard (CSC)

Birds (none)

Mammals (none)

The CMC site has not been surveyed for biological resources, so if this site were selected, and expansion of the existing facility would include areas not currently developed, surveys to determine the presence or absence of the potentially occurring special status species would be required.

Cultural Resources. In general, the Chorro Valley has potential for encountering cultural resources because of its proximity to Chorro Creek, and the fact that the area has a long history of human habitation. However, most of the site has been previously disturbed. The area is not included in the County's "Archaeological Sensitive Area" Combining Designation, which suggests that the area does not have the highest level of sensitivity.

In previous surveys, two prehistoric resources were found: a buried shell midden, and a scatter of chipped stone artifacts. There was also one historic trash dump. As noted in the Rough Screening Evaluation, the entire site may have been surveyed, but that has not been confirmed.

Because of the site's relatively high sensitivity, the possibility of encountering additional cultural resources on this property cannot be discounted.

Agriculture. The site is disturbed and has been previously developed. However, the westernmost 40 acres of the property have been used for agricultural purposes, and designated as AG



under the County's General Plan. This area also coincides with one of the best locations on which an expanded or new facility could be built, although it is possible to construct between the tributary drainages in the western portion of the site, though the potential configuration of the facility may be more limited because of the need to setback from riparian area. This might have design implications if the project were constructed as a large regional facility shared with other agencies.

The entire site is designated as prime farmland if irrigated, except the areas within Chorro Creek or its tributary drainages. This site is not under Williamson Act (LCA) Contract.

LCP Policies 1, 2, and 3 require that agricultural lands be maintained unless there are circumstances in and around existing urban areas that make agriculture infeasible or that would make conversion of the land to a non-agricultural use a logical land use change to better protect agricultural lands and strengthen the urban-rural boundary; that agricultural lands should not be subdivided unless such division would maintain or enhance agriculture; and, that non-agricultural uses should not be allowed except under limited circumstances, including in terms of supplemental non-agricultural uses where supplemental income is required for the continuation of agricultural use and 98% of the land is restricted for and maintained in agriculture. However, CZLUO Section 23.08.288, and Coastal Table "O", of the Land Use Element provide for the development of Public Facilities such as contemplated with the new WRF.

The County LCP allows for the siting of public utilities on agriculturally zoned property, partly from the recognition that agriculture uses are not an incompatible land use adjacent to a wastewater treatment or water reclamation facility. These uses can co-exist, without pressure from either one for limitations or restrictions on activities. As such, the plant would not be anticipated to result in the conversion of other lands with agricultural potential for public utility use on the property.

Overall, impacts to prime agricultural lands cannot be avoided, but it is worth noting that this site that much of the site has been previously disturbed, and the potential conversion of prime soils would not substantially impact agricultural production either onsite or offsite.

*Minimize Greenhouse Gas Emissions.* Construction and operation of public works facilities can increase GHG emissions and therefore the effects of global climate change. Energy (electricity) use during operation of the treatment plant, and lift stations and pumps used convey effluent from the facility, would generate GHG emissions. Although the pumps would not directly result in GHG emissions, use of pumps would indirectly release GHG emissions through the purchase/use of electricity.

This site has not been previously evaluated, and such an evaluation is beyond the scope of this study.

It can be said with some certainty, however, that this site is located substantially farther away from the City's sewer collection system, which currently convenes at the existing WWTP site, and is located at a higher elevation, and therefore would release a greater amount of GHG emissions compared to the Rancho Colina site due to additional energy demands to move wastewater to the site for treatment and eventual disposal.

## Rancho Colina Site



Coastal Proximity and Access. The site is about 1.7 miles from the ocean, and separated by intervening topography. It is not subject to coastal hazards such as tsunami and possible sea-level rise. A project at this location would not impede coastal access, or otherwise affect future development along the coastline.

Visual Impacts. There are no visual impacts relative to the coast, since the site cannot be seen from the ocean or estuary, nor would development on the site block views of these features. The most developable portion of the site is about 600 feet from Highway 41, and can be seen from a short segment of that roadway, for less than one-quarter mile nearest the property. It is not in the direct line of viewing for motorists traveling on that highway. The site of potential development is about 1,000 feet northeast of the Rancho Colina residential complex, but is not visible from homes within Rancho Colina because of intervening topography.

Biological Resources/ESHA. The site does not contain any designated Environmentally Sensitive Habitat Area (ESHA) per the County's LCP. The nearest ESHA is along the riparian margins of Morro Creek, but that is outside of the WRF development area. No special status species have been identified on the site, though the following species are identified as having the potential to occur on the site (list status shown in parentheses):

Plants

- San Joaquin spearscale (1B.2)
- LaPanza mariposa lily (1B.2)
- Cambria morning glory (4.2)
- San Luis Obispo sedge (1B.2)
- San Luis Obispo owl's clover (1B.2)
- Congdon's tarplant (1B.2)
- Betty's dudleya (1B.2)
- Mouse gray dudleya (1B.2)
- Blochman's dudleya (1B.2)
- Jones' layia (1B.2)
- Adobe sanicle (1B.1)
- Most beautiful jewel flower (1B.2)

Invertebrates (none)

Fish (in Morro Creek; not on the site itself)

- Tidewater goby (FE, CSC)
- Steelhead (FT, CSC) (CNDDDB onsite occurrence recorded)

Amphibians in and adjacent to Morro Creek, not likely on the upland portion of the site)

- California red-legged frog (FT, CSC)

Reptiles

- Silvery legless lizard (CSC)
- Pacific pond turtle (CSC)
- Blainville's horned lizard (CSC)

Birds (none)

Mammals (none)

Cultural Resources. No cultural resources have been previously identified on the most developable portions of the site. In general, the portions of the Morro Valley nearest to Morro Creek have a fairly high potential for encountering cultural resources, and the fact that the area has a long



history of human habitation. The presence of Morro Creek along the southern boundary of the site (and throughout much of the Morro Valley in general) would have represented an attractive food resource for prehistoric populations migrating between the coast and the interior areas. Many properties within Morro Valley feature prominent ridgelines that are known to have been attractive for hunting camps and temporary activity areas. The potential for encountering such resources diminishes with elevation and with distance from the coast. The potential for encountering unknown resources on this site is considered low to moderate (Applied Earthworks, informal evaluation, March 2014).

However, the area in the general vicinity of Highway 41 near its intersection with Highway 1 is considered highly sensitive, and a large cultural resource site has been recorded in that area (CA-SLO-165). The site has been surveyed many times since 1983, in conjunction with different developments and roadway projects that have occurred in that area. The various investigations uncovered a variety of subsurface artifacts, indicating an area of extensive prehistoric human habitation (Far Western Anthropological Research Group, 1998).

While this area is about 1.2 miles from the Rancho Colina site, it is in the direct path through which pipeline infrastructure to serve the site would need to be extended, both for the purpose of conveying untreated wastewater, and for conveying excess wet-weather treated wastewater to the ocean outfall for disposal. Before the pipeline route is finalized, the area should be surveyed again, with mitigation applied as appropriate, to minimize potential impacts to this resource.

*Agriculture.* Much of the land in Morro Valley features gently rolling hillsides trending to steeper topography to the north, particularly north of Highway 41. Most of this area is in rangeland, although some of this land supports avocado orchards. There are no prime soils on or near the most developable portions of the site.

The most developable portion of the Rancho Colina site (where the current wastewater treatment facility is located) is underlain by Los Osos-Diablo complex soils, which consist of loamy top layer overlying clay, sandy loam and bedrock, which is typically found at a depth of 39 to 59 inches (NRCS Soil Survey). It is not considered prime farmland by the NRCS, with a land capability classification of 6e. These soils are well-drained, and not prone to flooding or ponding. The depth to the water table is typically greater than 80 inches.

The steeper slopes above the more level area consist of Diablo and Cibo clays, which consist of clay over weathered bedrock, which is typically encountered at a depth of 58 to 68 inches below the surface. It is not considered prime farmland by the NRCS, with a land capability classification of 6e. These soils are well-drained, and not prone to flooding or ponding. The depth to the water table is typically greater than 80 inches.

The portion of the property just to the east of the current treatment facility and toward Highway 41 is Marimel silty clay loam, which consists of silty clay loam stratified loam and/or clay loam. This soil is considered prime farmland if irrigated, though it is not currently nor has it historically been irrigated on this property. Therefore, this property does not support prime farmland. The soil has a land classification of 1 (if irrigated), and 3c (if nonirrigated).

The potential development of a new WRF would not preclude continued agricultural uses on the property, which consists of grazing. Grazing land (uphill of the existing treatment plant site) has historically been provided from treated wastewater from the existing plant.



*Minimize Greenhouse Gas Emissions.* Energy (electricity) use during operation of the new facility, and lift stations and pumps used convey effluent from the facility, would generate GHG emissions. Although the pumps would not directly result in GHG emissions, use of pumps would indirectly release GHG emissions through the purchase/use of electricity. The site is located about 1.7 miles from the existing ocean outfall, and it is expected that the new WRF would need to tie into the existing infrastructure network at this location, with lift stations needed to pump wastewater uphill to the new site, which is at an elevation of about 150 to 160 feet.

**Summary and Conclusions.** The following summarizes the major conclusions of this analysis:

- Overall, neither site has a particular advantage from the standpoint of environmental issues that may be of concern to the Coastal Commission.
- Each site is far from the coast and separated by intervening topography, so a new WRF at either location will not be visible from the coast or block coastal access.
- Neither site is subject to coastal hazards because of their elevation and distance from the ocean or estuary.
- The most developable portions of both sites do not contain designated ESHA, although there is ESHA on the margins of both Chorro and Morro Creek.
- The entire CMC site is considered prime farmland, although the existing wastewater plant location is not in agricultural production. The most developable portion of the Rancho Colina site does not contain prime soils, although the lower portion of the property is considered prime if irrigated and drained. The Rancho Colina site supports grazing activities.
- Neither site supports known cultural resources, but there is the potential to do so at either location because of known prehistoric human habitation in the area. Pipeline infrastructure from the Rancho Colina site would traverse a known cultural resource site, CA-SLO-165, which may result in impacts that require mitigation.
- The Rancho Colina site is substantially closer to the City's existing infrastructure network than the CMC site, and thus development at that location may use somewhat less energy—which translates into lower greenhouse gas emissions.

#### **H. How will the discharge limitations and design goals of the treatment facility differ at the CMC and Rancho Colina sites? How will the treatment facilities differ as a result?**

**Why This Issue is Important.** This issue is important because discharge limitations and



permitting constraints have a bearing on potential project design, which in turn has cost ramifications. The cost issues discussed in Section 6.A. are based in part on limitation discussed below.

**Methodology.** Larry Walker Associates (LWA) performed an analysis of discharge permitting constraints for Morro Creek, Chorro Creek, percolation in Morro Valley, and the ocean outfall. See **Appendix E** for the complete LWA report, the major relevant points of which are summarized below. The analysis did not address water rights, potential issues with aquatic or riparian habitat, or other issues outside of National Pollutant Discharge Elimination System (NPDES) permitting for plant effluent.

The JFR project team had previously evaluated water quality and permitting requirements for Title 22 water reuse regulations in the *Report on Reclamation and Council Recommended WRF Sites* (May 2014).

**Comparative Site Analysis.** The following discussion compares the discharge limitations that could affect design goals at the two sites.

### CMC Wastewater Site

In its Discharge Options report, LWA evaluated the current CMC permit, current SWRCB and federal policies, and pending policies that could affect treatment feasibility and costs at the CMC Regional Site. LWA and the JFR project team concluded the following relative to the site:

- The existing discharge permit at CMC includes limits for TDS at 500 mg/L and a daily total nitrogen limit of 10 mg/L. Based on discussions with RWQCB staff, this is one of the most stringent nitrogen limits in San Luis Obispo County since it is a daily limit, not a monthly average as in the existing San Luis Obispo and Paso Robles permits. Adding service to Morro Bay and Cayucos will require an upgrade of the plant process to perform TDS removal since their wastewater exceeds 900 mg/L. The nitrogen and TDS limits require facilities such as biological nutrient removal basins and microfiltration with reverse osmosis that are not required by Title 22 regulations for direct reuse of wastewater for irrigation.
- The existing discharge permit also includes limits for trihalomethanes in the plant effluent. This drove the recent upgrade from chlorine contact basins to ultraviolet radiation.
- Discharge to Chorro Creek is accompanied by the highest regulatory burden and regulatory risk when compared with Title 22 direct reuse of wastewater, ocean outfall, Morro Creek discharge, or percolation ponds.
- Chorro Creek is listed as an impaired water body for nutrients (nitrogen and phosphorus), pathogens, and sediment under the federal Clean Water Act.
- Both the State Policy on Nutrients and the State's Implementation Plan for Biological Integrity are likely to result in more stringent nutrient levels (nitrogen and phosphorus) for streams and enclosed estuaries. Eventual thresholds for nitrogen are likely to be in the vicinity of 1.0 mg/L total nitrogen (whereas the current CMC discharge limit is 10.0 mg/L) and total phosphorus will be approximately 0.1 mg/L. The existing permit only requires orthophosphorus levels to remain at 2004-2005 levels between May and November, with no stated numerical limit. According to



the permit, median May-Sept concentrations were approximately 2.4 mg/L. New nutrient limitations will require upgrading the CMC facility.

- Increased discharges could be scrutinized by regulatory agencies (such as NOAA Fisheries and California Department of Forestry and Wildlife) since the creek is upstream of a high-profile, state-protected estuary of national significance that provides habitat for dozens of federally- and state-listed species.
- Introducing new flows could affect habitat and complicate efforts to redirect discharge in the future if direct potable reuse or other direct reuse alternatives are identified. For example, the City of San Luis Obispo cannot fully utilize the reclaimed water generated as part of their Water Reclamation Facility since they are required to maintain a minimum flow of 2.5 cfs in San Luis Obispo Creek for in-stream beneficial uses. The CMC facility is required to maintain 0.75 cfs in Chorro Creek but this number may increase, in the future, if more flow is available year-round to enhance aquatic and riparian habitat.
- The CMC discharge permit has a 5-year limit and any new regulations will be applied when that permit is renewed.

## Rancho Colina Site

Elements of the LWA Report and JFR analysis are summarized below for the Rancho Colina site:

- The discharge permitting through RWQCB for direct reuse to agricultural users, coupled with the ocean outfall as a possible wet weather disposal option and/or percolation pond disposal if an appropriate site is identified, will result in fewer effluent permit limitations and less risk of increased regulation in the future, as opposed to a Chorro Creek discharge as described in the Effluent Disposal Analysis (LWA, 2014).
- In particular, the effluent TN and TDS limits would not be imposed on the Rancho Colina site unless a discharge to Morro Creek was proposed as part of that project. These parameters result in higher capital and operating costs at the CMC Site. TDS removal from a percentage of the wastewater flow may be necessary to improve effluent quality for avocados, however, even though it would not be a regulatory requirement.
- If a discharge to Morro Creek were proposed as part of the project, permitting constraints (including nutrient limits and toxicity limits) would be more significant than those for direct irrigation use, ocean outfall or percolation. However, Chorro Creek would have more stringent regulatory requirements since it is an impaired water body and is located upstream of the Morro Bay National Estuary as discussed in the Discharge Options report (LWA, 2014).
- Discharge to Morro Creek and/or the ocean outfall would result in issuance of an NPDES permit that would be renewed every five (5) years, similar to the CMC discharge permit.
- The project could indirectly increase the amount of streamflow available for riparian habitat, but is less likely to face opposition from resource agencies if recycled water is diverted to other uses in the future. The level of flexibility for pursuing new reuse opportunities in the future,



including other reuse opportunities or direct potable reuse, is expected to be considerably higher for this project since the benefit to streamflow is indirect.

**Summary and Conclusions.** The following conclusions can be reached specific to the anticipated plant discharge permit at both sites based on the analysis presented above:

- Overall, the CMC site presents greater permitting challenges than development at the Rancho Colina site, which will have a direct adverse impact on the cost of the facility at that location.
- The CMC wastewater treatment plant discharge presents the most stringent regulatory requirements and greatest risk for additional requirements in the future. These have a direct impact on the cost to construct and operate the treatment facility, in addition to the City's ability to anticipate and plan for future costs.
- Stakeholders such as the Morro Bay National Estuary Program and regulatory agencies with jurisdiction over aquatic habitat and endangered species must be consulted prior to planning an expansion at CMC. Their input could impact permitting requirements, as well as ability to redirect treated effluent in the future if a different direct reuse opportunity is identified (for example, the City of San Luis Obispo's attempts to expand its recycled water program).
- A Rancho Colina facility that incorporates direct reuse of treated water with wet weather disposal through the ocean outfall (or via percolation ponds if appropriate sites are identified) presents the least discharge permit challenges and requires fewer onsite plant treatment facilities.
- A recycled water program (including agreements with users, capital investment in pumping and pipelines, and ongoing operation and maintenance) that complies with Title 22 requirements will be required to implement this strategy and must be factored into the site selection decision. The current recommendation, in order to comply with the City Council's 5-year timeline, is to work on this long-term planning and design effort in concert with planning, design, and construction of the Phase 1 WRF project if the Rancho Colina site is selected.

Please refer to **Table 6** in Section 7 of this report, *Summary and Conclusions*, for a locational comparison of all water resource-related issues, including those discussed in this portion of the analysis.

## **I. Is the City's 5-Year timeframe goal achievable at either the CMC or Rancho Colina site? What studies, permitting requirements, or logistical challenges may affect achieving this goal?**

**Why This Issue is Important.** The City Council established a goal to have the new WRF operational within five years of a final site selection, in order to ensure the maximum protection of



water quality and the ability to augment existing water supplies with reclaimed water as quickly as possible.

**Methodology.** The major obstacles to achieving the 5-year timeframe at any location relate to several factors, only some of which are related to the sites themselves. The key site-related factors include several issues already discussed in this report, notably:

1. *Minimizing logistical constraints associated with property ownership and developing a workable multi-agency framework for the design, construction, and operation of the facility*
2. *Finding a site that minimizes permitting challenges and regulatory constraints;*
3. *Finding a site that minimizes costs, in order to minimize challenges associated with funding the project.*

Most of these factors were previously analyzed in the *Options Report*, and some are carried further in this report. The issue of relative cost is discussed earlier in this report.

There are also several other factors not related to any of the sites themselves, which include but are not limited to: effective project management; the approach to bid process; consultant performance in the design and construction of the facility; developing a management framework with partner agencies, if any; completing and implementation an achievable reclamation plan; the degree of cooperation from regulatory agencies, including the Coastal Commission; and the level of public controversy.

While important, these factors are not analyzed in this report, because they do not directly pertain to the selection of one or another site.

**Comparative Site Analysis.** The following discussion compares issues related to the achievement of the City's 5-year goal at either site.

## CMC Wastewater Site

This site has the following suitability characteristics for each of the issues identified above:

**Logistical Constraints.** The site is owned by the State of California Department of Corrections and Rehabilitation. As noted in Section 6.E. above, CDCR has not indicated any specific interest in pursuing an expanded regional facility at this location. In addition, working with the State would require complex approvals from multiple state agencies, including the State Public Works Board and department of General Services before the potential pursuit of this site could be considered, a process that would take significant time and study. Further, the State cannot provide municipal services by itself, but would require the County to operate the facility to do so. At this time, the County's Public Works Department does not consider this project to be a high priority.

Development at this location would require a complex series of approvals from multiple state agencies and San Luis Obispo County, and then would require a multi-party operations agreement among CDCR, the County, Morro Bay and CSD. These agencies would also have to agree on water rights issues relative to the potential distribution and use of reclaimed water. Finally, CDCR has indicated that it would only own the WRF site itself, but the responsibility for extending pipelines to Morro Bay and CSD would be he



responsibility of those agencies. This would have to be considered in the cost-sharing framework and long-term operations and maintenance of the overall facility/reclamation system.

Overall, the State's ownership of the site, the fact that the County has not prioritized this project, and the need for complex multi-agency agreements on a variety of issues present a substantial constraints, and realistically preclude the achievement of the City's 5-year goal.

Permitting and Regulatory Constraints. While issues that may be of concern to the Coastal Commission are similar to those for Rancho Colina, and the CEQA process somewhat similar, the permitting requirements for this site may be somewhat more complex because of the State's ownership of the site, and the need to involve and gain approvals of multiple agencies, including San Luis Obispo County. Please refer to Sections 6.E. and 6.G. above for further discussion of this issue.

Cost and Funding Constraints. Please refer to Section 6.B. above for further discussion of cost issues. Relative to potential funding, there does not appear to be any comparative advantage relative to securing potential funding (grants or loans) for a facility at this site. Please refer to Section 6.K. for further discussion of this issue.

## **Rancho Colina Site**

This site has the following suitability characteristics for each of the issues identified above:

Logistical Constraints. The site is owned by a private individual who has indicated a high degree of willingness to work with the City to develop a new WRF at this location. The potential design, construction and operation of a facility at this site would be considerably less complex and time-consuming to achieve, because neither the State nor the County are involved in the ownership or potential operation of the facility.

If the CSD were included as a partner, development and operation at this location would require an agreement between the City and CSD, which would also need to include a cost-sharing framework. These agencies would also have to agree on water rights issues relative to the potential distribution and use of reclaimed water. Please see Section 6.E. above for further discussion of this issue.

Permitting and Regulatory Constraints. While issues that may be of concern to the Coastal Commission are similar to those for the CMC site, and the CEQA process somewhat similar, the permitting requirements for this site may be somewhat less complex because of the State is not involved in the ownership, nor would there be a potential transfer of operations of the site to the County, as would be the case at CMC. Please refer to Sections 6.E. and 6.G. above for further discussion of this issue.

Cost and Funding Constraints. Please refer to Section 6.B. above for further discussion of cost issues. Relative to potential funding, there does not appear to be any comparative advantage relative to securing potential funding (grants or loans) for a facility at this site. Please refer to Section 6.K. for further discussion of this issue.



**Summary and Conclusions.** The following summarizes the major findings of the analysis related to this issue:

- Because of a variety of logistical constraints, it is not realistically possible to achieve the City's 5-year goal at the CMC site.
- At the Rancho Colina Site, because of a willing and cooperative property owner, and the fact that neither the State nor the County would be involved in the ownership or operation of the facility, the City's 5-year goal may be achievable.

**J. What would the City's role be in constructing and operating a regional facility at CMC? How will an interagency framework affect the City's ability to achieve its stated goals?**

**Why This Issue is Important.** City workshops and subsequent direction by Council established that several goals (in addition to cost-related objectives) were important to the City, including design, environmental benefits, energy efficiency and generation, and reuse of biosolids among others. The degree to which the City has control over the facility would affect the City's ability to realize these goals. Ultimately, the agency that controls design, construction, and operation of the facility will have greater control over the goals of the facility, whether that is the City (or partnership with CSD) at Rancho Colina or CDCR at the CMC Site.

**Comparative Site Analysis.** The following discussion compares issues related to the City's likely role at either site, and its ability to achieve its stated goals with respect to the proposed WRF.

### **CMC Wastewater Site**

CDCR staff have stated that if CMC is expanded to serve the City and Cayucos as well as its existing customers, CDCR would retain ownership of the treatment facility but offsite raw wastewater conveyance and brine discharge pipelines would be owned and operated by others, likely the City and CSD.

For a facility at the CMC site, the City Council and CSD Board will not be able to jointly set annual budgets, determine the schedule and approach for addressing maintenance needs and capital improvement projects, or generally control the budget and timing of activities at the plant. These will all be determined by CDCR if they retain ownership of the plant.

It is assumed the goals stated by the City related to energy recovery, biosolids reuse, and other important considerations could be incorporated into the plant design if there is no conflict with the existing plant process or with CDCR program objectives. However, the City will no longer direct the project other than design/construction of the force main and possibly the brine disposal pipeline.

In addition, CDCR has stated it would only operate the treatment facility itself, but that the construction, operation and maintenance of offsite reclamation infrastructure would be the responsibility of Morro Bay/CSD. This arrangement could lead to complex logistical issues related to the construction and



maintenance of the facility as a whole. It could also lead to conflicts among the agencies whenever there is a breakdown in the system, relative to shared responsibilities for addressing the issue.

### **Rancho Colina Site**

The City jointly owns and operates the existing MBCSD WWTP with Cayucos Sanitary District under a Joint Powers Agreement. Because neither CDCR nor the County would be involved, it is assumed that a facility at the Rancho Colina site could have a similar framework or agreement between the two agencies.

The City Council would be able to set annual budgets, determine the schedule and approach for addressing maintenance needs and capital improvement projects, or generally control the budget and timing of activities at the plant.

In addition, the City would be able to develop a project that meets their stated goals for the WRF since they will be directing the planning, design, construction, and operation of the facility.

**Summary and Conclusions.** The following summarizes the major findings of the analysis related to this issue:

- The City would own a facility at Rancho Colina but would likely be a customer or non-majority partner at CMC.
- For a CDCR-owned facility at CMC, the City and/or CSD would still be responsible for constructing and maintaining pipeline infrastructure to and from the site. This complex arrangement could lead to conflict among the agencies relative to shared responsibilities in the event of a breakdown in the system.
- Developing a project at the Rancho Colina site would allow the City to direct the project and meet stated City goals. Participating in a regional CMC project will turn over control to CDCR and unless City objectives align with those of CDCR, those desired project elements may not necessarily be included.

### **K. Does either site have comparative advantage relative to securing possible funding (grants and loans) for a new regional reclamation facility?**

**Why This Issue is Important.** The issue relates to the City's ability to minimize costs. It has been suggested that aspects of the project could qualify it for various grant or loan programs, and that there might be locational advantages to one site or another relative to securing potential funding.

**Comparative Site Analysis.** This issue was studied extensively in a report produced by Kestrel Consulting, and included in **Appendix F** of this report. The major results of the analysis that pertain to site selection are summarized below.



## CMC Wastewater Site

A facility located at the CMC site might have different and potentially fewer uses for recycled water than one constructed at Rancho Colina, but greater potential for cost-sharing among regional partners, as well as expanded waste to energy systems. Until this Project is defined more clearly, it is difficult to assess grants that might be site-specific, and potentially comparatively more beneficial at this location.

Please refer to Sections 6.E., 6.F., and 6.H. for further discussion of issues related to project design and logistics. Also refer to Section 6.B. above for further discussion of cost-related issues.

Relative to potential funding, there does not appear to be any comparative advantage relative to securing potential funding (grants or loans) for a facility at this site, given what is known about the project at this time.

## Rancho Colina Site

Generally speaking, a water reclamation facility at Rancho Colina could have a higher potential for uses of recycled water including groundwater recharge (storage). Proposition 1, which was passed on November 4, 2014, includes a new competitive grant program for water storage projects. This grant program is likely to have a preference for projects that reduce dependence on imported water.

An example of such a project would be if the City of Morro Bay proposed to inject and store highly-treated recycled water in the aquifer and pump it out at a later date in-lieu of State Water Project water. With such a project and a competitive grant proposal, it is reasonable to think that the state could contribute up to 25% of the cost of construction.

That said, as with the CMC site, there does not appear to be any comparative advantage relative to securing potential funding (grants or loans) for a facility at this site, given what is known about the project at this time.

**Summary and Conclusions.** Based on what is known about the project at this time, neither site appears to have a comparative advantage relative to securing potential funding (grants or loans) for a facility. In fact, it is generally important to have the project well-defined before making a major effort to secure grants and loans, because these programs are highly competitive, and agencies offering these programs are looking for projects that have the highest degree of success. However, Kestrel Consulting has provided insights and recommendations to maximize the City's ability to secure grants and/or loans, whichever site is chosen. These are as follows:

- Since either project can be tied into water supply benefits, both could pursue similar grant and loan programs.
- The Rancho Colina site could have a slight edge over the CMC Regional site since improving quality and supply of groundwater in the Morro Valley could address a disparity between existing safe yield and basin demands, reduce risk of seawater intrusion, and help export nutrients and salt from the Morro Valley groundwater basin.
- CDCR could have access to various state funding sources for the Regional CMC site.



However, since the plant upgrade would not address any agency priorities it is unlikely that they would assist with providing funds to upgrade the facility. Since the County would not take over the CMC WWTF, according to CDCR staff, County resources are not likely to be different than those that would be available to support a Rancho Colina site (e.g., coordination of Integrated Regional Water Management Plan-related funding).

## 7. Conclusions and Recommended Regional WRF Site

**Table 6** summarizes the findings of the site analysis with respect to the key questions posed above. The table is color-coded to assist the reader in interpreting the results. Green areas indicates a comparative advantage for one site or the other, while orange indicates substantial constraint that may be difficult to overcome while still meeting the City’s goals for the project.

<b>Table 6. Summary of Comparative Site Analysis and Findings</b>			
<b>Key Issue</b>	<b>Site</b>		
	<b>CMC</b>	<b>Rancho Colina</b>	<b>Better Site</b>
	<b>Summary of Issues</b>		
<b>A. Unique Regional Benefits?</b>			
Administrative	<ul style="list-style-type: none"> <li>Combines multiple agencies in one location</li> </ul>	<ul style="list-style-type: none"> <li>Multiple agencies served in two locations</li> <li>Would remove existing outdated WWTP that serves nearby residential area, and replace it with new WRF, resulting in no net new facilities to permit.</li> </ul>	<i>CMC</i>
Regional Water Supply and Distribution	<ul style="list-style-type: none"> <li>About 1.5 miles from connection to regional water distribution network</li> </ul>	<ul style="list-style-type: none"> <li>About 1.5 miles from connection to regional water distribution network</li> </ul>	<i>similar</i>
Economic	<ul style="list-style-type: none"> <li>Water reclamation could benefit crops in Chorro Valley, but to a less extent than the comparative advantage of Rancho Colina relative to Morro Valley</li> </ul>	<ul style="list-style-type: none"> <li>Water reclamation could benefit more acreage of relatively higher value crops</li> </ul>	<i>Rancho Colina</i>
<b>B. Relative Cost to Construct and Operate?</b>			
	TBD	TBD	<i>TBD</i>
<b>C. Unique Water Supply Benefits?</b>			
Groundwater Availability and Quality	<ul style="list-style-type: none"> <li>Highest potential benefit during drought year (up to 950 AFY)</li> <li>26 parcels</li> </ul>	<ul style="list-style-type: none"> <li>Highest potential benefit during normal or wet year (900 AFY) without CSD, and 1,125 AFY with</li> </ul>	<i>similar</i>



<b>Table 6. Summary of Comparative Site Analysis and Findings</b>			
<b>Key Issue</b>	<b>Site</b>		
	<b>CMC</b>	<b>Rancho Colina</b>	<b>Better Site</b>
		CSD <ul style="list-style-type: none"> <li>• Fewer effluent permitting challenges and lower regulatory risk related to discharge</li> </ul>	
Streamflow Augmentation	<ul style="list-style-type: none"> <li>• Streamflow augmentation is assumed as major component of reclamation</li> </ul>	<ul style="list-style-type: none"> <li>• If streamflow augmentation occurred, overall benefit would be similar to Chorro Creek</li> </ul>	<i>similar</i>
<b>D. Agricultural Reclamation Opportunities?</b>			
Existing and Potential Acreage	<ul style="list-style-type: none"> <li>• 673 acres of potential irrigated ag</li> <li>• 26 parcels</li> </ul>	<ul style="list-style-type: none"> <li>• 1,080 acres of potential irrigated ag</li> <li>• 57 parcels</li> </ul>	<i>Rancho Colina</i>
Crop Type and Value	<ul style="list-style-type: none"> <li>• Mostly mixed row crops</li> <li>• Moderate value</li> </ul>	<ul style="list-style-type: none"> <li>• Mostly avocados</li> <li>• High value</li> </ul>	<i>Rancho Colina</i>
<b>E. Regulatory or Logistical Constraints?</b>			
Interagency Coordination and Timing	<ul style="list-style-type: none"> <li>• Neither CDCR nor County indicate desire to lead</li> <li>• Could not be achieved in 5-year timeframe</li> <li>• CDCR not motivated to pursue</li> <li>• Would require multiple state agency approval to pursue (2 years to go/no go decision?)</li> <li>• Low priority for County</li> <li>• Multi-agency framework needed; complex negotiations</li> <li>• Has support of RWQCB Executive Officer, but Board position is unknown</li> </ul>	<ul style="list-style-type: none"> <li>• Privately-owned; motivated seller</li> <li>• No coordination with CDCR or County needed</li> <li>• Could be achieved in 5-year timeframe</li> <li>• CSD is potential partner, but Morro Bay could pursue site independently</li> </ul>	<i>Rancho Colina</i>
Water Rights	<ul style="list-style-type: none"> <li>• Requires permitting to obtain water rights at City wellfields</li> <li>• Requires multi-agency agreements among all the customers discharging to the CMC WWTF</li> <li>• Risks creating or enhancing habitat and reducing ability to use recycled water for other applications in the future similar to City of SLO.</li> </ul>	<ul style="list-style-type: none"> <li>• Requires permitting to obtain water rights and City wellfields</li> <li>• Requires agreements with customers to reduce their pumping</li> </ul>	<i>similar</i>
Streamflow Discharge Requirements and Limits	<ul style="list-style-type: none"> <li>• Difficult to meet water quality goals in TMDL</li> <li>• Must meet minimum flow requirements</li> </ul>	<ul style="list-style-type: none"> <li>• No TMDL standards</li> <li>• No minimum flow requirements on Morro Creek</li> </ul>	<i>Rancho Colina</i>



<b>Table 6. Summary of Comparative Site Analysis and Findings</b>			
<b>Key Issue</b>	<b>Site</b>		
	<b>CMC</b>	<b>Rancho Colina</b>	<b>Better Site</b>
Caltrans Encroachment	<ul style="list-style-type: none"> <li>Encroachment Permit for pipeline potentially avoidable</li> </ul>	<ul style="list-style-type: none"> <li>Encroachment Permit along Highway 41 needed for pipeline</li> </ul>	CMC
Environmental and Other Agency Permitting	<ul style="list-style-type: none"> <li>Multiple studies and permits needed</li> </ul>	<ul style="list-style-type: none"> <li>Multiple studies and permits needed</li> </ul>	similar
<b>F. Site Constraints that Affect Design?</b>			
Site Configuration/Existing Development	TBD	TBD	TBD
Environmental Constraints	TBD	TBD	TBD
<b>G. Coastal Environmental Issues?</b>			
<i>Coastal Proximity and Access</i>	<ul style="list-style-type: none"> <li>4.7 miles to estuary; 6.5 miles to ocean. Will not affect coastal access</li> </ul>	<ul style="list-style-type: none"> <li>1.7 miles to ocean. Will not affect coastal access</li> </ul>	similar
<i>Visual Impacts</i>	<ul style="list-style-type: none"> <li>Not visible from coast; distant view from Highway 1</li> </ul>	<ul style="list-style-type: none"> <li>Not visible from coast; brief view from Highway 41</li> </ul>	similar
<i>Biological Resources/ESHA</i>	<ul style="list-style-type: none"> <li>ESHA near Chorro Creek, potentially avoidable</li> <li>Red-legged frog, tidewater goby and steelhead in Chorro Creek</li> </ul>	<ul style="list-style-type: none"> <li>ESHA near Morro Creek, avoidable</li> <li>Red-legged frog, tidewater goby and steelhead in Morro Creek</li> </ul>	similar
<i>Cultural Resources</i>	<ul style="list-style-type: none"> <li>Site disturbed; potential for unknown resources exists</li> </ul>	<ul style="list-style-type: none"> <li>Site disturbed; potential for unknown resources exists</li> <li>Large site (CA-SLO-165) near SR 41/1 intersection could be impacted by pipeline</li> </ul>	CMC
<i>Agriculture</i>	<ul style="list-style-type: none"> <li>All developable area property underlain by prime soils</li> </ul>	<ul style="list-style-type: none"> <li>No prime soils in most developable area; some potentially prime soils near Highway 41</li> </ul>	Rancho Colina
<i>Minimize Carbon Footprint</i>	<ul style="list-style-type: none"> <li>Longer pipeline distance suggests higher energy use and thus GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>Shorter pipeline distance suggests lower energy use and thus GHG emissions</li> </ul>	Rancho Colina
<b>H. Design Limitations?</b>			
Discharge Limitations that affect design	<ul style="list-style-type: none"> <li>Permitting challenges related to discharge limitations will adversely affect cost</li> </ul>	<ul style="list-style-type: none"> <li>If direct reuse of water and wet weather disposal used, there would be fewer permitting challenges leading to lower costs; recycled water program is a critical path item</li> </ul>	Rancho Colina
Other Considerations	<ul style="list-style-type: none"> <li>Morro Bay NEP and other agencies will need consultation relative to impacts to estuary</li> </ul>	<ul style="list-style-type: none"> <li>No national estuary reduces potential permitting and consultation challenges related to meeting water quality standards</li> </ul>	Rancho Colina



<b>Table 6. Summary of Comparative Site Analysis and Findings</b>			
<b>Key Issue</b>	<b>Site</b>		
	<b>CMC</b>	<b>Rancho Colina</b>	<b>Better Site</b>
<b>I. Is 5-Year Goal Achievable?</b>			
Logistical Constraints	<ul style="list-style-type: none"> <li>Neither CDCR nor County indicate desire to lead</li> <li>Would require multiple state agency approval to pursue (2 years to go/no go decision?)</li> <li>Could not be achieved in 5-year timeframe</li> </ul>	<ul style="list-style-type: none"> <li>Privately-owned; motivated seller</li> <li>No coordination with CDCR or County needed</li> <li>Could be achieved in 5-year timeframe</li> </ul>	<i>Rancho Colina</i>
Permitting/Regulatory Constraints	<ul style="list-style-type: none"> <li>Multiple studies and regulatory permits needed</li> </ul>	<ul style="list-style-type: none"> <li>Multiple studies and regulatory permits needed</li> </ul>	<i>similar</i>
Cost/Funding Constraints	TBD	TBD	<i>TBD</i>
<b>J. City's Role in Operating facility?</b>			
Treatment Facility	<ul style="list-style-type: none"> <li>Owned by CDCR; City would be customer</li> </ul>	<ul style="list-style-type: none"> <li>Owned and operated by City</li> </ul>	<i>see below</i>
Offsite Pipeline Network	<ul style="list-style-type: none"> <li>Owned and operated by City</li> </ul>	<ul style="list-style-type: none"> <li>Owned and operated by City</li> </ul>	<i>see below</i>
Logistical Issues	<ul style="list-style-type: none"> <li>CDCR control would make realization of City goals difficult</li> <li>Split ownership of treatment facility and pipelines could lead to conflict among agencies</li> </ul>	<ul style="list-style-type: none"> <li>City control would make realization of City goals possible</li> <li>Unified City ownership of entire reclamation system reduces operation and maintenance difficulties</li> </ul>	<i>Rancho Colina</i>
<b>K. Comparative Funding Advantages?</b>			
Grants and Loans	<ul style="list-style-type: none"> <li>There are currently no identified site-specific advantages for securing funding at this location.</li> </ul>	<ul style="list-style-type: none"> <li>There are currently no identified site-specific advantages for securing funding at this location.</li> </ul>	<i>similar</i>
Other Considerations	<ul style="list-style-type: none"> <li>A well-defined project at any location will be more competitive for funding.</li> <li>Projects that solve nitrate problems will be more competitive.</li> </ul>	<ul style="list-style-type: none"> <li>A well-defined project at any location will be more competitive for funding.</li> <li>Projects that solve nitrate problems will be more competitive.</li> </ul>	<i>similar</i>
<b>OVERALL</b>			<b><i>Rancho Colina</i></b>

While both sites are potentially suitable for a new regional WRF, the **Rancho Colina** site is considered better overall. Key considerations in this determination include:

- Long-term benefits of water reuse in Morro Valley exceed those in the Chorro Valley for the following reasons:
  - Siting in the Morro Valley provides an opportunity to optimize reuse of State Water to



restore a severely depleted groundwater basin that already experience agricultural demands that exceed the basin's safe yield (Cleath, 2014);

- The City can likely improve the reliability of its existing appropriated water right and acquire additional water rights based on the reclaimed water used to recharge the basin;
- Once the basin is restored and operated in a sustainable fashion, the City gains the ability to reduce its reliability on State Water and use a less expensive water supply to significantly reduce water costs to rate payers;
- The Rancho Colina site is much closer to both the existing Morro Bay Desalination Plant and the Ocean Outfall, both of which provide vital infrastructure support to direct agricultural and future potable water reuse;
- The Rancho Colina site and City water distribution system are within 2 miles of both the Whale Rock and Chorro Valley Turnout, thereby enabling broader distribution of reclaimed or potable City water throughout San Luis Obispo County. The CMC WWTP is a similar distance from both pipelines, so that site does not have an advantage relative to proximity to major water conveyance facilities.
- Recharge of the Morro Valley aquifer provides three secondary benefits by:
  - Reducing the risk of seawater intrusion into the City well fields (Cleath, 2014)
  - Increased pumping which could remediate existing nitrate contamination in the basin because of the unique hydrogeographic conditions at "the Narrows" (Nitrate Study, Cleath, 2014)
  - Direct or indirect groundwater recharge of the aquifer through either percolation ponds or stream discharge which could potentially enhance aquatic habitat in both Morro and Little Morro Creeks
- The City's 5-Year Goal is not achievable at the CMC site, for the following reasons:
  - Neither CDCR nor the County appear likely to make expansion of the WRF facility at CMC a priority in their 5-year capital improvement program;
  - Pursuit of a regional facility at CMC would require extensive study and multiple state agency approvals, which may take at least a year or longer to even determine feasibility. If the State denies the project concept, the City would need to pursue a different site.
  - A multi-agency framework for operation, maintenance, cost-sharing, and water rights would need to be developed at CMC, which would take considerable time.
- Rancho Colina has highly motivated private property owner, willing to work with the City, and there are no agency-related constraints to transferring ownership or operation to the City, which will save considerable time. Conversely, the CMC site is currently encumbered by an existing State Bond, which could significantly complicate property transfer/acquisition.



- **COST CONCLUSIONS TO BE DETERMINED PENDING COMPLETION OF CAROLLO REPORT**
- The City will have more flexibility at a “greenfield”, or undeveloped, site to pursue innovative treatment approaches, energy-efficient technologies or alternative energy elements such as solar panels, composting, and other City priorities identified during the public workshops in 2013, rather than if they are a partner in the expansion of the existing CMC plant.
- Although a new WRF at CMC could improve the City’s water supply from its wells Chorro Valley wells, the City would also benefit from a WRF in the Morro Valley indirectly by creating an additional water supply that could benefit growers in the Morro Valley and improve the utility of the City’s wells in that valley. In addition, some of the City’s theoretical water supply gain in the Chorro Valley from a CMC site could be offset by minimum streamflow requirements in Chorro Creek, or complications related to achieving water quality goals in that basin.

**Table 7** below summarizes the conclusions from the water resources-specific studies performed for each site, relative to cost, potential water supply benefit, and permitting. For the Rancho Colina site, the table considers two possibilities: that CSD may or may not participate in a new WRF at that location.

<b>Table 7. Comparison of Water Resources-Specific Conclusions</b>			
	<b>CMC Wastewater Site</b>	<b>Rancho Colina (City Only)</b>	<b>Rancho Colina (City + CSD)</b>
<b>Design Flows for City/CSD</b>	Additional 1.5 MGD (1,680 AFY)	1.13 MGD (1,270 AFY)	1.5 MGD (1,680 AFY)
<b>Discharge Permitting</b>	Highest regulatory risk due to location upstream of Morro Bay National Marine Sanctuary; listing of Chorro Creek as an impaired water body under the Clean Water Act; TN and TDS limits; and potential future nutrient policies. Mandatory minimum penalties are assigned to effluent exceedances (typically \$3,000 per violation or \$10,000 per day)	Opportunities include a range of permitting options such as use of the existing ocean outfall for wet weather flows, direct agricultural reuse within 3 miles of the plant, potential percolation, and stream augmentation. All vary in level of complexity but have less effluent limitations than CMC Regional Site.	Same as City Only
<b>Water Supply Benefit</b>	900 AFY during drought years 510 AFY during normal/wet years	320 AFY during drought years 900 AFY during normal/wet years	545 AFY during drought years 1,125 AFY during normal/wet years
<b>WRF Capital Cost</b>	TBD	TBD	TBD
<b>Annual Treatment Facility O&amp;M Cost</b>	\$\$ Total \$\$ for MB/CSD		
<b>Relative Cost for Wastewater Reclamation</b>	TBD	TBD	TBD
<b>Relative Cost for Water Supply Benefit (\$/AFY)</b>	TBD	TBD	TBD



## 8. References and Report Preparers

### References

Ashbrook Simon Hartley. (2013). <http://www.as-h.com>. Retrieved from <http://www.as-h.com>:  
<http://www.as-h.com/uk/en-gb/klampress.aspx>

California Coastal Commission. (January 10, 2013). *Staff Report for CDP Application Number A-3-MRB-11-001 (Morro Bay WWTP)*. Available at <http://documents.coastal.ca.gov/reports/2013/1/Th23b-1-2013.pdf>.

Caltrans, District 5. *Prehistoric Adaptations on the Shores of Morro Bay Estuary, A Report on Excavations at Site CA-SLO-165, Morro Bay, California*. (September 1998) Prepared by Far Western Anthropological Research Group, Inc.

Google Earth.

Morro Bay, City of. (September 2011; revised November 2011). *Alternative Sites Evaluation, Phase 1 – Rough Screening Analysis*. Prepared by Dudek.

Morro Bay, City of. (November 2011). *Alternative Sites Evaluation, Phase 2 – Fine Screening Analysis*. Prepared by Dudek.

Morro Bay, City of. *General Plan and Local Coastal Plan*.

Morro Bay North Embarcadero Waterfront Futures Group. (2007). *Report to the Morro Bay City Council, July 2007*.

San Luis Obispo County. *PermitView website*. <http://www.sloplanning.org/PermitViewMap/MapSearch>

Siemens. (2013). [water.siemens.com](http://water.siemens.com). Retrieved from [water.siemens.com](http://water.siemens.com).

*References for this study also include links to articles, newsletters, studies, and other documents imbedded into many of the above documents, websites, and correspondence submitted through the process.*

### Report Preparers

This report was prepared by **John F. Rickenbach Consulting** under contract to the City of Morro Bay. Persons and involved in the preparation of this report and related supporting activities include:

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## Appendix A

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*Letter from San Luis Obispo County to CDCR*  
October 29, 2013

**DEPARTMENT OF PUBLIC WORKS**

Paavo Ogren, Director

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October 29, 2013

**VIA EMAIL & MAIL**

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Sacramento, CA 95827

Dear Mr. Cordano,

The purpose of this letter is to provide you with a summary of some of my thoughts, prior to our meeting on November 8, 2013, relating to discussions that have transpired over the past few years on the possibility of transitioning the operations of the water and wastewater facilities at the California Mens Colony (CMC) to the County of San Luis Obispo (County). Although no formal action has been considered by the County Board of Supervisors, several benefits will result if a transition occurs and my discussions with many recognize the transition will include benefits for California Department of Corrections and Rehabilitation (CDCR), the County and other agencies currently receiving service from CMC. Understandably, certain concerns have also been raised and I have addressed those to the extent I am aware of them. Lastly, I have provided some thoughts on how service might be transitioned in the event that your agency, the Board of Supervisors, and others agree to do so.

As you may be aware, the San Luis Obispo County Flood Control and Water Conservation District (District), which is a component of the County, is managed by the Public Works Department. We provide wholesale water to all seven (7) cities within our boundaries and most of the unincorporated communities. We operate two dams and reservoirs – Salinas Dam under agreement with the United States Army Corp of Engineers and Lopez Dam which was supported by a local voter initiative in the 1960s. The District is also a State Water Contractor and obtains a fourth wholesale supply from Lake Nacimiento, which is operated by the Monterey County Water Resource Agency. Each system is operated pursuant to multi-agency contracts, just as the current CMC systems are operated pursuant to contractual arrangements. The business professionals within Public Works include MBAs and CPAs and are instrumental in the administration of these contractual relationships.

In addition to the District's wholesale operations, the Public Works Department also operates municipal retail water systems through "County Service Areas" in Shandon, Santa Margarita, and Cayucos; plus a system in the Avila Valley area that is based on contracts with individual property owners due to its relatively rural nature. We operate Grade 3 and Grade 4 water treatment plants. We currently operate two wastewater systems and are developing a Grade 4 water recycling facility for the community of Los Osos, which had a 30-year duration of non-compliance with a Regional Water Board mandate to convert the community from septic systems to a community system. We are more than 50% complete with the construction of the Los Osos collection system and are currently bidding the water recycling facilities bringing compliance to Los Osos.

The Public Works operating crews include both Water System Workers and Public Works Workers. The former are our water and wastewater operators; the latter are our heavy equipment workers who predominantly work on our roads and bridges as employees of our Transportation Division, in addition to working on reservoirs and levees since our job specifications recognize that multi-dimensional crews are important to meeting the needs of ever-increasing complex field work.

The Public Works Department also has a State certified water quality lab and a team of Environmental Specialists that are leaders on the Central Coast in understanding the local environmental issues and how to obtain permits from Federal and State resource agencies in a timely manner. Finally, we are the lead agency responsible for San Luis Obispo County's Integrated Regional Water Management (IRWM) Plan, which is the State's planning model for coordinating the multiple benefits of water resource management including water quality, water supply, ecosystem restoration, groundwater and flood control.

In consideration of a possible transition, there are two primary benefits that I envision for the County.

- P1. The transition will ensure reliability of service.
- P2. The transition will enhance emergency responsiveness.

Below, addresses each of the primary benefits.

#### Reliability of Service

The CMC facilities, via Public Works, provide service to several agencies including the County Sheriff, the County Jail (male, female and juvenile facilities), the Emergency Operations Center and others. Each of these are critical to local law enforcement and responsiveness of all emergency personnel. Although CMC has not failed to meet its responsibilities to the County, concerns do exist on the lack of upgrades to some of the facilities and understandably, the resources at CMC are limited in their ability to tackle the issues that are facing public infrastructure as environmental and other regulations have been increasing over the years. The benefit of the Public Works Department providing a full slate of professional and operating resources is especially important on complex issues.

While I do have confidence in the CMC operators and other staff to succeed on a daily basis, the concern I have and the benefit the County provides is the breadth of resources available to address the non-routine issues and capital projects in a timely manner. Our in-house engineering staff includes a full compliment of water and wastewater professionals, in addition to structural, design and construction engineers. The design of the Los Osos wastewater (water recycling facilities) include similar technologies to the CMC facilities. Utilizing a common operating crew will provide economies of scale, as well as additional on-call staff to respond in the event of system malfunctions or failures. One of our heavy equipment yards is also located across Highway 1 from CMC, and the opportunity to ensure long-term maintenance of Chorro Reservoir, as an example, will benefit the overall operations.

### Emergency Responsiveness

As California's challenges for adequate water resources continue, the need for local emergency and drought responsiveness increases. Our efforts in IRWM Planning has earned us grant funding and other recognition at the State level. A transition to the County will benefit both the County and CMC by improving access to water in droughts and other emergencies. The existing CMC rights to Whalerock Reservoir will provide enhancements to regional emergency planning and, likewise, the County's ability to respond to future needs of CMC in emergencies and droughts will be enhanced if the County has a direct responsibility for ensuring adequate water supplies to CMC during emergencies and droughts.

The issue of emergency responsiveness may best be understood in that the County is a permanent local institution that is extensively involved in emergency action planning and response with a long history of success. The Public Works Department is part of the County's emergency response efforts and we currently respond to the "Control Room" with other decision makers during emergencies. The significance of challenges during emergencies, including how multiple agencies need to coordinate, are understood by a relatively small percentage of people, and I am of the opinion that the transition will benefit both CMC as well as the region in our efforts to assure that safe drinking water is available in emergencies and droughts. I also believe that CMC's current reliance on State Water is an "at-risk" issue and the ability to connect to the Nacimiento Supply and improve system reliability absent of emergencies should be on the table for us to discuss and consider.

In addition to these two primary benefits, there are two secondary benefits that I also believe exist.

- S1. Capital Project Planning and Implementation
- S2. Local Needs and Regulatory Alignment

Below, addresses each of the secondary benefits.

### Capital Project Planning and Implementation

In addition to the full breadth of engineering, environmental and financial professionals needed to successfully implement capital projects in a timely manner, the County also has its own financing authority for the sale of municipal bonds when needed. Recently, the County's Triple "A" credit rating led to issuance of approximately \$200 million in municipal bonds for the construction of the Nacimiento Water Project which began operations in 2011. The Project included 45 miles of pipeline from Lake Nacimiento to the City of San Luis Obispo, with turnouts serving Paso Robles, Templeton and Atascadero and facilities that include three storage tanks, three pump stations and intake facilities at the lake. Our current efforts in developing a \$173 million wastewater collection and water recycling facilities for Los Osos has been funded through approximately \$20 million in Federal and State grants and the remaining \$150+ million is from \$70 million in State Revolving Funds (SRF) issued by the State Water Board and \$83 million in Rural Development Funds from the United States Department of Agriculture (USDA). The SRF funds is one of the largest awards by the State Water Board and the USDA Rural Development Funds is the largest project funding ever awarded by USDA in the history of the Rural Development Program.

The Public Works Department success in developing funding is a result of excellent County credit ratings and our success in public outreach. The importance of establishing local support for infrastructure goes almost without stating today and is illustrated by voter approvals we have obtained. For example, we completed the Lopez Dam Seismic Remediation Project in 2006 and received State-wide honors as the geotechnical project of the year, but only after voters approved a special tax that required two-thirds approval, and we obtained a nearly 70% 'yes' vote. The Los Osos wastewater project success came only after the property owners approved assessments of nearly \$25,000 per single family equivalent unit by an 80% yes vote! Our business professionals have been instrumental in the success of our capital projects, and while our engineers and environmental professionals have led the alternatives analysis and environmental permitting, the development of the best available financing for all of the projects we undertake is one hallmark of our success. Likewise, developing support between governmental agencies, such as what was needed for the Nacimiento Water Project, the Lopez Dam Seismic Remediation Project, the Los Osos Wastewater Project, and others, is another hallmark.

### Local Needs and Regulatory Alignment

The existing CMC wastewater facilities have the potential of helping to address other local needs including those facing the communities of Morro Bay and Cayucos. Since the 1990's, the communities have been under a mandate by the Regional Water Board to upgrade the facilities. In January of 2013, the California Coastal Commission denied the coastal development permit for a project that had been proposed by the communities and re-evaluation of options is ongoing. Utilizing the CMC facilities as a regional treatment plant has been part of recent discussion, but it is our understanding that CDCR cannot provide municipal services. As a result, if this option is beneficial,

then it is likewise our understanding that transitioning operations to the County will provide the ability for the treatment plant to serve additional local needs. In doing so, the benefit to CMC and others connected to the CMC system will be a reduction in operating costs since economies of scale will result. A full analysis of capacity, “buy-in fees” and upgrade responsibilities that Morro Bay and Cayucos would need to pay, environmental impacts and other issues will need to be part of the project alternatives analysis that Morro Bay and Cayucos will need to update.

Our existing multi-agency contracts on regional facilities include provisions that address issues such as this and I am fully confident that meeting additional local needs is a benefit that a County operated facility would be able to make more feasible. It will provide direct economic benefit to the existing users of the CMC facilities, and may be preferable to both the Regional Water Board and the California Coastal Commission. Although the Morro Bay/Cayucos wastewater issue is independent of the primary issues in considering a possible transition to County operations, it is still important to recognize that a transition can also help meet the needs of other local agencies in their efforts to align local decisions with regulatory requirements.

On other regulatory issues, the County’s central role in our region positions us to help promote alignment between regulatory issues and local needs. The breadth of resources within the Public Works Department and knowledge of the regulations with the local issues, needs and environment place us in a position, and with the responsibility, to efficiently undertake necessary efforts to ensure that local infrastructure is developed and maintained to comply with increasingly complex regulations while meeting local needs.

### CDCR Concerns

While I will refrain from expressing a position that I fully understand the concerns of CDCR that might exist in considering a transition to County operation, it is both understandable that concerns would exist and that some would be more obvious. What I have understood is that prior transitions to local agencies have not proven as beneficial as anticipated for CDCR. Certainly, any transition is subject to risks of the unknown, such as a new regulatory mandate that would increase costs to all parties. The key to addressing risks is to have contractual arrangements established up front to provide for equitable allocation of costs when future issues do arise. Mitigating risks is not difficult and our existing multi-agency contracts do have provisions for doing so.

More specifically, it is my understanding that other transitions were different than the CMC situation. In the CMC situation, no “retail services” exist. Unlike other situations where the local agency provided service to both their municipal customers and to the CDCR facility – which simply made the CDCR facility one of many customers and subject to the rate setting process at the discretion of the local council. Not surprisingly in those situations, the local City Council is under pressure to minimize rates and charges on residential and business customers, and likewise pressured to increase the rates and charges to institutions such as CDCR. This risk simply does not exist, nor would it surface even if the Morro Bay/Cayucos option prevailed as a preferred option due to the contractual nature of the inter-agency rights and responsibilities.

The existing cost sharing for the CMC facilities are established by contract, and not a rate-setting process, and they will continue to be contractually based. We should anticipate that some modifications to the existing contracts will be needed commensurate with a transition of operations, rather than pursuing a simple assignment of the existing CMC contracts to the County, which itself may not be possible. Nevertheless, since the existing CMC contracts with the various users have been extremely well thought, detail oriented, and agreed upon in the past, the number of issues to accomplish with the transition will be relatively few and addressing risks and concerns of CDCR should be well within our abilities to accomplish.

### Transitional Issues

Lastly, some basic transitional issues will also need to be addressed. First, it is customary for local transitions to provide existing employees with the right to transition. I believe that this is important not only to respect the existing CMC employees who might need to transition to County employment, but to also help ensure that those with existing knowledge of the CMC facilities continue to provide maintenance and to ensure continuity. Salary and benefit comparisons will need to be prepared; doing so as part of evaluating a transition is important to avoid a negative financial impact on existing employees. Equipment currently being utilized would also need to be inventoried and separated between those that would be provided to the County for its operations versus equipment that would continue to be held by CMC for its own use. Lastly, security and access issues will need to be addressed, together with delineating the facilities that are within secured areas that the County would not maintain, but would continue to be part of the internal CMC system.

I am hopeful, Fred, that this letter provides you with some insight on my thoughts regarding a possible transition in the operations of the existing CMC facilities. I look forward to meeting with you on November 8, 2013.

Sincerely,



PAAVO A. OGREN  
San Luis Obispo County Public Works Director

File: CF 70.10.01

## Appendix B

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*Capacity Evaluation of the CMC Wastewater Plant*  
Carollo Engineers, November 2014

## Appendix C

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*Hydrologic Evaluation of Chorro Valley and Morro Valley*  
Cleath-Harris Geologists, November 2014

Cleath-Harris Geologists, Inc.  
71 Zaca Lane, Suite 140  
San Luis Obispo, California 93401  
(805) 543-1413



## Technical Memorandum

**Date:** November 6, 2014

**From:** Spencer Harris, HG 633

**To:** Rob Livick, Morro Bay Public Services Director/City Engineer

**SUBJECT:** **Hydrologic evaluation of the potential benefits to the City water supply from increasing wastewater discharge to Chorro Creek, San Luis Obispo County.**

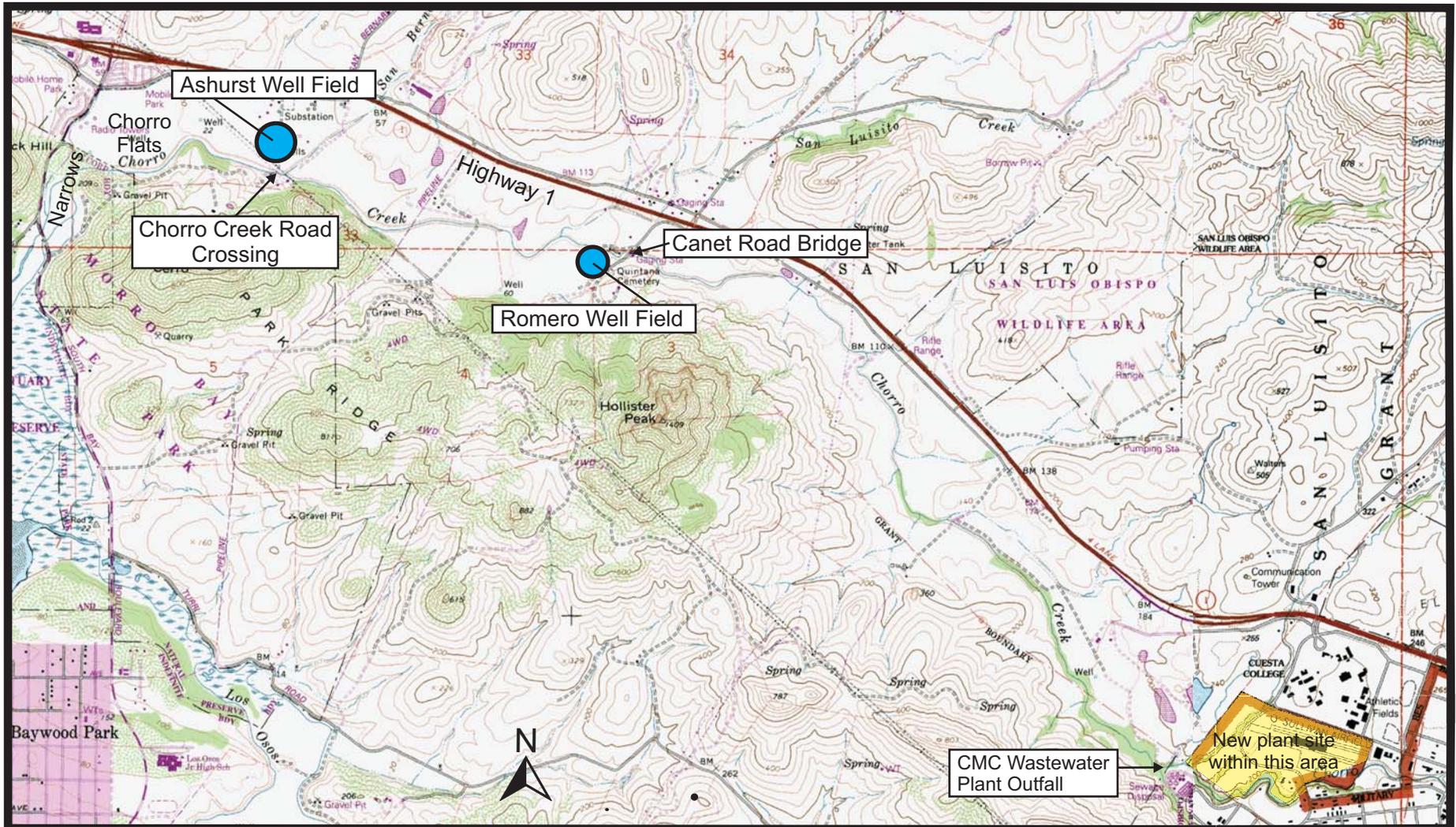
Cleath-Harris Geologists (CHG) has completed an evaluation, on behalf of the City of Morro Bay (City), of potential increases in groundwater yield to the City's Chorro Valley well fields from increased wastewater discharges to Chorro Creek. Constraints on City well field production include minimum surface flow requirements in Chorro Creek. Increasing the flow in Chorro Creek using wastewater discharges would allow the City to operate their well fields more frequently, with more available water during drought periods, in addition to providing water for environmental demand. This Technical Memorandum presents the results of the study.

Regulatory constraints related to waste discharge permitting and groundwater quality were not evaluated in this memorandum. Direct wastewater reuse in the Chorro Valley was also not part of this study. The benefits analysis focuses on water rights and hydrology, and specifically on compliance with the minimum stream flow requirements contained in the City's permit for diversion and use of Chorro Creek underflow.

### Background

The City of Morro Bay is evaluating sites for constructing a new water reclamation facility. One of the potential locations has been identified as the area near the existing California Mens Colony (CMC) wastewater plant in the Chorro Valley (Figure 1). The CMC wastewater plant operates under Waste Discharge Order R3-2012-0027, with a permitted average dry-weather discharge of 1.2 million gallons per day (MGD) to Chorro Creek, and a minimum continuous discharge requirement of 0.75 cubic feet per second (cfs).

The Second Public Draft Options Report prepared for the City indicates the new facility could either be constructed and operated by the City, independent from the existing CMC wastewater plant, or be constructed and operated as a regional facility under a multi-agency project, which would replace the older CMC plant (Rickenbach, 2013). In either case, the new facility would process effluent from both Morro Bay and Cayucos. Wastewater discharges to Chorro Creek would be projected to increase by an average of 1.5 MGD, equivalent to approximately 2.32 cfs.



Base Maps: U.S.G.S. Morro Bay North (1995),  
 Atascadero (1995), Morro Bay South (1994),  
 and San Luis Obispo (1995) Quadrangles,  
 San Luis Obispo County, California,  
 7.5 Minute Series (Topographic)

0 3,000  
 Scale: 1 inch = 3,000 feet

Figure 1  
 Chorro Valley Well Fields  
 City of Morro Bay

Cleath-Harris Geologists, Inc.



## **Constraints on City Well Field Production**

The City operates two well fields in the Chorro Valley, the Romero well field and the Ashurst well field. The constraints on the City's ability to pump from the Chorro Valley have been grouped into four categories: water rights, water quality, facilities, and stream flow interference.

### Water Rights

Both Chorro Valley well fields operate under State Water Resource Control Board, Division of Water Rights Permits for Diversion and Use of Water. For this benefits analysis, the City is assumed to be constrained by water rights permits to cease production at the well fields when surface flow in Chorro Creek (measured downstream of the respective fields) is less than 1.4 cfs. The current permitted maximum allocation for City groundwater production from the Chorro Valley well fields is 1,142.5 acre-feet per year (CH2M Hill, 2011 Appendix F). If the City increases wastewater discharges to Chorro Creek, however, it is assumed that the City well field allocation of creek underflow may also be increased.

### Water Quality

Water from the Chorro Valley well fields has historically been impacted by elevated nitrate concentrations, which are attributed primarily to agricultural fertilizer applications (CHG, 2009). The City is working to resolve the nitrate problem by providing treatment or blending by 2020 (CH2M Hill, 2011). Addressing nitrate contamination or future regulatory standards for emerging contaminants, including pharmaceuticals and personal care products, would be required with or without the additional wastewater discharges to Chorro Creek. Therefore, water quality constraints on production are not a factor in this benefits analysis.

Historically, seawater intrusion has not been a problem for the City's Chorro Valley well fields. The Department of Water Resources seawater intrusion study in 1972 documented elevated salinity associated with seawater intrusion in the narrows area downstream of Chorro Flats (Figure 1). Since that study, chloride level fluctuations at the County golf course irrigation well also suggested occasional periods of intrusion in the narrows area (Cleath & Associates, 1993). Increases in wastewater discharges to Chorro Creek would reduce the potential impact of seawater intrusion in the narrows.



## Facilities

Under normal system pressure, maximum production from the Romero well field is approximately 240 gallons per minute (gpm) from one active well, and maximum production from the Ashurst well field is approximately 1,150 gpm from four wells (assuming future treatment/blending for nitrates). The resulting combined production capacity for the City's Chorro Valley well fields is 1,390 gpm, or 3.1 cfs. Wells are not typically pumped continuously for extended periods, and a 75 percent duty factor is assumed for maximum sustainable production, equivalent to approximately 1,040 gpm (coincidentally 2.32 cfs, or 1.5 MGD). The previously mentioned 1,142.5 acre-feet per year permitted maximum allocation is equivalent to 710 gpm, or 1.6 cfs. The City has the capacity, at a 50 percent duty factor, to extract the current maximum allocation.

## Stream Flow Interference

The amount of stream flow interference during well field pumping varies by well and the duration of pumping. For the purposes of this benefits analysis, however, a Chorro Creek stream flow depletion rate of 100 percent of the total well field production rate is assumed. In other words, groundwater production at the City well fields will reduce stream flow by an equivalent amount.

## **Methodology**

CHG has been monitoring stream flow at two locations on Chorro Creek every two weeks from January 2010 to present (the study period). The monitoring locations are at the Canet Road bridge (adjacent to the County stream gage), and at the Chorro Creek Road crossing. The Canet Road bridge site is approximately 600 feet upstream of the Romero well field, and the Chorro Creek Road crossing is immediately adjacent to the Ashurst well field (Figure 1). This flow data, along with well field production constraints and adjustments for increased agricultural water demand, provide the information needed to complete the benefits analysis using the four steps outlined below.

- Step 1. Treated wastewater discharges to Chorro Creek (1.5 MGD) are added directly to the January 2010 - September 2014 flow data measured at Chorro Creek Road, except during periods of no flow. Low flow correlation with Canet Road provides a basis for adjustment when there are no measurable surface flows at Chorro Creek Road.
- Step 2. Potential increases in local agricultural water demand, based on a land survey conducted between the CMC wastewater discharge site and the City well fields, are subtracted from the surface flows calculated in Step 1 to account for future losses in stream flow not benefitting the City.



Step 3. The maximum available production from City well fields are compared with and without increased City wastewater discharges. Well field production constraints are applied. The potential benefit to the City is calculated as the increased production available under project conditions during 2010-2014 study period, which includes an exceptional drought.

Step 4: Increasing the maximum permitted diversions from Chorro Creek underflow will also directly increase the potential City benefit during years where the minimum flow threshold does not significantly restrict production (i.e. non-drought years). The current maximum permitted diversion is 1,142.5 acre-feet per year. The continuous sustainable capacity of the City well field facilities is estimated at 1,040 gpm, or 1,678 acre-feet per year. The benefit to the City from increasing the maximum permitted discharge is the difference between annual production under project conditions and 1,142.5 acre-feet per year (up to 535 acre-feet of increased annual production).

### **Benefits Analysis**

Bi-weekly flow measurements for Chorro Creek at the Chorro Creek Road crossing from January 2010 through September 2014 are plotted in Figure 2. The 1.4 cfs flow threshold for permitted diversions from City well fields is shown, along with the allowable extractions by the City well fields, assuming a maximum facilities production rate of 1,040 gpm (2.32 cfs) with 100 percent of production resulting in stream flow depletion. Periods where the annual permitted maximum diversion of 1,142.5 acre-feet would be reached is also shown.

Adjustments for potential increased agricultural water demand and for the flow deficit during periods of low flow are needed prior to adding the 1.5 MGD increased discharges under project conditions. These adjustments are described below.

### **Increased Agricultural Demand Adjustment**

A land use survey using aerial imagery identified three properties with wells in the Chorro Valley groundwater basin, between the CMC wastewater plant discharge site and the Ashurst well field, where additional land could be farmed. Increasing irrigated acreage would increase overall future groundwater extractions and reduce stream flow, compared to current conditions. Room for 20 acres of increased vineyard acreage and 40 acres of other potential crops were identified, which could result in up to 120 acre-feet per year of additional groundwater demand. Assuming 85 percent consumptive use (15 percent return flow), and 100 percent of the consumptive use derived from stream depletion, the estimated potential average decrease in Chorro Creek stream flow from increased agricultural water use would be approximately 100 acre-feet per year (63 gpm; 0.14 cfs).

### Chorro Creek Flow and Well Field Production Capacity Current Conditions - January 2010 through September 2014

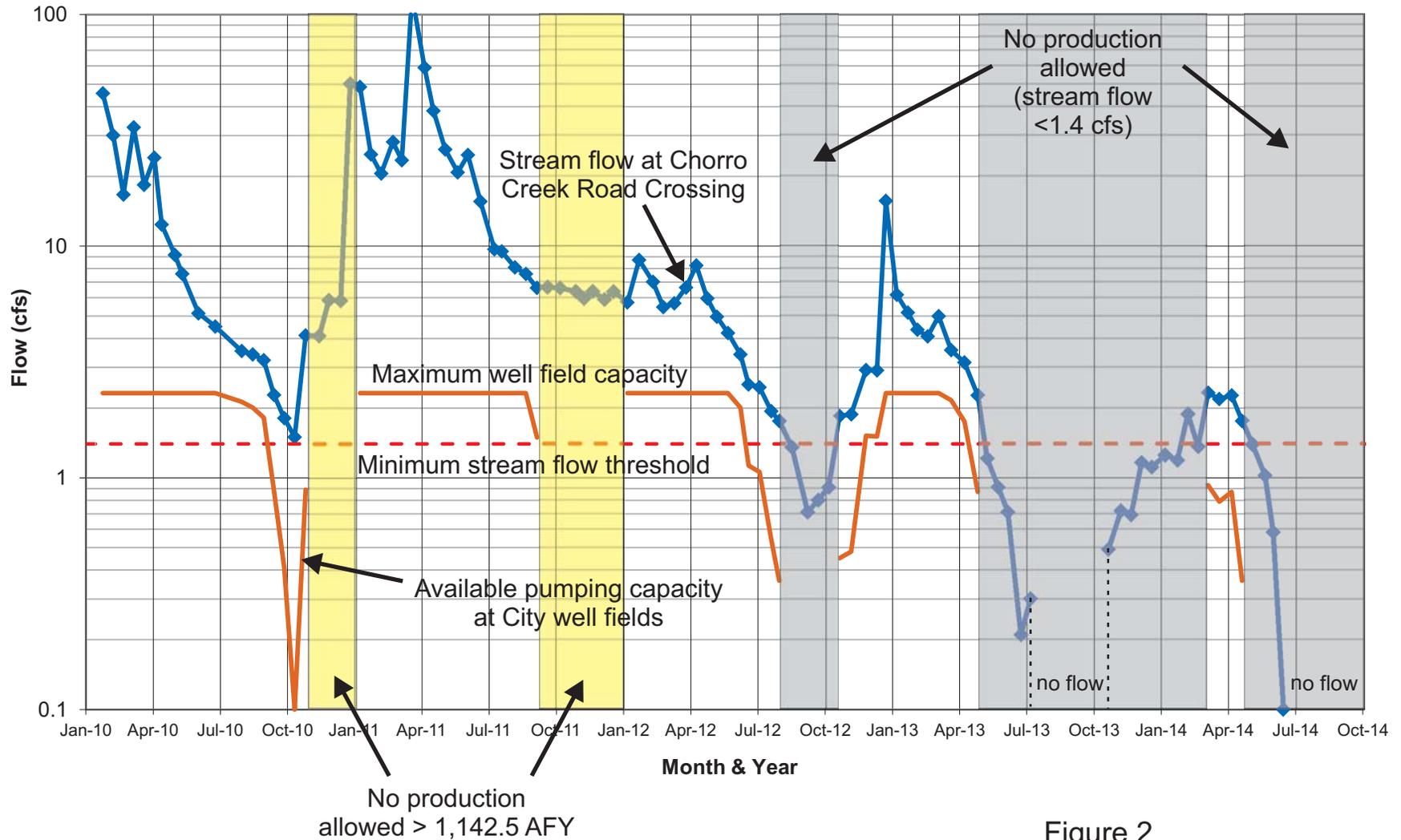


Figure 2  
Chorro Creek Flow  
Current Conditions  
City of Morro Bay



### Low Flow Conditions Adjustment

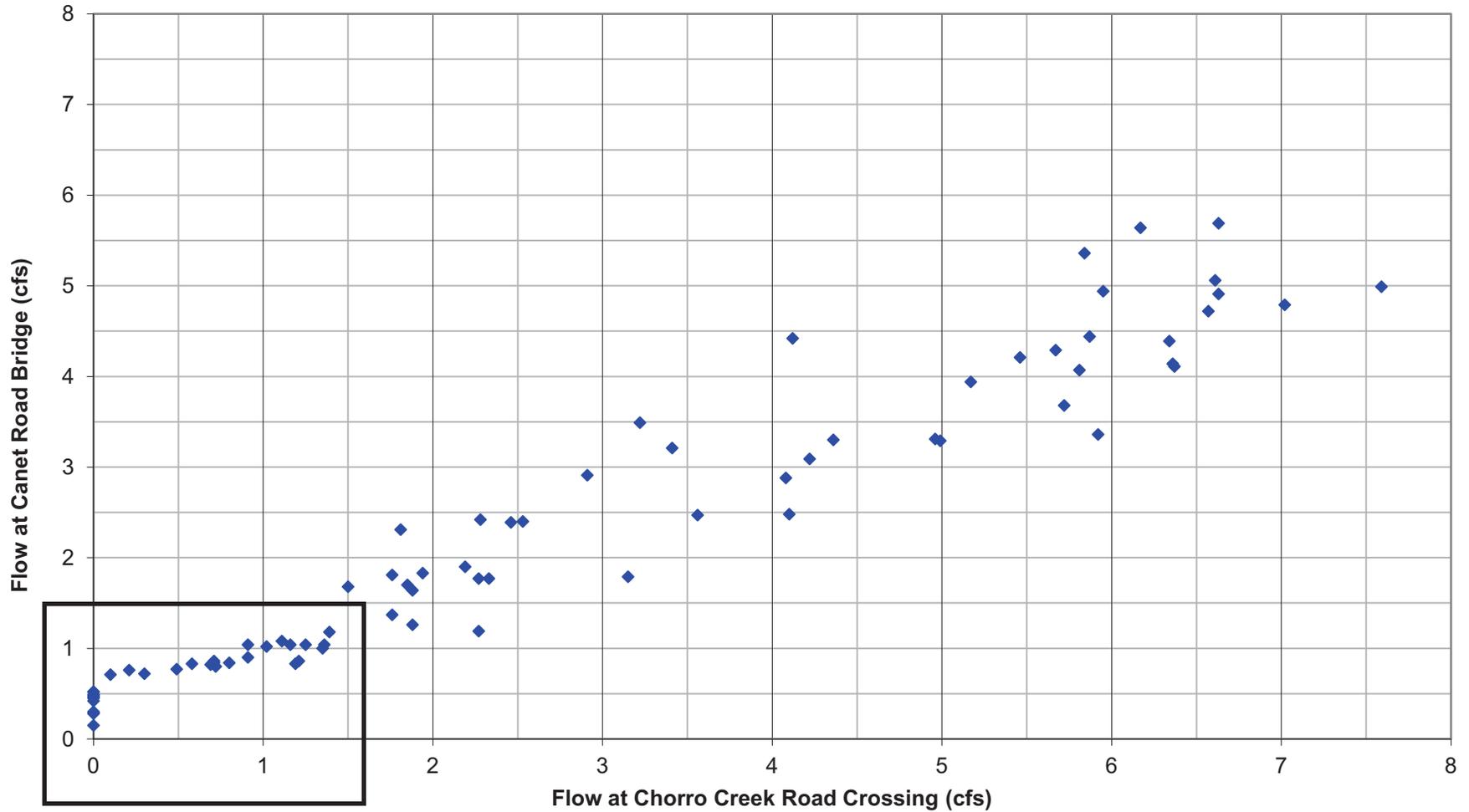
Figures 3 and 4 present the correlation between stream flow at Canet Road and Chorro Creek Road. At moderate flows of 2-8 cfs, Chorro Creek is generally a gaining stream between Canet Road and Chorro Creek Road (Figure 3). At flows less than 1.5 cfs, however, Chorro Creek becomes a losing stream. There is no flow at Chorro Creek Road when flow at Canet Road falls below a threshold of approximately 0.7 cfs (Figure 4). This low flow correlation can be used to estimate the accumulated deficit in flow at Chorro Creek Road, which subtracts from the 1.5 MGD increase in surface flow under project conditions.

For example, on July 26, 2013, flow on Chorro Creek at Canet Road was measured at 0.29 cfs, with no flow at Chorro Creek Road. Since a flow of 0.7 cfs is needed at Canet Road before any surface flow is observed at Chorro Creek Road, the corresponding flow deficit would be 0.41 cfs. For an increased wastewater discharge of 1.5 MGD (2.32 cfs) upstream of Canet Road, the stream would lose 0.41 cfs between Canet Road and Chorro Creek Road, and the resulting surface flow at Chorro Creek Road would be estimated at 1.91 cfs.

### City Water Supply Benefit

The bi-weekly flow measurements for the study period presented in Figure 2 are re-plotted in Figures 5 and 6. Figure 5 shows the anticipated changes in stream flow from adding 1.5 MGD wastewater discharges to Chorro Creek at a constant rate. Figure 6 shows the anticipated changes in flow from adding 1.5 MGD wastewater discharges in the form of a variable monthly discharge rate, based on the monthly flow distribution observed at the existing plant in 2005, a wet year (Table 1).

### Chorro Creek Flow Correlation January 2010 through September 2014



Low flow data set  
(see Figure 4)

Figure 3  
Chorro Creek Flow Correlation  
Current Conditions  
City of Morro Bay

Cleath-Harris Geologists

### Chorro Creek Low Flow Correlation January 2010 through September 2014

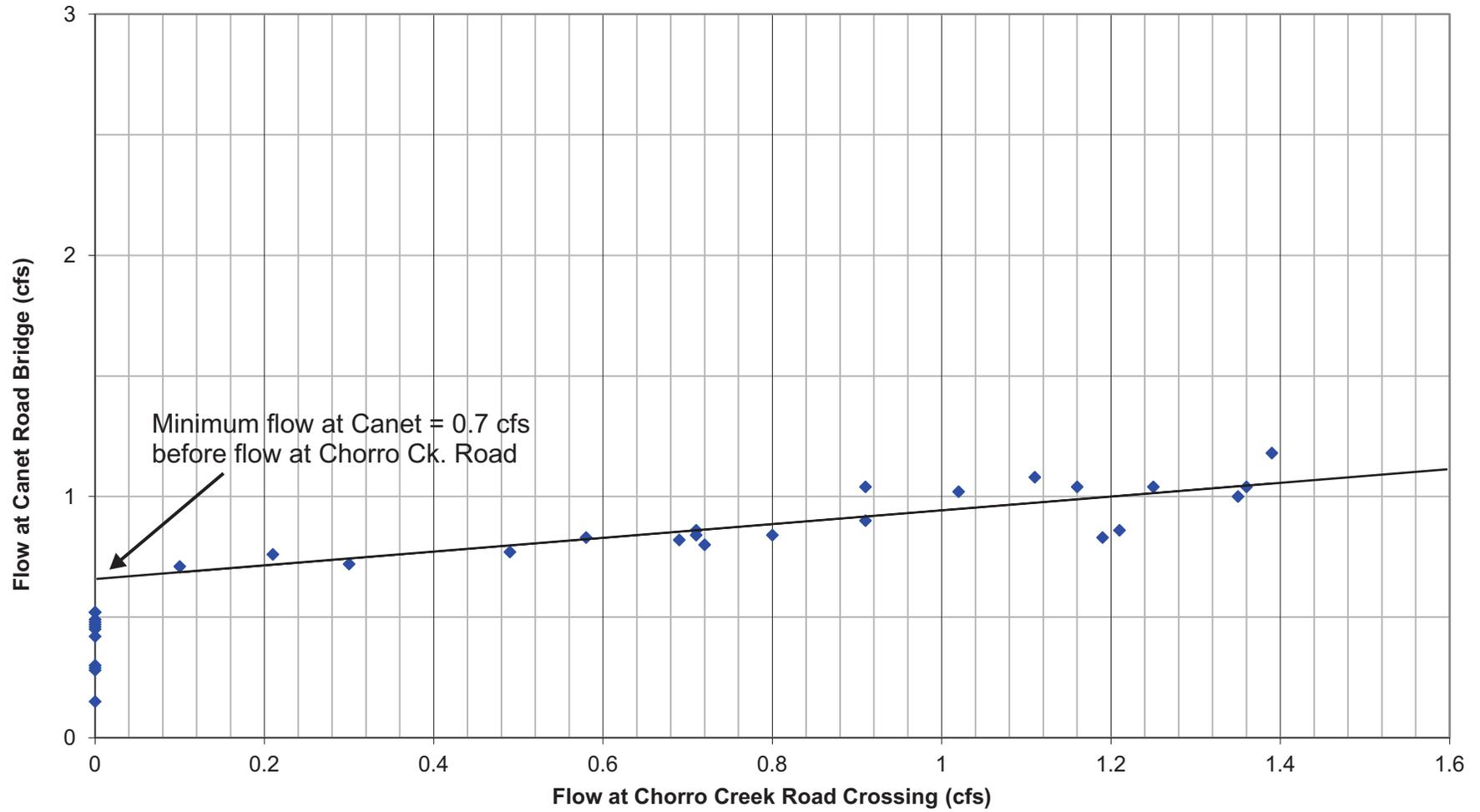


Figure 4  
Chorro Creek Flow Correlation  
Low Flow Data Set  
City of Morro Bay

Cleath-Harris Geologists

### Chorro Creek Flow and Well Field Production Capacity Project Conditions for Constant Monthly Discharge - January 2010 through September 2014

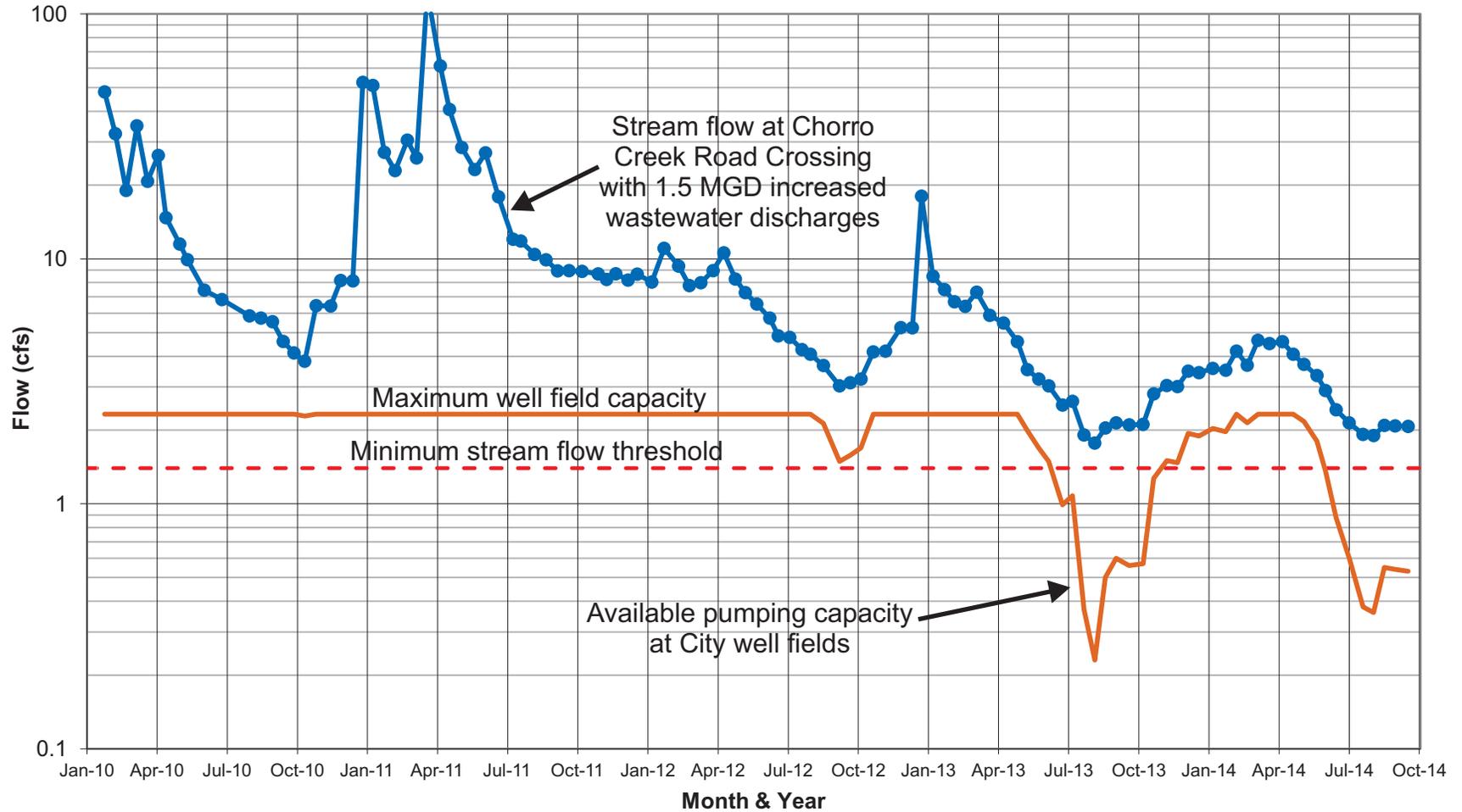


Figure 5  
Chorro Creek Flow  
Project Conditions - Constant Discharge  
City of Morro Bay

### Chorro Creek Flow and Well Field Production Capacity Project Conditions for Variable Monthly Discharge - January 2010 through September 2014

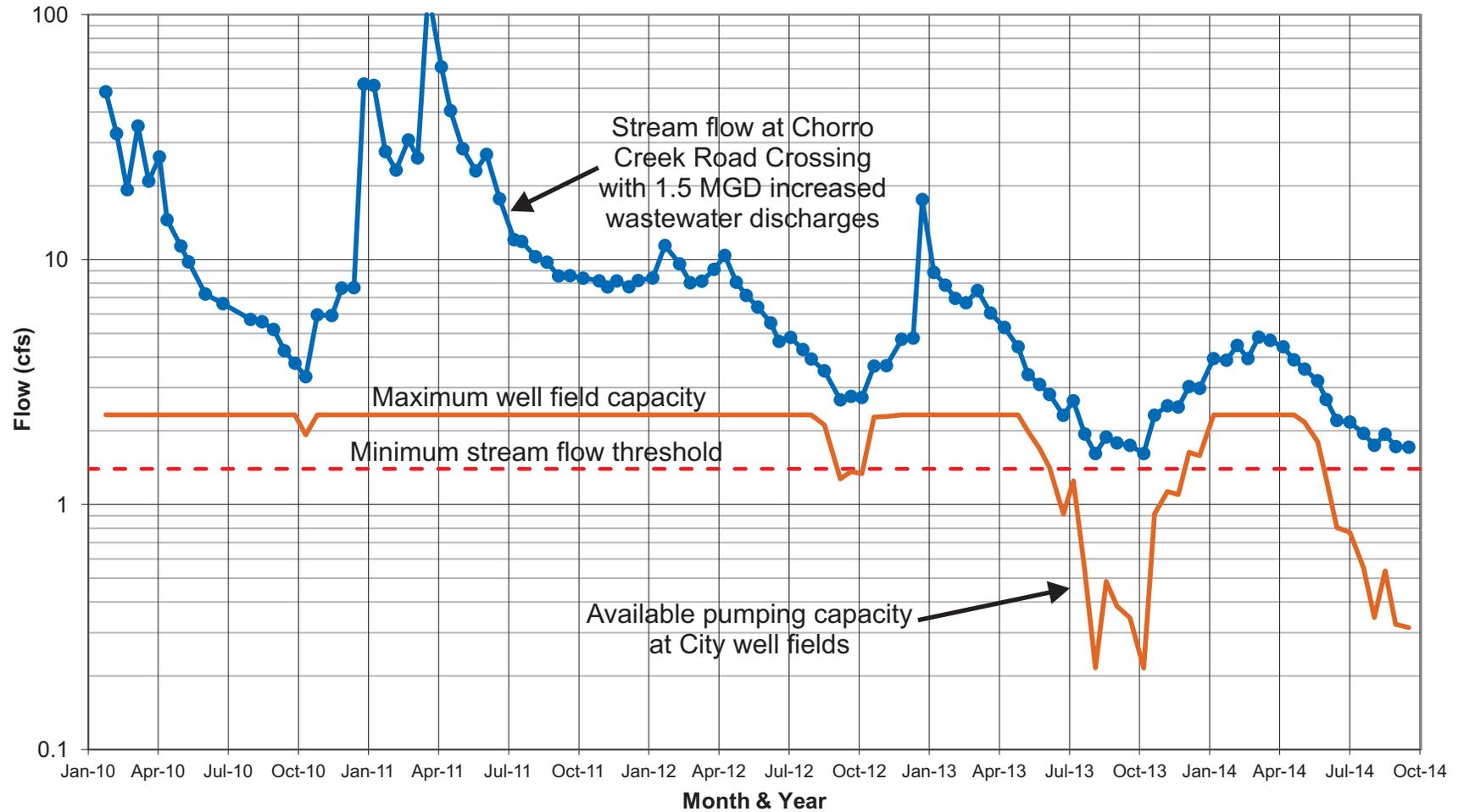


Figure 6  
Chorro Creek Flow  
Project Conditions - Variable Discharge  
City of Morro Bay



**Table 1**  
**Project Conditions**  
**Variable Wastewater Discharge Rate**

Month	Average Daily Flow (MGD)
January	1.83
February	1.76
March	1.70
April	1.47
May	1.50
June	1.45
July	1.61
August	1.49
September	1.36
October	1.27
November	1.26
December	1.30
Average	1.50

Adjustments for potential increased agricultural water demand and for low flow conditions have been applied. The 1.4 cfs flow threshold for permitted diversions from City well fields is shown, along with the allowable extractions by the City well fields, assuming a maximum facilities production rate of 2.32 cfs with 100 percent of production resulting in stream flow depletion.

Figures 7 and 8 show the potential benefit of the increased wastewater discharges, based on the difference in the allowable extractions by the City well fields between current and project conditions. Table 2 and 3 below summarize the increased water supply available to the City based on project conditions over the January 2010 to September 2014 study period.

**Increased Well Field Production Potential  
Project Benefit - January 2010 through September 2014  
Constant Monthly Discharge Scenario**

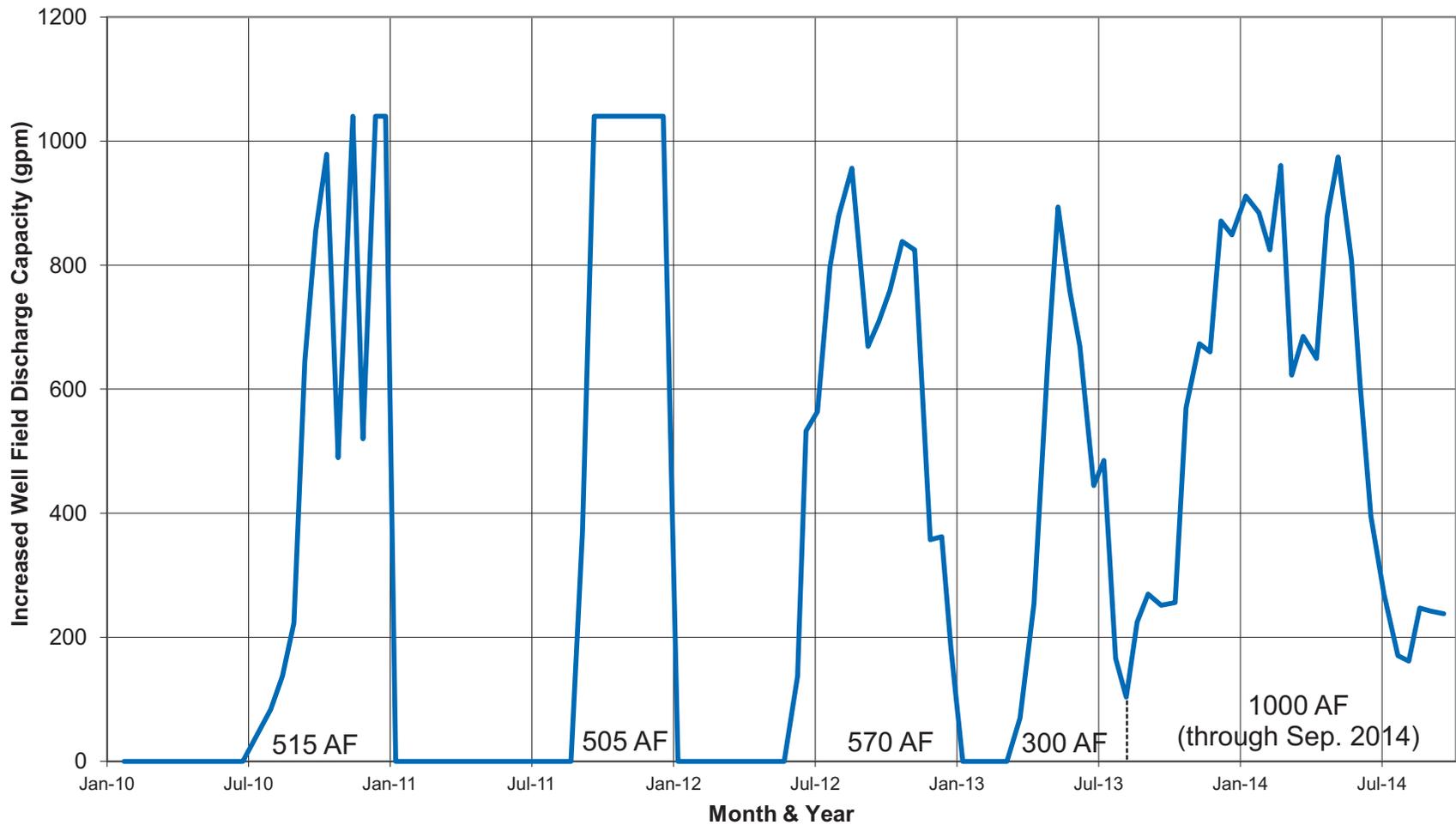


Figure 7  
Project Benefit - Constant Discharge  
City of Morro Bay

Cleath-Harris Geologists

**Increased Well Field Production Potential  
Project Benefit - January 2010 through September 2014  
Variable Monthly Discharge Scenario**

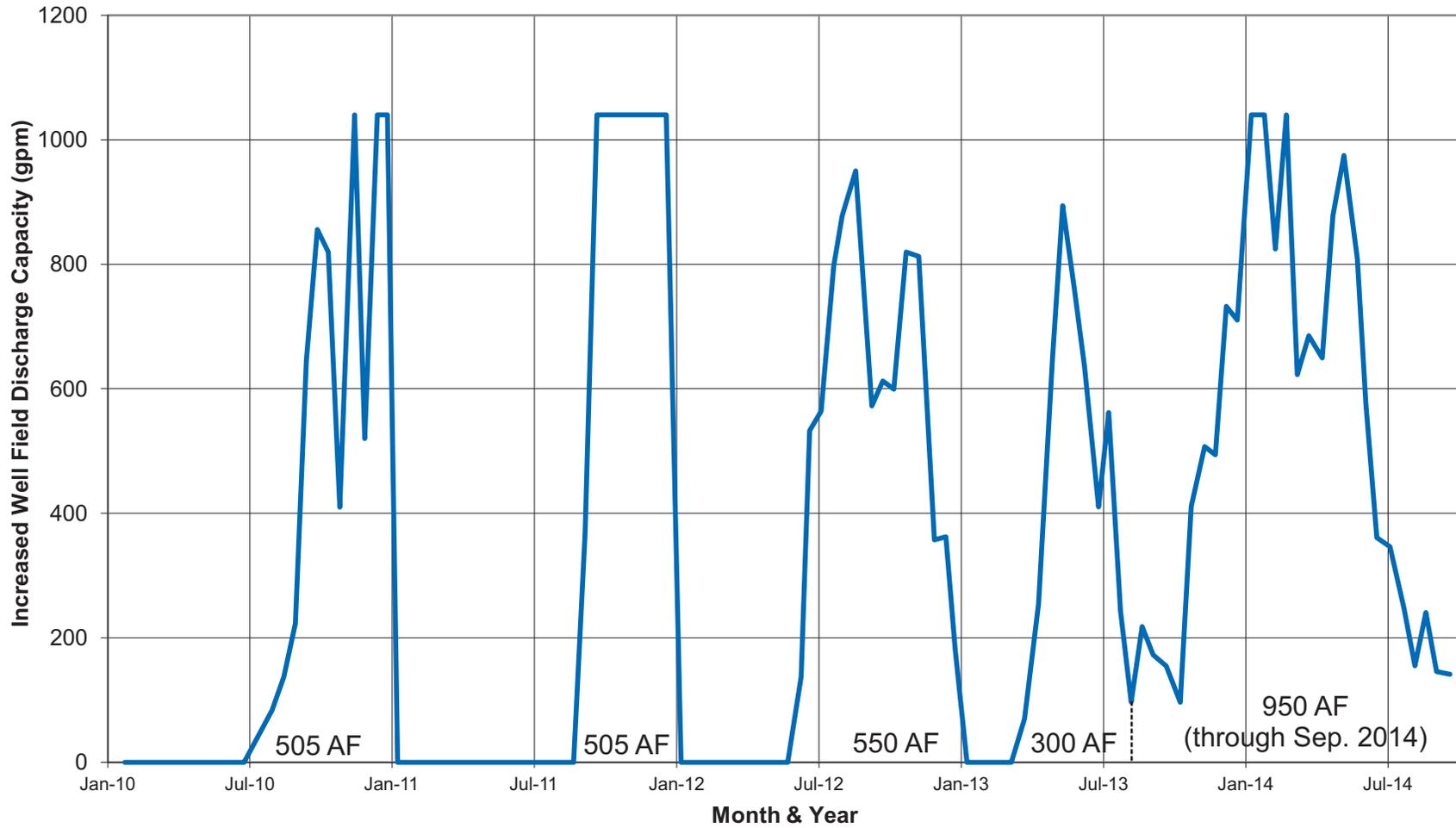


Figure 8  
Project Benefit - Variable Discharge  
City of Morro Bay

Cleath-Harris Geologists



**Table 2**  
**City Water Supply Benefit - Constant 1.5 MGD Discharge Rate**  
**January 2010 - September 2014**

Time Periods with benefit under project conditions during 57-month study period	Maximum City Well Field Production (Acre-Feet)		
	Current Condition	Project Condition	Project Benefit
July - October 2010 (4 mos.)	255	770	515
Sep.- December 2011 (4 mos.)	25	530	505
June - December 2012 (7 mos.)	300	870	570
March - August 2013 (6 mos.)	130	430	300
Sep. 2013 - Sep. 2014 (13 mos.)	100	1100	1000
<b>TOTAL (34 mos.)</b>	<b>810</b>	<b>3700</b>	<b>2890</b>

**Table 3**  
**City Water Supply Benefit - Variable Discharge Rate**  
**January 2010 - September 2014**

Time Periods with benefit under project conditions during 57-month study period	Maximum City Well Field Production (Acre-Feet)		
	Current Condition	Project Condition	Project Benefit
July - October 2010 (4 mos.)	255	760	505
Sep.- December 2011 (4 mos.)	25	530	505
June - December 2012 (7 mos.)	300	850	550
March - August 2013 (6 mos.)	130	430	300
Sep. 2013 - Sep. 2014 (13 mos.)	100	1050	950
<b>TOTAL (34 mos.)</b>	<b>810</b>	<b>3620</b>	<b>2810</b>

The benefits analysis identifies five periods totaling 34 months between January 2010 and September 2014 when the City could have produced more water from its Chorro Valley well fields under project conditions, compared to current conditions. The maximum City production available during those 34 months is estimated at 810 acre-feet with the current CMC wastewater treatment



plant discharges and up to 3,700 acre-feet after increasing treated wastewater discharges by a constant 1.5 MGD (a net gain of 2,890 acre-feet), for an average of 85 acre-feet per month benefit. The total average increase in wastewater discharges over the 57-month study period would be 7,980 acre-feet.

The average net benefit to the City is approximately 36 percent of the total increased discharges to Chorro Creek over the 57-month study period, and approximately 60 percent of the increased discharges to Chorro Creek during the 34 months of actual project benefits. The benefit is maximized during drought periods.

With increased treated wastewater discharges, the minimum threshold for flow in Chorro Creek required for City well field production would be met at all times, even under the current exceptional drought condition. As shown in Figure 2, there have been close to 16 months during the 57-month study period when stream flow at Chorro Creek Road was at or below the 1.4 cfs threshold for well field operation. Under project conditions, flow would exceed the 1.4 cfs threshold in all months (Figures 5 and 6).

During drought, the benefit specific to increasing the maximum permitted diversion will decline, but the overall benefit will increase due to gains from meeting the minimum flow threshold. Figure 9 illustrates this dynamic benefit to the City water supply during the study period, along with approximate annual benefits to the City water supply over the study period. Annual benefit during normal to wet years was up to 515 acre-feet. The drought benefit was up to 700 acre-feet through the first 9 months of 2014, which would be projected to reach 900 acre-feet if drought conditions persisted through the end of the year.

### Environmental Water Supply Benefit

Siting the new City wastewater plant in the Chorro Valley and increasing average dry weather flows in Chorro Creek by 1.5 MGD would provide more water for meeting environmental demand. Surface flows at Chorro Creek Road would be above the 1.4 cfs threshold for 16 additional months under project conditions, compared to the study period flow record. In addition, there were approximately 7 months of no flow at Chorro Creek Road over the study period, which under the project would have continuous flows of at least 1.4 cfs.

### **Discharge Management Strategies**

Under current conditions, once storm water runoff has dissipated, stream flow in Chorro Creek fluctuates between approximately 0.5 and 1 cfs at the Canet Road bridge, based on correlating stage readings from the County stream gage. These fluctuations relate to a combination of the timing of wastewater discharges from the CMC wastewater treatment plant, riparian corridor

## Cumulative Maximum Annual City Production January 2010 through September 2014

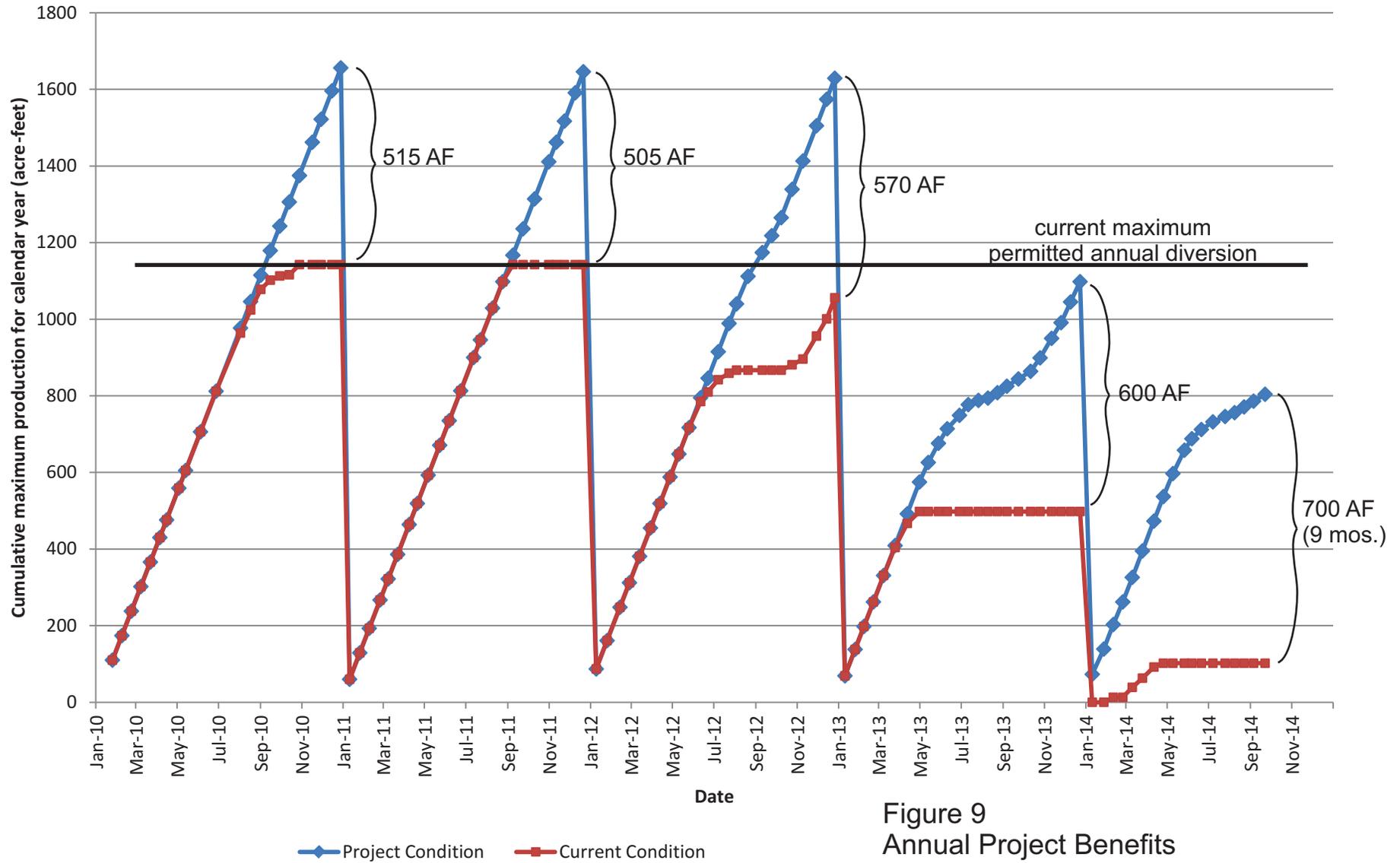


Figure 9  
Annual Project Benefits  
Constant 1.5 MGD Discharge  
City of Morro Bay

Cleath-Harris Geologists



evapotranspiration, and pumping activities upstream of Canet Road. The flow peaks are generally overnight or in the morning hours.

If the City had sufficient treated wastewater storage capacity to control the timing of the non-continuous portion of the permitted discharges, it may be possible to coordinate releases at the new treatment plant with well field operations downstream. For example, if declining flows at Chorro Creek Road approached the 1.4 cfs threshold, the City could adjust well field pumping times to coincide with peak overnight flow periods, taking advantage of both low evapotranspiration and increased releases. Due to the fluctuations in average stream flow velocity and related travel times, the actual timing of peak releases at the new treatment plant may need to vary under this type of management strategy.

An alternative or concurrent management strategy would be to use the flexible (non-continuous) permitted discharge capacity of a new City or multi-agency wastewater treatment plant to offset existing irrigation in the Chorro Valley, thereby reducing groundwater production. A decline in groundwater production will increase surface flows and contribute toward meeting the in-stream flow requirements for permitted diversions.

## **Summary**

This study provides an overview of the constraints on City well field operation in the Chorro Valley and of the potential benefits to the City water supply from increasing wastewater discharges to Chorro Creek. Adding 1.5 MGD in discharges to Chorro Creek over the study period resulted in annual benefits during normal to wet years of up to 515 acre-feet. The drought benefit was up to 700 acre-feet through the first 9 months of 2014, which would be projected to reach 900 acre-feet if drought conditions persist through the end of the year.



## References

CH2M Hill, 2011. 2010 Urban Water Management Plan, City of Morro Bay, June 2011.

Cleath & Associates, 1993. Groundwater Analysis for Water Management Plan, City of Morro Bay, Appendix B of Water Management Plan prepared for Boyle Engineering, October 1993.

Cleath-Harris Geologists, 2009. Ashurst Well Field Nitrate Study, Chorro Valley, San Luis Obispo County, May 2009.

Department of Water Resources, 1972. Sea Water Intrusion: Morro Bay Area, San Luis Obispo County, DWR Bulletin 63-6, February 1972.

Rickenbach Consulting, 2013. City of Morro Bay New Water Reclamation Facility Project, Second Public Draft Options Report, December 5, 2013.

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### Technical Memorandum

**Date:** November 7, 2014

**From:** Spencer Harris, HG 633

**To:** Rob Livick, Morro Bay Public Services Director/City Engineer

**SUBJECT:** **Hydrologic evaluation of the potential benefits to the City water supply from reclaimed water use in the Morro Valley, San Luis Obispo County.**

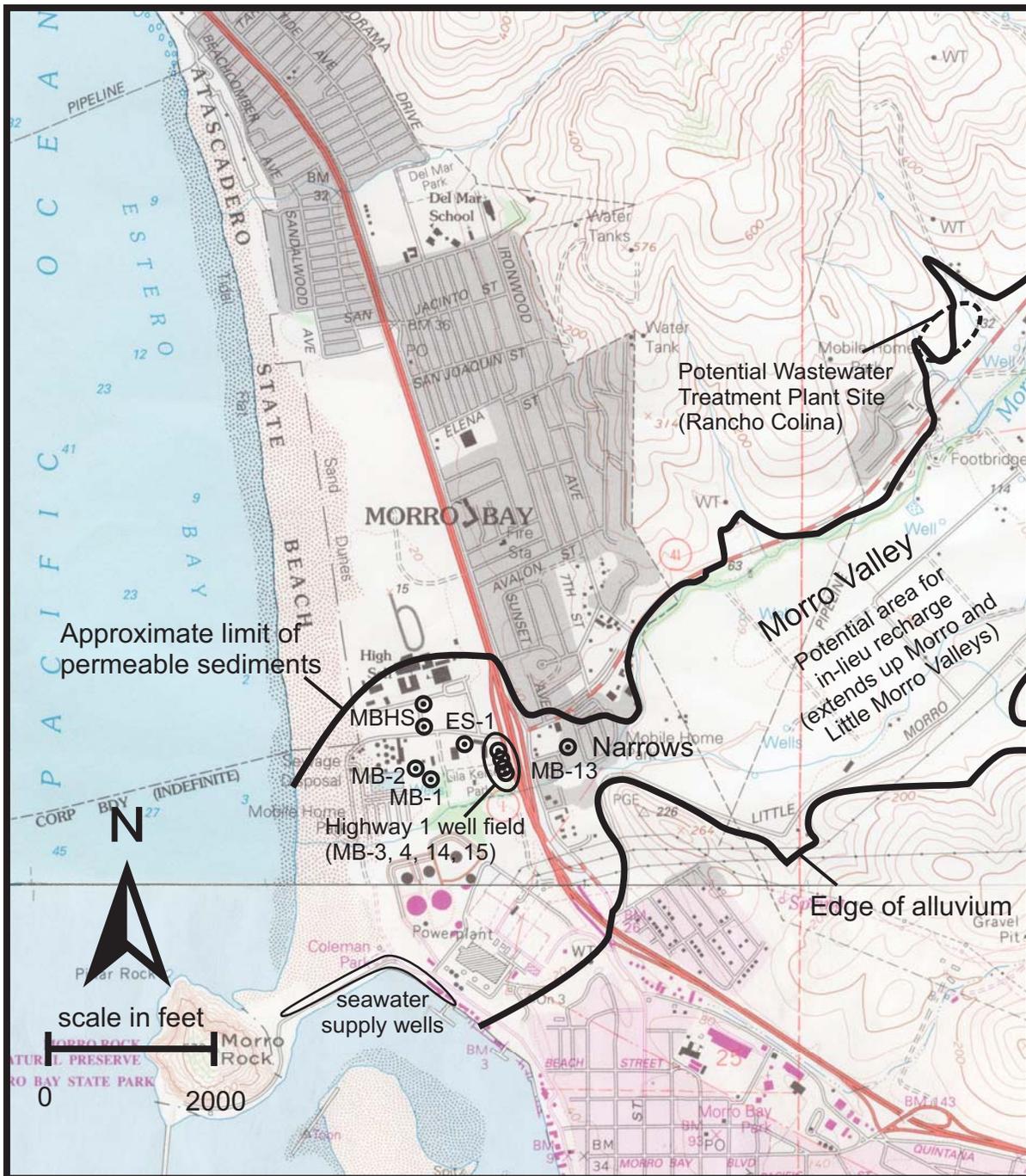
Cleath-Harris Geologists (CHG) has completed an evaluation, on behalf of the City of Morro Bay (City), of potential increases in yield from the City's Morro Valley groundwater basin wells due to the use of reclaimed water for agriculture in the Morro Valley. This memorandum presents the results of the study, and compares the results to a concurrent benefits study for the Chorro Valley.

The Morro basin is in overdraft. The City wells are the farthest downstream wells in the basin, and have lost a significant portion of their historical yield. Providing reclaimed water to growers in the Morro Valley would reduce agricultural pumping and provide in-lieu recharge to the groundwater basin. This in lieu-recharge would restore the freshwater yield during drought years and increase the City's Morro groundwater basin yield during normal to wet periods, in addition to providing water for environmental demand.

Regulatory constraints related to waste discharge permitting and groundwater quality were not evaluated in this memorandum. Direct wastewater reuse in the Morro Valley was assumed to be feasible. The benefits analysis focuses primarily on groundwater use and hydrology, and specifically on potential increases to the maximum permitted diversion of Morro Creek underflow from in-lieu recharge credit, and on increases to the available yield of the basin downstream of the narrows.

### Background

The City of Morro Bay is evaluating sites for constructing a new water reclamation facility. One potential location has been identified along Highway 41 in the Morro Valley (Rancho Colina; Figure 1). According to the Second Public Draft Options Report, the Cayucos Sanitary District (CSD) remains a potential partner to the City for all new wastewater facility sites, but are pursuing future options through its own studies, and the efforts of the two agencies are independent of one another (Rickenbach, 2013). This study includes potential benefits from a water reclamation facility in the Morro Valley the would process effluent from the City, which is estimated to average 1.13 million



Base Maps: U.S.G.S. topographic map, Morro Bay North, 1995 and Morro Bay South, 1994.

Legend

- City water well

Figure 1  
Morro Valley  
City of Morro Bay

Cleath-Harris Geologists



gallons per day (MGD), and potential benefits from a facility that processes both CSD and Morro City flows of 1.5 MGD.

## Methodology

The benefits analysis combines basin yield estimates with the principal of conservation of mass used in the standard hydrologic balance equation: groundwater basin inflow = groundwater basin outflow + change in storage. The maximum production capacity of the City wells is also evaluated to be compared with available yield under project conditions. The project benefit is defined as the increase in yield available to City well between current and project conditions.

This analysis takes a “maximum benefit” approach, based on key assumptions discussed below. These assumptions will not necessarily be fully met. They are assumed in order to bracket the upper range of the potential benefit. The benefit to the City water supply from reclaimed water use in the Morro Valley would decline if the assumptions are not fully met. The likelihood of meeting these assumptions should be considered during the wastewater plant siting process. The assumptions are as follows:

- 1) *The water quality delivered to the growers is suitable for the irrigation of existing crops.*

Avocado are sensitive to salt content in the irrigation water. An evaluation of the suitability of the reclaimed water for existing crop irrigation should be performed.

- 2) *Reclaimed water use is maximized by the growers to meet their existing water demand.*

If reclaimed water is available, the growers will use as much of it as possible to meet their applied water demand. This will maximize the amount of credit the City would accrue as in-lieu recharge.

- 3) *Reclaimed water delivery to growers would be offset by reduced pumpage from the groundwater basin.*

The intent of this assumption is for growers to use recycled water instead of pumping groundwater from their wells. Otherwise, the concept of in-lieu recharge is voided, and the City would not benefit from the deliveries. In situations where a grower does not (or cannot), fully offset reclaimed water use by reducing pumpage, whether due to the overdraft condition or per negotiated agreement, the City would not take the in-lieu recharge credit.

- 4) *The maximum permitted diversion from Morro Creek underflow is not limited to 581 acre-feet per year or 1.2 cfs maximum discharge.*



Credit for in-lieu recharge is available to the City on a 1:1 basis. This credit would only be valid (from a technical perspective) when Assumption 3 above is met. Credit for in-lieu recharge will not necessarily equal the increased freshwater yield available to City wells, particularly during drought (this is discussed in the Benefits Analysis section).

Even recycled water that is economic, good quality, reliable, and delivered may not have as many customers as the available supply. This analysis assumes most Morro Valley growers are able to make long-term commitments to the City to use reclaimed water in a manner that will provide credit for in-lieu recharge. If that is not the case, the benefit to the City water supply will be lower.

### **City Water Supply Wells**

Historically, there were eight wells in the groundwater basin that available City production records indicate were used by the City for water supply. These were wells MB-1, MB-2, MB-3, MB-4, MB-5, MB-13, MB-14, and MB-15. Well MB-5 is abandoned. Wells MB-1 and MB-2 are in the City's Corporation yard area, Well MB-13 is located in the narrows area, and Wells MB-3, MB-4, MB-14, and MB-15 form the Highway 1 (or Keiser Park) well field (Figure 1).

Other city wells include two irrigation wells serving Morro Bay High School, and a groundwater extraction well constructed during remediation activities for methyl tertiary butyl ether (MTBE) contamination that was transferred to the City several years ago (ES-1, or Flippos well). There is also a City well field along the Embarcadero towards Morro Rock that supplies seawater for the desalination plant (Figure 1).

### Water Rights

City Wells MB-1, MB-2, MB-3, MB-4, MB-13, MB-14, and MB-15 operate under State Water Resource Control Board (SWRCB), Division of Water Rights Permits for Diversion and Use of Water. The current permitted maximum allocation for City groundwater production from these wells is 581 acre-feet per year (AFY; CH2M Hill, 2011 Appendix F). The maximum permitted combined flow rate from the wells is 1.2 cubic feet per second (cfs). If the City provides reclaimed water to growers in the Morro Valley that directly offsets groundwater pumping, however, it is assumed that the City's annual well field allocation of creek underflow may be increased.

### Water Quality

Historically, seawater intrusion has been a problem for the City's wells during drought, including chloride concentrations at the Highway 1 well field approaching 1,000 mg/l in 1977 and 1990 (Cleath & Associates, 1993). Groundwater contamination from methyl tertiary butyl ether (MTBE)



impacted Highway 1 well field operations between 2000-2008, and elevated nitrate concentrations have also been a problem. The City has installed Brackish Reverse Osmosis Treatment to allow continued extractions from City wells in light of the degraded water quality and nitrate contamination (CH2M Hill, 2011).

### City Well Pumping Capacity

In order to maximize the benefit to the City water supply, facilities in place would need sufficient capacity to pump the existing permitted maximum plus any available in-lieu recharge. The historical performance of the wells are used herein to estimate constraints on the City's maximum pumping capacity in the basin. Some of the City wells may require rehabilitation, or even replacement to achieve historical performance.

The pumping capacity estimates are not intended to be used for basin yield and do not preclude seawater intrusion; they are facilities constraints. The City wells are also shallow, and are subject to production declines during drought. Table 1 summarized the estimated pumping capacities.

**Table 1**  
**Maximum Pumping Capacity (Facilities Constraint)**  
**City Wells in Morro Basin**

City Well	Maximum Pumping Capacity (acre-feet per year)
MB-1 and MB-2	290
Highway 1 Well Field (MB-3, 4, 14, 15)	640
MB-13	110
High School irrigation wells and ES-1	300
Total	1,340

NOTE: Not a groundwater yield estimate - for facilities constraints analysis only

The combined maximum pumping capacity of all the City wells below the narrows (excluding the seawater wells) is estimated at 1,340 AFY. As noted above, these pumping capacity estimates are not groundwater yield estimates and are for facilities constraints analysis only.



## Groundwater Pumping Offset Potential

CHG conducted a crop survey in August 2014 to develop an applied water use estimate for this benefits analysis. The results of the survey are shown in Figure 2 and summarized in Table 2.

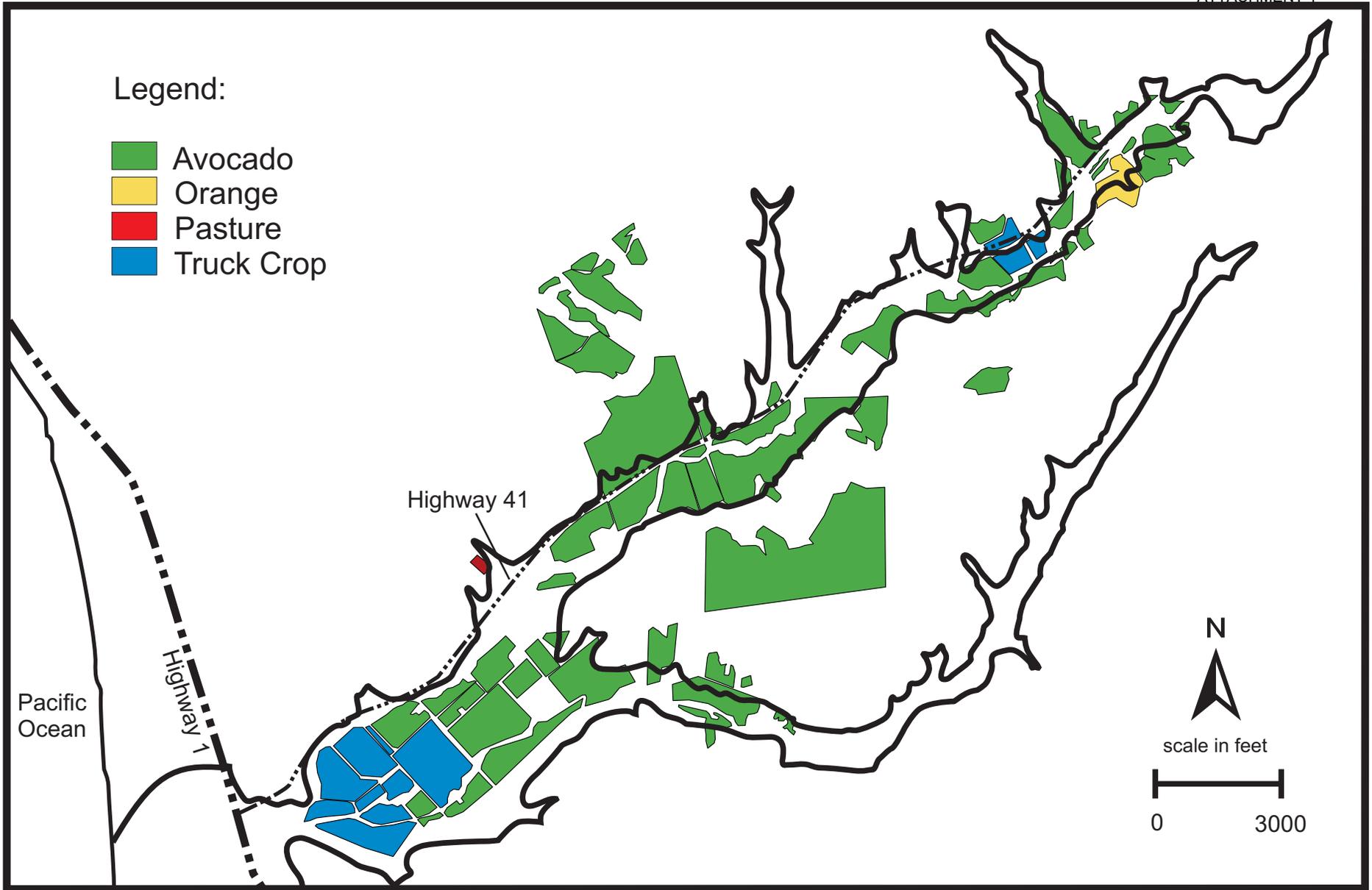
**Table 2**  
**Morro Valley Applied Water Demand - August 2014**

Crop	Acres	Applied Water Factor (AF/Ac/Yr)*	Water Demand (AFY)
Citrus and Avocados	837	2	1,674
Vegetables	143	1.4	200
Pasture	2	2.9	6
<b>Total</b>	<b>982</b>		<b>1,880</b>

\* Applied water in acre-feet per acre per year, assumes 3 vegetable crops per year, from medium demand condition on Table A1 of County Master Water Report (Carollo, 2012), except avocado and citrus water demand which is based on input from local growers.

The existing applied water demand in the Morro Valley in Table 1 is estimated at 1,880 AFY. This includes water demand for avocado orchards that are currently stumped due to the exceptional drought conditions. Up to 1.13 MGD of reclaimed water would be available to growers in the Morro Valley, equivalent to 1,265 AFY. With CSD flows, up to 1.5 MGD (1,680 AFY) of reclaimed water would be available. Variations in the reclaimed water supply are impacted by wet weather flow, which peaks in January, and does not coincide with the July peak in applied water demand.

The potential to offset groundwater pumping with reclaimed water use would be the lowest of either the monthly applied water demand or the reclaimed water supply. In order to compare the projected reclaimed water supply to irrigation demand, monthly estimates of the applied water were calculated based on the variation in local reference evapotranspiration rate from CIMIS station 160 (San Luis Obispo West). The monthly reclaimed water supply is based on monthly flow factors for 2005. The demand versus supply comparison for Morro City flows is shown in Table 3 and in Figure 3.



Field reconnaissance August 2014  
using areal photograph August 2013 as base map

Figure 2  
August 2014 Crop Survey  
Morro Valley  
City of Morro Bay

Cleath-Harris Geologists



**Table 3**  
**Morro Valley Applied Water Demand vs Reclaimed Water Supply**

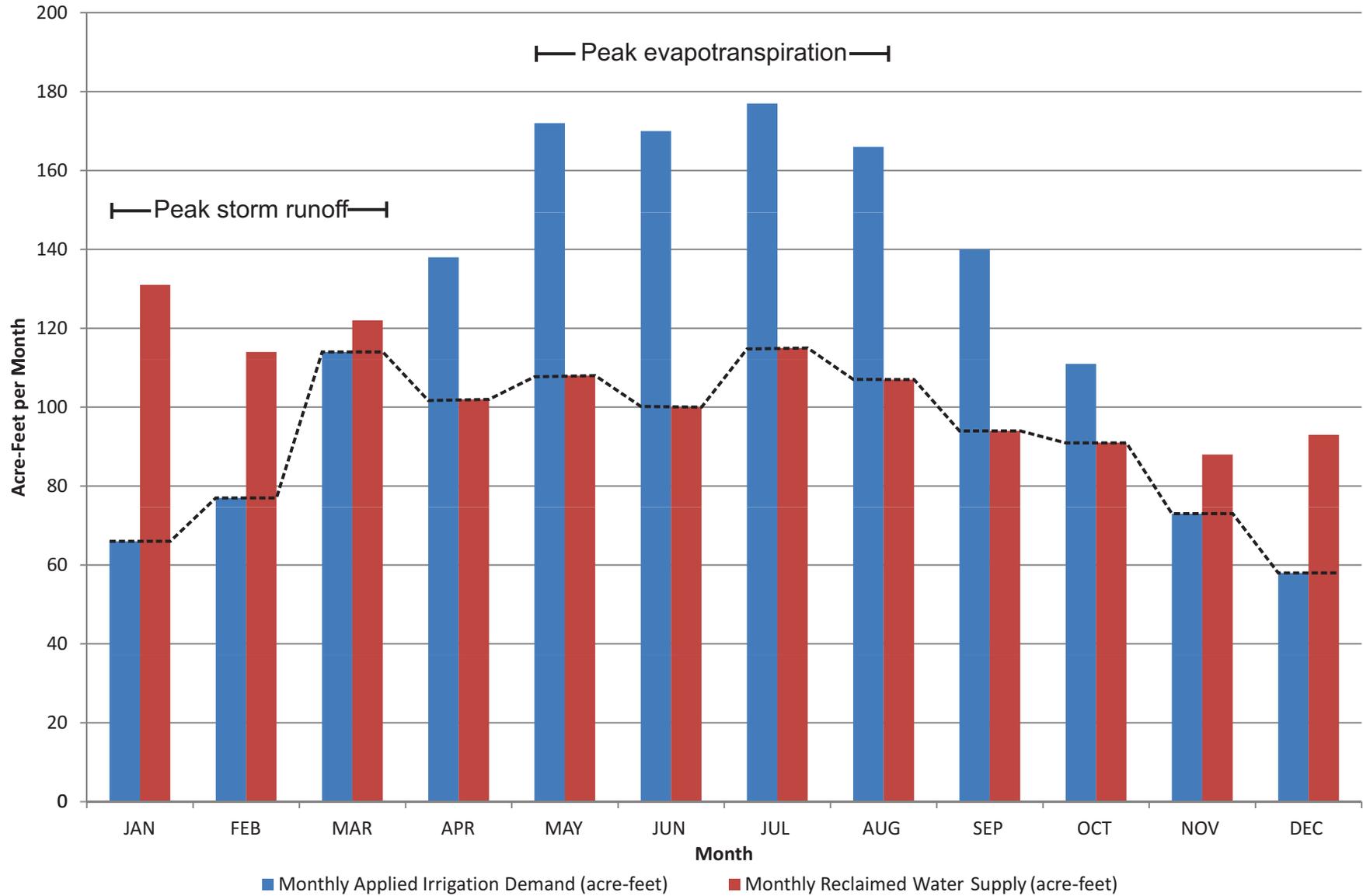
Month	Reference ET (inches)	Applied Water Demand (acre-feet)	Reclaimed Water Supply (acre-feet)	Groundwater Pumping Offset Potential* (acre-feet)
JAN	2.14	84	131	84
FEB	2.53	100	114	100
MAR	3.73	147	122	122
APR	4.5	177	102	102
MAY	5.63	222	108	108
JUN	5.55	219	100	100
JUL	5.78	228	115	115
AUG	5.41	213	107	107
SEP	4.56	180	94	94
OCT	3.64	143	91	91
NOV	2.37	93	88	88
DEC	1.89	74	93	74
<b>TOTAL</b>	<b>47.73</b>	<b>1,880</b>	<b>1,265</b>	<b>1,185</b>

NOTES: Reference ET for CIMIS Station 160 (San Luis Obispo West).

\*Offset potential will vary from year to year based on actual applied water demand and reclaimed water supply.

Based on the estimates in Table 3 above, the available reclaimed water can potentially offset 1,185 acre-feet of applied water demand in the Morro Valley. When adding CSD flows, the average offset potential increases from 1,185 AFY to 1,450 AFY. The groundwater offset potential is not a fixed value but will vary from year to year based on actual applied water demand and available reclaimed water supply. As previously discussed, this is a maximum benefits analysis and assumes a high level of grower participation.

# Reclaimed Water Supply and Applied Irrigation Demand



Explanation

- Potential Groundwater Pumping Offset

Figure 3  
Reclaimed Water Supply  
and Applied Irrigation Demand  
City of Morro Bay



## **Basin Yield**

Sustainable yield estimates developed for the Morro basin include 1,500 AFY (Cleath & Associates, 1993) and 1,529 AFY (Brown and Caldwell, 1981). In addition, Brown and Caldwell developed a long-term yield of 1,770+ AFY for normal precipitation years.

The Morro basin is in overdraft. Groundwater withdrawals exceed natural replenishment of the basin during drought periods. Under the current exceptional drought, avocado orchards are being stumped and truck crop acreage left fallow due to a shortage of water. The City wells are the farthest downstream wells in the basin, and as a result of increases in agricultural pumping, the City wells have lost a significant portion of their historical freshwater yield.

The average applied water demand for existing agriculture has been estimated at 1,880 AFY (and may range higher under dry conditions). Rural domestic water demand in the valley was previously estimated at 30 AFY in 1992 (Cleath & Associates, 1993) and has likely increased. For the purpose of this benefits analysis, the prior sustainable yield estimate of approximately 1,500 AFY appears reasonable.

## **Benefits Analysis**

An average of 1,185 AFY, or 63 percent of applied water demand for agricultural irrigation in the Morro Valley could potentially be offset using reclaimed water from a new wastewater treatment plant based on City flows. When CSD flow are added, the potential offset is 1,450 AFY, or 77 percent of applied water demand. This offset becomes in-lieu recharge to the groundwater basin.

Not all of the in-lieu recharge credit would necessarily be available to City wells. As indicated earlier, the hydrologic balance equation is: groundwater basin inflow = groundwater basin outflow + change in storage. Using the concept of in-lieu recharge, reclaimed water may be represented by an increase in basin inflow. This results in an increase to groundwater in storage and/or an increase in basin outflow (to Morro Creek and the ocean). Conversely, if reclaimed water is represented by a reduction in outflow (from wells), then the result of the hydrologic balance is an increase in storage and/or a decrease in basin inflow. Generally speaking, the potential for increasing outflow and reducing inflow increases as a basin fills up. The basin narrows (Figure 1) also restricts subsurface underflow from the upper basin to the area where the City's wells are located, and the primary mechanism for transferring in-lieu recharge is expected to be stream flow. The potential change in storage must be accounted for when estimating available in-lieu recharge.

During drought, pumping depressions expand and carry over from year to year because of lower than normal recharge to the aquifer. A significant portion of the in-lieu recharge would be needed to fill storage declines upstream of the narrows before any benefits are available to downstream users.



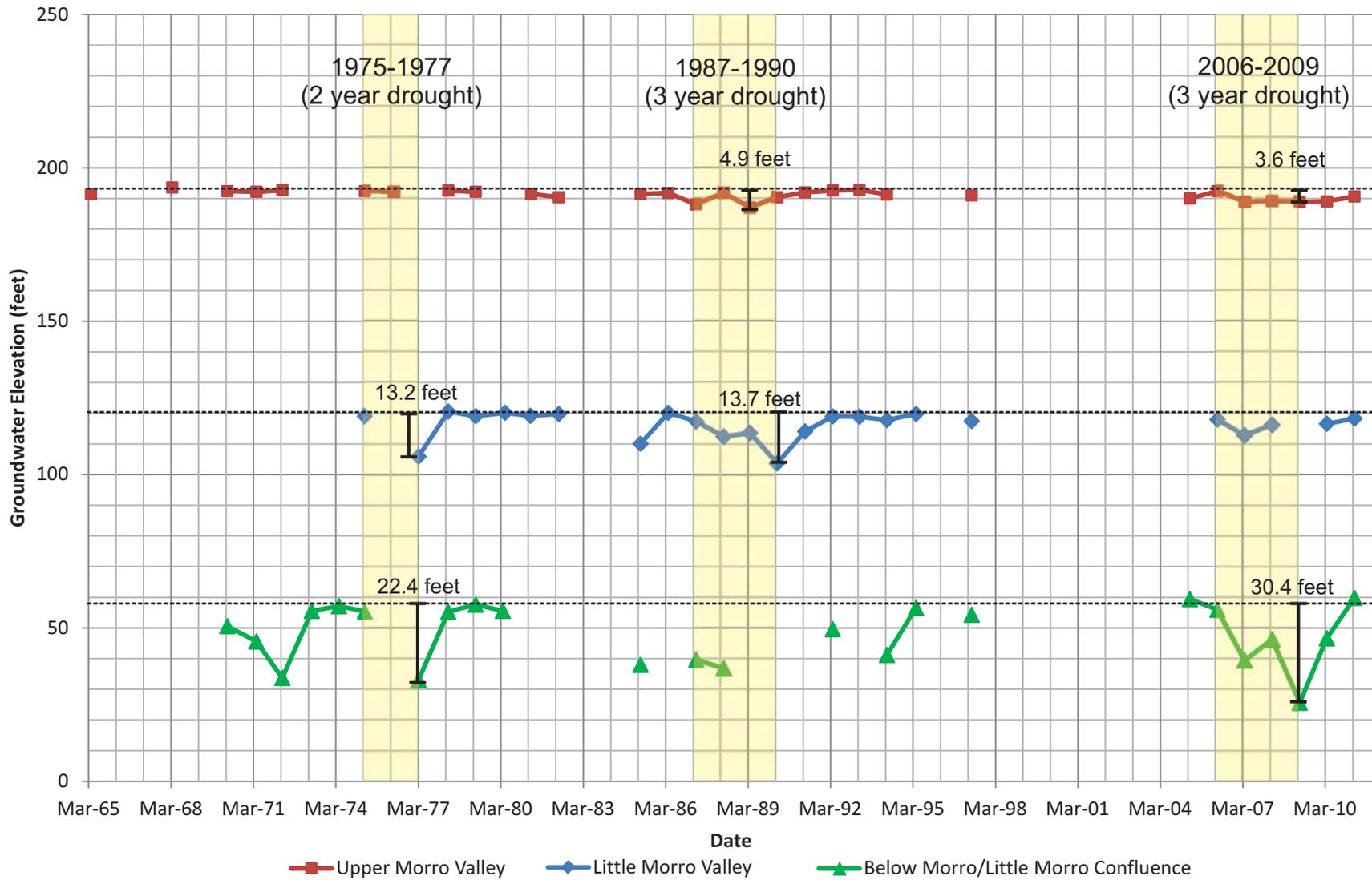
Groundwater storage declines during drought have been estimated based on the basin area, water level hydrographs, and specific yield. Spring water level declines during drought appear to increase from upstream to downstream, ranging from 5 feet in the upper reaches of the Morro Valley to approximately 30 feet in the lower valley upstream of the narrows (Figure 4). The declines are typically cumulative over two or three drought years. For the purposes of this analysis, an average water level decline of 18 feet over three years, or 6 feet per year, is assumed under drought conditions upstream of the narrows.

During normal or wet periods under the current condition, available water level hydrographs show basin storage above the narrows returns to a full condition almost every year. Therefore, little or no use of in-lieu recharge would be needed to fill the basin. Additional stream flow, together with increased subsurface outflow through the narrows, would take place on an annual basis and be available to benefit the City water supply. City water demand typically peaks in the summer and fall, however, while stream flow peaks in the winter. Even in normal years, extending the duration of base flow between the upper basin and the lower basin may be necessary to avoiding seawater intrusion, due to the limited lower basin storage and proximity of City wells to the ocean. The duration of flow becomes more critical as the yield of the City wells increase. As a conservative measure to assist extending the duration of base flows, a nominal two feet of water level decline upstream of the narrows is assumed to be offset by in-lieu recharge during normal years.

The basin upstream of the narrows covers approximately 890 acres. Assuming an average annual decline during drought of 6 feet, and an average specific yield of 10 percent, the resulting storage loss under current conditions would be 535 AFY. Both storage loss and overdraft need to be mitigated before water can flow through the narrows and benefit City wells. As previously discussed, the Morro basin yield is assumed to be 1,500 AFY during drought (the sustainable yield), and 1,770+ AFY during normal to wet years. These yield values provide a basis for estimating the available water for City wells under current conditions, so that the relative benefit of the project can be determined.

Assuming 1,185 AFY offset potential from City reclaimed water, 535 AFY is deducted for changes in storage and 330 AFY deducted for overdraft (benefit to growers), an estimated 320 AFY of in-lieu recharge would flow through the narrows and be available to benefit the City wells during drought. In normal to wet years, up to 180 AFY of in-lieu recharge would be needed to offset potential storage decline in the upper basin, along with an estimated 110 AFY of overdraft, leaving 895 AFY of available benefit to the City. With CSD reclaimed water added to the project, the resulting maximum potential benefit to the City water supply is estimated at 585 AFY during drought years, and 1,160 AFY during normal to wet years. The benefit to the City water supply from using reclaimed water in the Morro Valley is summarized in Table 4 below.

# Spring Water Levels Morro Basin above Narrows



Explanation

13.2 feet  

 Spring groundwater elevations with drought period decline in feet

Figure 4  
 Spring Water Levels  
 Morro Valley  
 City of Morro Bay



**Table 4**  
**Maximum Potential Project Benefit**  
**Morro Valley Reclaimed Water Use**

Scenario	Description	Drought Years	Normal to Wet Years
		(acre-feet per year)	
Current Conditions	Basin Yield	1500	1,770+
	Ag Water Demand	1,880*	
	City Yield	0 (-330 deficit)	0 (-110 deficit)
Project with City Reclaimed Water (1.13 MGD)	In-Lieu Credit	1,185	
	Storage Adjustment	535	180
	City Yield	320	895
	Project Benefit	320	895
Project with City and CSD Reclaimed Water (1.5 MGD)	In-Lieu Credit	1,450	
	Storage Adjustment	535	180
	City Yield	585	1,160
	Project Benefit	585	1,160

NOTE: City yield from Morro Creek underflow without seawater intrusion.

Project benefits will vary from year-to-year, and will be less if assumptions are not met.

\*Ag water demand value is average and will typically be greater in dry years than in normal to wet years

Groundwater is not available to the City from the Morro basin, under the current overdraft conditions, without inducing seawater intrusion. This is because the City wells are the farthest downstream wells in the basin, and are therefore the last to receive inflow from stream seepage, which is the primary source of basin recharge.

Under the City reclaimed water project (1.13 MGD), some of the current 581 AFY permitted diversion will be restored during drought years (320 AFY yield), and during normal to wet years the average City yield would increase to 895 AFY. Under the City and CSD reclaimed water project (1.5 MGD), all of the current 581 AFY permitted diversion will be restored during drought years (585 AFY yield), and during normal to wet years the average City yield would increase to 1,160 AFY. Comparing the project's City yield with the maximum pumping capacity at City wells in Table 1 indicates the City has the facilities to produce the increased yield (some rehabilitation or well replacements may be required).



## **Environmental Water Supply Benefit**

Siting the new City wastewater plant in the Morro Valley and providing reclaimed water for irrigated agriculture would provide more water for environmental demand. Under project conditions, groundwater levels in the Morro Valley would be maintained at higher levels, resulting in periods of greater stream flow. Extending the duration of base flow is expected to be an important mechanism for transferring in-lieu recharge from the upper valley through the narrows and toward the City wells. Not all of the in-lieu recharge will become available to the City, and a portion will contribute to the riparian habitat.

## **Management Strategies**

A reclaimed water project of this magnitude will require cooperation between the City, other public agencies, and private stakeholders. A detailed discussion of potential management strategies are beyond the scope of this analysis. However, the difference in Table 2 between the available reclaimed water supply and the applied water demand supports the use of agricultural reservoir storage capacity to effectively increase the utilization of reclaimed water.

## **Morro Valley Benefits Summary**

The City wells are the farthest downstream wells in the basin, and have lost a significant portion of their historical freshwater yield. Providing reclaimed water to growers in the Morro Valley would reduce agricultural pumping and provide in-lieu recharge to the groundwater basin. This would restore the freshwater yield during drought years and increase the yield during normal to wet periods, in addition to providing water for environmental demand. The maximum project water supply benefit with CSD participation is estimated at 585 AFY during drought and 1,160 AFY during normal to wet years. These are maximum anticipated benefits, and would require a high level of grower participation in the reclaimed water program.

## **Chorro Valley and Morro Valley Benefits Comparison**

A concurrent benefits analysis of a 1.5 MGD wastewater project in the Chorro Valley has been performed (CHG, 2014). Table 5 compares the potential benefits to the City water supply from the Chorro Valley project with the potential benefits from the Morro Valley project.



**Table 5**  
**Maximum Project Benefit Comparison**  
**Chorro Valley versus Morro Valley**

<b>Item Compared</b>	<b>Chorro Valley (1.5 MGD)</b>	<b>Morro Valley (1.13 MGD)</b>	<b>Morro Valley (1.5 MGD)</b>
City water supply increased yield: Drought years	900 AFY	320 AFY	585 AFY
City water supply increased yield: Normal to wet years	515 AFY	895 AFY	1,160 AFY
Critical Assumptions*	Water Rights Permit Revision	Water Rights Permit Revisions, Overdraft Estimate, Program Participation	
Other benefits	Env. Demand	Agriculture Users + Env. Demand	

NOTE: The benefit is defined as the increased yield at City wells between current conditions and project conditions.

The Chorro Valley project has a greater potential for benefit to the City water supply during drought years, while the Morro Valley project has a greater benefit potential during normal to wet years. Water rights permit revisions would be needed in both Chorro Valley and Morro Valley to obtain the maximum benefit potential. There are additional critical assumptions involved in the Morro Valley analysis, changes to which would mostly result in the partial transfer of benefit from the City water supply to the agricultural water supply. Both projects would provide more water for environmental demand, and the Morro Valley project would also benefit local growers.



## References

- Brown and Caldwell, 1981. Groundwater Evaluation of the Cabrillo Property in Morro Creek Basin, June 1981.
- Carollo, 2012. County Master Water Report, May 2012.
- CH2M Hill, 2011. 2010 Urban Water Management Plan, City of Morro Bay, June 2011.
- Cleath & Associates, 1993. Groundwater Analysis for Water Management Plan, City of Morro Bay, Appendix B of Water Management Plan prepared for Boyle Engineering, October 1993.
- Cleath-Harris Geologists, 2007. Morro Basin Nitrate Study, Morro Valley, San Luis Obispo County, December 2007.
- Cleath-Harris Geologists, 2014. Hydrologic evaluation of the potential benefits to the City water supply from increasing wastewater discharges to Chorro Creek, San Luis Obispo County, October 6, 2014.
- Department of Water Resources, 1972. Sea Water Intrusion: Morro Bay Area, San Luis Obispo County, DWR Bulletin 63-6, February 1972.
- Rickenbach Consulting, 2013. City of Morro Bay New Water Reclamation Facility Project, Second Public Draft Options Report, December 5, 2013.

## Appendix D

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*Water Supply Cost Analysis*  
MKN and Associates

## Appendix E

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*Regulatory Implications for Discharge*  
Larry Walker Associates, September 2014



# Memorandum

DATE: October 1, 2014

TO: Rob Livick, City of Morro Bay

Cc: Betsy Elzufon, LWA  
Mike, Nunley, Michael K. Nunley &  
Associates

SUBJECT: Regulatory Implications of Discharge  
Options for the Future City of Morro Bay  
Water Reclamation Facility

**Diana Engle, Ph.D.**  
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The City of Morro Bay-Cayucos Wastewater Treatment Plant currently operates under National Pollution Discharge Elimination System Permit (NPDES) No. CA0047881, Waste Discharge Requirements (WDR) Order No. R3-2008-0065. The current discharge to the Pacific Ocean occurs by virtue of a 301(h) exception allowing partial secondary treatment. The City of Morro Bay (City) is planning to build a new Water Reclamation Facility (Morro Bay WRF) that is Reclamation Ready and which will ultimately produce tertiary, disinfected wastewater in accordance with Title 22 requirements for unrestricted urban irrigation. This level of treatment is appropriate for a wide range of reuse options that are under consideration by the City. While the intent is for re-use of most of the Morro Bay WRF's effluent, an option for discharging treated effluent to surface water or land during both dry and wet weather will still be necessary.

Many sites for the Morro Bay WRF have been considered in the past, however, the City is currently focusing evaluation on two sites: Rancho Colina and the California Men's Colony (CMC). The purpose of this memorandum is to evaluate the regulatory implications of the discharge options associated with the Rancho Colina and CMC sites.

As discussed in more detail below, the Rancho Colina site would be used to construct an upgraded facility for the current service area, the City of Morro Bay. If the existing CMC facility was upgraded, it would likely be a regional facility that would serve California Men's Colony, other County customers, the Cayucos Sanitary District and the City of Morro Bay.

The types of permits and the governing water quality objectives that would apply to each of the potential waste discharge scenarios is summarized in Section 1 and discussed in more detail in the

remainder of the memorandum. Regulatory implications of the environmental settings and of several future state and federal regulatory actions are described. Recent effluent data from the current Morro Bay-Cayucos WWTP was screened using the suite of water quality objectives that pertains to each of the discharge scenarios. This resulted in identification of several constituents that might be assigned numeric effluent limits in the permit for the new Morro Bay WRF. The more significant regulatory implications of the discharge scenarios are summarized in a matrix. As discussed elsewhere, the regulatory requirements and other program elements associated with the anticipated recycling program are expected to be similar for the different sites with the one difference being proximity to potential recycled water customers.

## **1. Summary and Conclusions**

The most significant regulatory factors identified in this evaluation are contrasted for the discharge options in Table 1. The implications of each regulatory option are summarized below and discussed in more detail in the following sections:

- Section 2. Current Regulatory Implications
- Section 3. Effluent Quality Evaluation
- Section 4. Considerations for the Future

The options evaluated include discharges to groundwater through land disposal (percolation ponds), discharges to inland surface water (i.e., Chorro Creek or Morro Creek) and discharges to the Ocean. When evaluating the discharge options to inland surface waters, different requirements associated with each creek are also highlighted given that Chorro Creek is tributary to Morro Bay estuary while Morro Creek flows directly to the ocean.

### **PERCOLATION PONDS**

The process for applying for a WDR (i.e., Waste Discharge Requirements) for discharge to percolation ponds is the simplest among the discharge options and avoids involvement of USEPA. In addition, permit cycles for WDRs are indeterminate, requiring fewer rounds of reapplication. Many fewer constituents are likely to be assigned numeric effluent limits for discharge to percolation ponds. Percolation ponds are unlikely to be named a source in future TMDLs, unless contaminated groundwater affects Morro Creek. Bacteria limits and toxicity provisions are not likely in a WDR. However, there is a possibility that numeric effluent limits for total nitrogen and salts may apply to percolation ponds, which might necessitate additional treatment processes.

### **INLAND SURFACE WATER**

Several future regulatory actions are likely to affect permits for discharges to Morro Creek or Chorro Creek that will not apply to discharges to the ocean or percolation ponds. Both the State Policy on Nutrients and the State's Implementation Plan for Biological Integrity are likely to result in lower recommended nutrient levels in streams and enclosed estuaries. In streams, eventual impairment thresholds for nitrogen are likely to be in the vicinity of 1.0 mg/L total nitrogen; limits for P may be about 1/10th the value for total N. The State Toxicity Policy has several implications for discharges to the creeks that may not apply to an ocean discharge and will not apply to percolation ponds. The new numeric toxicity criterion is highly controversial and will replace the current narrative criterion. Toxicity provisions in future permits will be more costly than in current permits and will more easily lead to violations. Acute tests will be required in addition to

chronic tests. Dischargers with no dilution credits will not be able to consider in-stream concentrations to determine compliance.

Among the inland discharges, discharge to Chorro Creek (by expansion of the CMC facility to serve the City) is accompanied by the highest regulatory burden and regulatory risk. Discharge to Chorro Creek will likely result in numeric effluent limits for total nitrogen, orthophosphorus, one or more salts, and bacteria that have implications for treatment. Discharge to Chorro Creek will likely require consideration of governance options since it would involve partnering with other agencies to form a regional facility. Compared to the Morro Valley Basin, Salt and Nutrient Management Plan (SNMP) development for the Chorro Valley Basin may be complicated by a larger number of stakeholders (that may include regulatory agencies such as NOAA Fisheries and CDFW) and the need to account for more diverse land uses in a larger watershed.

Discharges to Chorro Creek will be scrutinized regarding potential downstream effects on high profile, state-protected estuarine habitat of national significance that provides habitat for dozens of listed species. Chorro Creek itself is officially named as critical habitat for federally listed steelhead and California red-legged frog. Actions that affect flow in Chorro Creek may attract the attention of state and federal resource agencies and petitions to remove discharge from the creek in the future (e.g., as reclaimed water demand increases) will require a Change Petition to the SWRCB Division of Water Rights and will be complicated by water rights issues and Biological Opinions. Requirements to maintain a minimum flow has been a challenge for the City of San Luis Obispo (SLO) in implementing its recycled water program. Due to the presence of steelhead trout, SLO has dedicated a portion of its Water Reclamation Facility effluent to maintain a minimum flow of 2.5 cfs in San Luis Obispo Creek for in-stream beneficial uses, in-stream habitat uses in particular. This minimum dedicated discharge is included in SLO's Water Reuse Project's SWRCB permit and is a required term and condition of the Biological Opinion issued by NOAA Fisheries. Consequently, SLO cannot fully utilize the reclaimed water generated as part of the Water Reuse Project.

Owing to the future regulatory actions named above, Chorro Creek may be subject to impairment evaluations that may result in more stringent nutrient regulations. The reopener provision in the Chorro Creek Nutrient Total Maximum Daily Load (TMDL) provides an opportunity for regulators to exercise new screening tools arising from the state policies on nutrients and biointegrity to revise POTW allocations downward.

Discharge to Morro Creek is accompanied by many of the same regulatory risks as discharge to Chorro Creek. Morro Creek will be similarly affected by the Biological Integrity assessment procedures and the Nutrient Policy for wadeable streams. The Toxicity and Bacteria policies will apply to both Creeks. However, Morro Creek does not discharge to a large, sensitive estuary, and has not previously been listed as impaired on the 303(d) list. There are no TMDLs for Morro Creek that can potentially be reopened and revised with unpredictable outcomes for dischargers.

Identification of constituents that might require numeric effluent limits for new types of discharges (Morro Creek, Chorro Creek, and percolation ponds) was based on a review of current effluent data. In addition, projected effluent quality based on planned upgrades to the treatment process was considered for ammonia, nitrogen, and total coliform. Salts data available from the *2012 Recycled Water Feasibility Study* (Dudek, Draft March 9, 2012) were also used for the evaluation.

## OCEAN

The most significant benefits of maintaining the current ocean outfall for wet weather discharges, at a minimum, are (1) dilution will be granted in the permit resulting in less stringent effluent limits, (2) effluent limits for nutrients (nitrogen and phosphorus) and salts will be avoided, and (3) there is less risk from future regulatory actions planned by the SWRCB or from environmental sensitivity of receiving water. There would be no minimum flow requirements that could restrict the quantity of water that can be used for recycling. The Bacteria Policy would result in a revision to the Ocean Plan, but the enterococcus limits that are being proposed so far are not significantly different than the limits in the current Ocean Plan. In addition, the current ocean outfall presents opportunities for brine disposal to support local or regional solutions addressing water supply and salt and nutrient management.

**Table 1. Comparison of Significant Regulatory Factors for Discharge Scenarios**

	Rancho Colina			California Men's Colony
	Ocean Discharge	Discharge to Surface Water	Discharge to Land	Discharge to Surface Water
	Existing Ocean Outfall	Morro Creek	Percolation ponds	Chorro Creek
Type of Permit Needed	NPDES	NPDES	WDR	Modification of existing NPDES permit or issuance of new NPDES permit
Agencies that Approve the Discharge Permit	Regional Water Quality Control Board (RWQCB), USEPA	RWQCB, USEPA	RWQCB	RWQCB, USEPA
Permit Cycle	5 years	5 years	indefinite	5 years
Would Dilution be Granted?	Yes (Minimum of 133:1; additional dilution may be available)	No	No	No
Other Agencies that might evaluate the effects on Beneficial Uses in some contexts	unlikely	CDFW, NMFS	N/A	CDFW, NMFS
Beneficial Uses Assigned to Receiving Water <sup>1</sup>	REC1, REC2, IND, NAV, MAR, SHELL, COMM, RARE, WILD, MIGR	MUN, AGR, GWR, REC1, REC2, WILD, COLD, WARM, MIGR, SPWN, RARE, EST, FRESH, COMM	AGR, MUN	MUN, AGR, GWR, REC1, REC2, WILD, COLD, WARM, MIGR, SPWN, RARE, FRESH, COMM, BIOL
Will existing TMDLs affect the permit?	No	No	No	<u>Nutrient TMDL</u> : yes, N removal might be required and phosphate limits are likely. TMDL may be reopened in 2016. <u>Sediment TMDL</u> : maybe, if stream erosion is increased <u>Bacteria TMDL</u> : maybe (Title 22 bacteria limits may apply to discharge to stream)
Constituents <u>in current effluent data set</u> that may require an effluent limit	total cadmium, total copper, cyanide, nickel (salts), total zinc, dioxin,	antimony, total copper, cyanide, mercury, ammonia, dioxin, bis(2-ethylhexyl) phthalate	antimony, total nitrogen (based on ammonia data), bis(2-ethylhexyl) phthalate, total coliform	antimony, total copper, cyanide, mercury, ammonia, dioxin, bis(2-ethylhexyl) phthalate  total nitrogen exceeds POTW allocation in Nutrient TMDL
Will numeric limits for Salts be applied?	No	Probably, if salts objectives are exceeded in effluent. Regional Board may make allowances for imported water quality.	Probably, if salts objectives for receiving groundwater are exceeded in effluent	Probably for one or more constituents. Regional Board may make allowances for imported water quality.

<sup>1</sup> See Attachment 2 for definitions of Beneficial Uses

	Rancho Colina			California Men's Colony
	Ocean Discharge	Discharge to Surface Water	Discharge to Land	Discharge to Surface Water
	Existing Ocean Outfall	Morro Creek	Percolation ponds	Chorro Creek
Would SNMP requirement apply?	Yes – if permit to recycle water is also requested	Yes	Yes	Yes. There may be opportunities for regional partners. SNMP process may be more complex.
Environmental Sensitivity	TBD	Morro Creek is designated Critical Habitat for federally listed south Central California coast DPS steelhead and California red-legged frog. Lower portion of creek is habitat for federally listed tidewater goby.	TBD	Chorro Creek is designated Critical Habitat for federally listed south Central California coast DPS steelhead and California red-legged frog. Chorro Creek discharges into a national "Estuary of Significance", and two State Marine Protected Areas. Estuary supports dozens of listed species. Oyster farming occurs in Morro Bay.

## 2. Current Regulatory Implications of Discharge Scenarios

The discharge options associated with the Rancho Colina and CMC sites involve different receiving waters as shown in Table 2. Three potential methods for disposal of effluent were considered for the Rancho Colina site: use of the existing ocean outfall, discharge into Morro Creek, and discharge to percolation ponds. Only one method of disposal was considered for the CMC site: expansion of the existing CMC treatment facility and outfall with discharge to Chorro Creek. This would provide the most direct benefit to the City of Morro Bay via augmentation of streamflow in Chorro Creek and recharge of City groundwater.

**Table 2. Discharge Scenarios for the Morro Bay WRF and Associated Receiving Waters**

Site/ Treatment Plant	Method of Discharge	Receiving Water
Rancho Colina/ New Reclamation Ready Treatment Plant	Existing Ocean Outfall	Estero Bay (Pacific Ocean)
	Outfall into Creek	Morro Creek
	Percolation Ponds	Morro Valley Groundwater Basin
CMC/ Expansion and upgrade of existing Treatment Plant	Outfall into Creek	Chorro Creek

### PERMIT CATEGORIES

For regulatory purposes, discharges in California can generally be divided into the discharge of pollutants to surface waters (i.e., rivers, creeks, streams, lakes, ocean, etc.) or discharges to land (discharges that affect groundwater). Discharges to surface waters are regulated by permits issued under the National Pollutant Discharge Elimination System (NPDES) program under the Clean Water Act. Discharges to land are permitted through Waste Discharge Requirements (WDR) under the Porter-Cologne Act. NPDES permits require approval by the USEPA; WDRs do not require USEPA approval. In addition, for NPDES permits, serious violations pertaining to effluent limitation exceedances and failure to submit reports are subject to Mandatory Minimum Penalties (MMPs, e.g., \$3000/violation) as described in the California Water Code Section 13385. Permit violations for WDRs are not subject to MMPs.

Details regarding the process and information required to apply for an NPDES permit or a WDR are provided in **Attachment 1**. NPDES permits are generally reissued every five years. WDRs have no predetermined renewal interval, and sometimes remain unaltered for long periods. Discharge through the existing ocean outfall or to either Morro Creek or Chorro Creek would require an NPDES permit. Discharge to percolation ponds would require a WDR.

In addition to the current 2008 Morro Bay-Cayucos WWTP Permit and the August 2013 Report of Waste Discharge (ROWD) for the Morro Bay-Cayucos WWTP, three recent permits from Region 3 were consulted, owing to their potential to shed light on permitting practices in Region 3:

- 2012 California Men’s Colony Wastewater Treatment Plant, (ORDER No. R3-2012-0027/NPDES No. CA0047856), ( 2012 CMC Permit)
- 2011 Waste Discharge/Recycled Water Requirements for the Los Osos Water Recycling Facility (Order No. R3-2011-0001), (Los Osos WDR)
- 2012 Waste Discharge Requirements for the Tres Pinos Water District Wastewater Treatment Facility (Order No. R3-2012-0015), (Tres Pinos WDR)<sup>2</sup>.

## BENEFICIAL USES AND APPLICABLE WATER QUALITY OBJECTIVES

The water quality standards that apply to the receiving waters are described in several regulatory documents:

- Region 3, Central Coast Basin Plan (Basin Plan)
- Water Quality Control Plan for Ocean Waters of California (Ocean Plan)
- Drinking water standards in Title 22 of the California Code of Regulations (Title 22)
- California Toxics Rule (CTR)
- Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan)
- TMDLs that set targets and allocations for Chorro Creek:

The beneficial uses assigned to the four receiving waters and the applicable water quality objectives are outlined in **Attachment 2**. The sources of applicable water quality objectives for the discharge scenarios are compared in Table 3.

**Table 3. Sources of Applicable Water Quality Objectives for Discharge Scenarios**

	Ocean	Percolation Ponds	Morro Creek	Chorro Creek
<b>Source of Applicable Water Quality Objectives</b>	Basin Plan Ocean Plan Thermal Plan	Basin Plan Title 22	Basin Plan Title 22 CTR	Basin Plan Title 22 CTR 3 TMDLs

Numeric objectives are discussed in this section for a subset of constituents (bacteria, salts, and nutrients) which may have implications for treatment processes (e.g., nitrogen removal, disinfection, desalination), and thus create potentially significant contrast between the discharge options. In the fourth section of the memorandum (Effluent Quality Evaluation), applicable numeric water quality objectives are compared to effluent data (based on current data or projected data for the upgraded plant) to determine if an effluent limit would be needed under each discharge scenario. It should be noted that an exceedance of a water quality objective does not necessarily correspond to an exceedance of an effluent limit. This especially true for the ocean discharge

<sup>2</sup> While the Tres Pinos facility is located in San Benito County, it is indicative of current WDR permitting policy for the Central Coast Region.

scenario where effluent limits are determined by applying a dilution factor of 133 to the water quality objective.

## **TMDLs**

Three TMDLs have been adopted that contain targets for Chorro Creek, which is a 303(d) listed impaired water body according to the federal Clean Water Act:

- 2005 TMDL for Nutrients and Dissolved Oxygen in Chorro Creek (Nutrient TMDL)
- 2003 TMDL for Pathogens for Morro Bay and Chorro and Los Osos Creeks (Pathogen TMDL)
- 2003 TMDL for Sediment including Chorro Creek, Los Osos Creek and the Morro Bay Estuary (Sediment TMDL)

The Nutrient TMDL has targets for nitrogen and phosphorus species, and allocations for the CMC WWTP, that have implications for the scenario in which the regional treatment facility discharges to Chorro Creek. These implications are explained below in the Nutrients subsection. The Nutrient TMDL also established targets for TDS and Sodium (Na), however they are equivalent to the Basin Plan objectives for Chorro Creek for TDS and Na, and are thus not particularly significant. The Pathogen TMDL resulted in total coliform targets for Chorro Creek. However, the numeric effluent limits for total coliform in the 2012 CMC Permit were stricter than the Pathogen TMDL targets and are consistent with Title 22 bacteria objectives for urban irrigation. The Sediment TMDL assigned numeric targets for turbidity (expressed as NTU) for Chorro Creek, and allocations for sediment flux (expressed as annual loads) to classes of erosional features (including stream banks) and land uses in the Morro Bay watershed. This TMDL did not affect the 2012 CMC Permit. It is possible that an increase in surface flow in Chorro Creek (e.g. owing to additional discharge from the City) could affect erosion of the stream banks; the combined discharge would approximately double the volume of water discharged to Chorro Creek.

No TMDLs have been adopted for Morro Creek or for Estero Bay, and there are no currently unaddressed water quality impairments for Morro Creek, Chorro Creek, Morro Bay, or Estero Bay on the 303(d) list.

## **Objectives that May Influence Treatment Options**

Discharge options that involve surface water or groundwater may result in effluent limits for bacteria, nutrients (N and P), and salts that have significant implication for treatment options. The potential issues for each constituent group are summarized below.

### ***Pathogens***

Discharge to either Morro Creek or Chorro Creek will result in numeric effluent limits for pathogen indicators (i.e., bacteria). The bacteria limits in the 2012 CMC Permit were carried over from a previous permit (Order No. R3-2006-0032)<sup>3</sup> and are as follows:

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<sup>3</sup> The 2006 CMC Permit is not posted on the Region 3 website along with other 2006 Orders and Resolutions. Consequently, it was not possible at this time to review the reasoning behind the apparent assignment of the Title 22 bacteria standards for urban irrigation as numeric effluent limits *for discharges to the creek* (as opposed to requirements for recycled water only).

- Total coliform: 2.2 MPN/100 mL (7-day median)
- No more than one sample shall exceed 23 MPN/100 mL in any 30-day period;
- No sample shall exceed 240 MPN/100 mL.

The 7-day median total coliform effluent limit in the 2012 CMC Permit is much stricter than the Ocean Plan limits for total coliform.<sup>4</sup> They are equivalent to the Title 22 standards for recycled water for urban irrigation; the 7-day median limit for total coliform bacteria is also equivalent to the Basin Plan MUN objective for groundwater.

It is not clear whether the Regional Board would apply all of the Title 22 standards for recycled water to creek discharges by combined WWTP or the Morro Bay WRF, as they did in the 2012 CMC WWTP, or whether only the 7-day median for total coliform (for the groundwater MUN use) would be applied.

### **Salts**

If the regional CMC facility continues to discharge to Chorro Creek, it is likely that the Regional Board will assign numeric effluent limits for one or more salt constituents. The Basin Plan establishes water quality objectives for salts for Chorro Creek as follows:

#### Basin Plan Objectives for Surface Water in Chorro Creek (annual means)

- TDS            500 mg/L (also a target in the Chorro Creek Nutrient TMDL)
- Cl              50 mg/L
- SO<sub>4</sub>          50 mg/L
- B               0.2 mg/L
- Na             50 mg/L (also a target in the Chorro Creek Nutrient TMDL)

In the 2012 CMC Permit, the Regional Board assigned a numeric effluent limit for SO<sub>4</sub> (125 mg/L; 1,251 lbs/day) that exceeded the Basin Plan objective for Chorro Creek. The sulfate limit was intended to account for high background salt concentrations and salt loading from the water supply in facility influent, and was carried over from the previous 2006 permit.<sup>5</sup>

Although percolation ponds in the Chorro Valley Basin are not currently a discharge scenario under consideration, the groundwater objectives for salts and nitrogen for Chorro Valley Basin may inform Regional Board expectations for groundwater quality in the Morro Valley Basin, and are as follows:

#### Chorro Valley Groundwater Basin Objectives for Salts

- TDS            1,000 mg/L

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<sup>4</sup> Ocean Plan total coliform limits are 1,000/100 mL (30-day geomeans) (REC1); 10,000/100 mL (single sample maximum) (REC2)

<sup>5</sup> The sulfate effluent limit is justified in the Fact Sheet (Attachment F) of the 2012 CMC Permit as follows: “Typically, waste discharge requirements incorporate the Basin Plan’s specific, numeric WQOs as effluent limitations. Although convention generally sets effluent limitations at the Basin Plan’s WQOs, the previous Order does not use Table 3-7 Basin Plan numeric WQOs as effluent limitations. Instead, the existing effluent limitation (for sulfate) is greater than WQOs in Basin Plan Table 3-7 to account for high background salt concentrations and uncontrollable salt loading from the water supply in Facility influent. Consistent with the previous Order, this Order shall establish a limitation for sulfate that is characteristic of the natural receiving water.”

- Cl            250 mg/L
- SO<sub>4</sub>        100 mg/L
- Na            50 mg/L
- B             0.2 mg/L

Although the Basin Plan does not currently include groundwater objectives for salts specific to Morro Valley Basin, the Regional Board may establish them in the future. The June 8, 2011, edition of the Basin Plan includes a priority list for future Regional Board tasks, established in 1988 (referred to as the “Triennial Review List”). “Establishment of Morro Valley Basin groundwater objectives” appears as item 40 out of 49 tasks. The evaluation of current groundwater quality in Morro Valley Basin with respect to salts and nutrients, and the quantification of the effects on groundwater of future discharges to land or surface water in the Morro Valley Basin (including application of reclaimed water), would be elements of a Salt & Nutrient Management Plan<sup>6</sup> that the Regional Board is likely to require if a permit is sought to apply reclaimed water to land overlying the Morro Valley Basin.

There is recent precedent for assignment of numeric effluent limits for salts for percolation ponds in Region 3. The 2012 Tres Pinos WDR for discharge to percolation ponds included numeric effluent limits for three salt constituents:

- TDS        1,200 mg/L
- Na         200 mg/L
- Cl         200 mg/L

The ponds discharge to the San Juan subbasin of the Gilroy-Hollister Basin. This subbasin is not assigned specific salt objectives in the Basin Plan.

The 2011 Los Osos WDR, which also addresses discharge to groundwater (via leach fields and recycled water) does not contain numeric effluent limits for salts, and the Los Osos Valley groundwater basin is not assigned salt objectives in the Basin Plan. However, based on information in the Los Osos WDR regarding data through 2010, sea water intrusion is an issue in the lower aquifer into which the leach fields discharge, so this permit may not provide a good analogy for a scenario in which a new Morro Bay WRF would discharge to percolation ponds in the Morro Valley Basin.

### ***Nutrients***

Discharge to either creek, and to percolation ponds, will result in effluent limits for one or more nitrogen species. Discharge to Chorro Creek may result in effluent limits for orthophosphorus. Discharge to the ocean outfall will not result in effluent limits for nutrients. Additional background on applicable objectives and recent Region 3 permit limits for nutrients is provided below.

Discharge to Chorro Creek. If the existing CMC facility is expanded and discharge to Chorro Creek is increased, it is likely that the Regional Board will assign numeric effluent limits for total nitrogen (TN) and “orthophosphorus.”<sup>7</sup> The impetus for the limits would be the targets in the

<sup>6</sup> Salt and Nutrient Management Plans are discussed later in the document.

<sup>7</sup> Based on the 2012 CMC Permit Fact Sheet, the Regional Board is interpreting “orthophosphorus” to be “phosphate” + “orthophosphate”.

Chorro Creek Nutrient TMDL.<sup>8</sup> The TMDL targets are compared to the corresponding TMDL allocations for the CMC WWTP and numeric effluent limits in the 2012 CMC Permit in Table 4.

**Table 4. Comparison of Nutrient TMDL Targets for Nitrate and Orthophosphorus with Effluent Limits in the 2012 CMC Permit.**

	TMDL In-Stream Target	CMC WWTP Allocation in the TMDL	CMC Permit Limit
<b>N</b>	Nitrate-N: 1.5 mg/L Determined as a rolling median May-Sept. measured in half-mile reach upstream from South Bay Boulevard crossing.	“The monthly maximum nitrate-N concentration of effluent shall not exceed 10 mg/L-N.”	Total Nitrogen: 10 mg/L (monthly maximum) 100 lbs/day (based on 1.2 MGD design flow)  No ammonia limit
<b>P</b>	“Orthophosphorus- P”: 0.4 mg/L  Determined as a rolling median May-Sept. measured in half-mile reach upstream from South Bay Boulevard crossing	“Median orthophosphorus-P concentration of effluent from May through September shall not exceed current levels, as measured by a comparison to effluent concentration from 2004 and 2005.”	Orthosphosphate-P: A cap based on effluent concentration 2004-2005.  The Fact Sheet of the 2012 CMC Permit identifies median May-Sept. orthophosphorus as 2.4 mg P/L.

It is possible that increased loading of TN and phosphate to Chorro Creek due to the additional flow from a regional facility may result in a change in effluent limits. The justification for assigning generous limits for TN and orthophosphorus in the 2012 CMC permit appeared to hinge on natural attenuation of nitrate and phosphate downstream from the CMC outfall. It is worth noting that the Regional Board carried over the TN limit from the 2006 CMC Permit with the expectation that treatment upgrades at the CMC WWTP would achieve single-digit nitrate concentrations in the future.<sup>9</sup>

Based on limited data for total ammonia, the concentration of TN in the current effluent from the Morro Bay/Cayucos WWTP is over 20 mg N/L (at least two times higher in terms of nitrogen content than the effluent limit for TN in the 2012 CMC Permit). However, no nutrient removal is performed at the Morro Bay/Cayucos WWTP whereas the CMC facility does perform nitrogen

<sup>8</sup> The Regional Board arrived at the nitrate and orthophosphorus allocations for the CMC WWTP by determining that although the CMC discharge elevated nutrient concentrations in the stream above the TMDL targets below the outfall, there was sufficient in-stream attenuation below the outfall to achieve the TMDL targets at the compliance point for the TMDL further downstream (the half-mile reach upstream from South Bay Boulevard). The determination was made by comparing stream concentration data from monitoring sites, and not by evaluating assimilative capacity directly (for example by using a water quality model).

<sup>9</sup> “Note that achieving the nitrate-N and orthophosphorus-P allocations at the point of discharge will result in achieving the TMDLs for these constituents in the lower reaches of Chorro Creek. Also note that although the nitrate-N allocation is 10 mg/L-N, the technology of the plant upgrade for the CMC facility is expected to result in single digit nitrate-N concentration in the discharge. It is also anticipated that the plant upgrade will result in reduced effluent orthophosphorus-P concentration.” (TMDL Project Report, p. 35)

removal. The daily maximum load of TN allowed in the CMC 2012 Permit was based on a final effluent limitation of 10 mg N/L and a design flow of 1.2 MGD. Discharge to Chorro Creek is expected to require expansion of nitrogen removal (nitrification/denitrification) at the CMC facility to treat additional flow from the City. By similar reasoning, the Regional Board may consider additional significant orthophosphorus loading to Chorro Creek to be inconsistent with the goals for controlling benthic algal cover and dissolved oxygen concentrations in the lower reaches of Chorro Creek.

Discharge to Morro Creek. If the Morro Bay WRF discharges to Morro Creek, the surface water objectives that would currently govern expectations for nutrient concentrations would be the narrative objective for biostimulatory substances, and the following drinking water objectives for nitrate and nitrite:

- Nitrate (as NO<sub>3</sub>): 45 mg/L (Basin Plan MUN and Title 22)
- Nitrate + Nitrite (as N): 10 mg/L (Title 22)
- Nitrite (as N): 1 mg/L (Title 22)

Discharge to Groundwater. If the Morro Bay WRF discharges to percolation ponds in the Morro Valley Basin, the MUN objective for nitrate (10 mg/L nitrate-N) would likely be the governing objective. However, the neighboring Chorro Valley groundwater basin has an objective of 5 mg/L TN. The available recent permits for discharge to groundwater in Region 3 resulted in different types of numeric effluent limits for nitrogen species, as follows:

Los Osos WDR:

- Total Nitrogen: 10 mg N/L (daily maximum), 7 mg N/L (30-day average)

Tres Pinos WDR (final limits, by 2016):

- Nitrate: 5 mg/L as N (30-d ave.)
- Ammonia: 5 mg/L as N (30-d ave.)

As was noted above in the case of salts, the percolation ponds regulated by the Tres Pinos WDR discharge to a groundwater basin (the San Juan subbasin) that has not been assigned specific nitrate or TN objectives in the Basin Plan. The Los Osos Valley groundwater basin is identified in the Basin Plan, but not assigned nitrate or TN objectives.

## **OTHER CURRENT REGULATORY CONSIDERATIONS**

### **Salt and Nutrient Management Plans**

In November 2008 the SWRCB adopted the Statewide Recycled Water Policy, which requires the development of regional or sub-regional salt and nutrient management plans (SNMPs) for groundwater basins in California by 2014 (with the potential for a two year extension if substantial progress towards development of a plan is being made). SNMPs will be adopted by Regional Boards as Basin Plan amendments. According to the state policy, SNMPs must include the following components:

- Basin/sub-basin wide monitoring plan
  - Assess groundwater quality, preferably by sampling existing wells
  - Focus on groundwater near large recycling and recharge projects and near water supply wells

- Target where appropriate ground and surface water in areas of connectivity
- Annual monitoring for contaminants of emerging concern (CECs)
- Water recycling and stormwater recharge/use goals and objectives
- Salt and nutrient source identification, loading estimates, assimilative capacity, and fate and transport
- Implementation measures to manage salt and nutrient loading in the [groundwater] basin on a sustainable basis
- Antidegradation analysis

In Region 3, this SNMP requirement is being implemented by inclusion of provisions in WDRs or NDPEs permits for facilities which use reclaimed water for irrigation. In the 2012 CMC Permit, *Section (a) Salt and Nutrient Management* (in the Best Management Practices and Pollution Minimization Program) describes in great detail required elements of a salt and nutrient management program specific to the facility, and then provides the option to alternatively satisfy the detailed requirements through participation in a regional salt and nutrient management plan.

Required elements of Central Coast SNMPS are detailed in a February 2014 document available on the Region 3 website.<sup>10</sup> Based on a September 13, 2013, Salt and Nutrient Management Plan Update (powerpoint presentation by the Region 3 Staff for the Central Coast Forum), a regional SNMP effort was tentatively underway at the time for the Los Osos Valley, but not the Chorro Valley.

Because the Morro Bay WRF will involve a significant reclaimed water component, a requirement to either perform a facility-specific salt and nutrient management program or to participate in a regional salt and nutrient management plan is a guaranteed element of the eventual permit regardless of the site of the wet weather discharge. However, it is possible that by the time the Morro Bay WRF or the expanded CMC facility is built, a regional SNMP might be underway in the Chorro Valley and that some economy of effort could be achieved by the City of Morro Bay participating in the regional planning effort with partner agencies.

### **Environmental Sensitivity of Receiving Waters**

Discharges to Chorro Creek, in particular, may be subject to regulations associated with presence of sensitive habitat and species. Morro Bay is one of only 28 estuaries nationwide that have been designated as “estuaries of national significance” and supports more than two dozen endangered species. Chorro Creek terminates in the Morro Bay Estuary which is afforded additional protection by virtue of the Morro Bay State Marine Recreational Management Area and the Morro Bay State Marine Reserve. Within these protected areas fishing and take of all living marine resources is prohibited except that in a northern portion of the Bay, recreational fishing and aquaculture of oysters, pursuant to a valid State water bottom lease and permit, is permitted. Oysters are commercially farmed in Morro Bay by the Morro Bay Oyster Company and the Grassy Bar Oyster Company. Both Morro and Chorro Creeks are designated Critical Habitat for federally listed South Central California Coast DPS steelhead and California red-legged frog. Lower portions of both creeks are habitat for federally listed tidewater goby. Downstream from the CMC WWTP

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<sup>10</sup> Informational Document: Salt and Nutrient Management Plan Development. February 2014. Available at [http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/nutrient\\_mgmt/index.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/nutrient_mgmt/index.shtml).

discharge, approximately two miles of Chorro Creek flows through the Chorro Creek Ecological Reserve.

### Regionalization Issues

If discharge to Chorro Creek occurs through establishment of a new regional facility, there will be additional complexity related to the formation of a joint powers authority (JPA) or similar governing body able to receive influent from more than one sanitary district with a single NPDES permit issued for a regional facility. This added layer of regulatory complexity would be avoided if discharge occurs to one of the other receiving waters.

## 3. Effluent Quality Evaluation

Effluent data from semi-annual sampling reports and conductivity/TDS monitoring data for the current Morro Bay-Cayucos WWTP were reviewed as an initial assessment of potential water quality issues under the four discharge scenarios. This data did not include all constituents of potential concern because not all monitored constituents were found in this report as described below. Because effluent quality is expected to improve with the proposed upgrades, it is anticipated that a subset of the constituents identified in this analysis would require effluent limits. Therefore, this analysis provides a preliminary comparison of constituents that could require effluent limits under the different discharge scenarios.

In accordance with the method in the SIP for determining “reasonable potential” (Reasonable Potential Analysis, or RPA) for inland surface waters, the maximum detected concentrations for constituents in effluent were compared with the lowest water quality criteria from the applicable suite of objectives for the creek and percolation pond scenarios. RPA for the ocean outfall scenario followed the procedure identified in the Ocean Plan. Effluent was compared with the suites of objectives pertaining to the following scenarios:

1. Discharge to fresh surface water (using objectives from CTR, Basin Plan, Title 22)
2. Discharge to fresh surface water using potential future CTR objectives (based on the revised USEPA criteria described above)
3. Discharge to ocean (using objectives from the Ocean Plan and Basin Plan)
4. Discharge to land (using Basin Plan groundwater objectives)

The effluent dataset included semi-annual sampling data from January 2010 through January 2014 and daily conductivity/TDS monitoring from July 2012 through July 2013. The constituents reported included organics, inorganics (metals), toxicity, nitrate-N, ammonia-N, coliform, pH, and TDS. Inorganics, nitrate and toxicity were generally monitored semi-annually (9 data points each), while organics were monitored annually (4 data points each). Ammonia is sampled monthly and total coliform is sampled 5 days per week. The maximum concentrations for these constituents were obtained from the August 2013 ROWD. Data for salts were from six 24-hour composite samples taken between February 8, 2012 and February 14, 2012 (*2012 Recycled Water Feasibility Study*, Dudek, Draft March 9, 2012). The data reports evaluated did not provide results for total nitrogen and dozens of Title 22 and CTR constituents. Several inorganics applicable to Basin Plan objectives for AGR, WARM/COLD, SPWN were also not screened. A table of these unscreened constituents is provided in **Attachment 3**. Constituents for which there are applicable water quality objectives, but which were not detected in any of the effluent data screened, are also provided in **Attachment 3**.

## DISCHARGE TO SURFACE WATER

Both Chorro Creek and Morro Creek are assigned the MUN use, so Title 22 MCLs were included in the suite of objectives for RPA. Concentrations of ten constituents in effluent exceeded the lowest applicable objective. Hardness was assumed to be 150 mg/L. Ammonia-N exceeds the total nitrogen limit in the 2012 CMC Permit (10 mg/L total nitrogen) but expansion of nitrogen removal processes at CMC is expected as part of the regionalization effort. Detailed results are provided in **Attachment 3**.

Updated human health CTR criteria were proposed for 90 constituents in 2014. Only three of the updated constituents that are monitored in effluent were detected (cyanide, bis(2-ethylhexyl) phthalate, toluene), concentrations for two of them exceeded the proposed updated criterion (cyanide, bis(2-ethylhexyl) phthalate). However, concentrations of these two constituents exceed the *current* CTR criteria and it is not likely that these concentrations would be lowered as a result of the planned upgrades to the treatment process. Therefore, there would be no difference in reasonable potential in the case of these two constituents should the 2014 proposed criteria be adopted.

## DISCHARGE TO OCEAN

The Ocean Plan RPA is very different from the RPA for inland surface waters. A tool called RPCalc2.0 is used on each individual constituent's dataset, with a dilution of 133 for this discharge and ambient concentrations from the Ocean Plan. Three endpoints are possible: 1=reasonable potential, 2=no reasonable potential, 3=inconclusive, continue collecting data. Three constituents had reasonable potential with Ocean Plan objectives, while 11 had an inconclusive result, and 8 had a result of "no reasonable potential." Detailed results are provided in **Attachment 3**.

## DISCHARGE TO LAND

Concentrations of seven constituents in effluent exceeded the lowest applicable objective, including four salts (boron, chloride, sodium, and TDS) and ammonia-N at current concentrations. However, ammonia concentrations would be reduced as by the projected plant upgrade or as a result of expansion of the CMC facility. Detailed results are provided in **Attachment 3**.

## SUMMARY

Table 5 summarizes the criteria exceeded by effluent concentrations for detected constituents (or showing reasonable potential under the Ocean Plan) under the various discharge scenarios. In addition, although there was no data for total nitrogen in the dataset screened, ammonia-N exceeds the basin plan objective for groundwater for Chorro Valley Basin (5 mg/L total nitrogen), and the total nitrogen limit in the 2012 CMC Permit (10 mg/L total nitrogen). In addition, the maximum 7-day median total coliform value in the screened data set (50 MPN/mL) exceeds the 7-day median total coliform effluent limit MUN limit assigned to groundwater in Region 3 (2.2 MPN/L), which was assigned to the creek discharge in the 2012 CMC Permit. However, ammonia, total nitrogen, and coliform bacteria concentrations are expected to be reduced by the projected plant upgrade or as a result of expansion of the CMC facility.

While a similar set of effluent limits would be required for an ocean discharge or surface water discharge, the effluent limits for the ocean discharge would be much higher due to the dilution credit of 133:1.

**Table 5. Summary of Constituents Likely to Have Effluent Limits for Discharge Scenarios**

Constituent	Units	Detected Effluent Maximum <sup>[a]</sup>	Freshwater			Ocean		Groundwater
			Basin Plan Objectives	CTR	Title 22 MCLs	Ocean Plan RPA	Basin Plan Objectives	Basin Plan Objectives & Title 22 MCLs
<i>Constituents with concentrations likely to change based on the plant design/upgrades:</i>								
Ammonia (as N)	mg/L	ND <sup>[b]</sup>						
Nitrogen	mg/L	10 <sup>[b]</sup>						X
Total Coliform	MPN/ 100mL	2.2 <sup>[b]</sup>						
<i>Constituents with concentrations that may incidentally change due to upgrades:</i>								
Antimony	µg/L	11			X			X
Cadmium, Total	µg/L	0.64	[c]				X	
Copper, Total	µg/L	22	[c]	X		X	X	
Cyanide	µg/L	94		X		X		
Mercury	µg/L	0.088		X				
Nickel, Total	µg/L	4.3					X (salts)	
Zinc, Total	µg/L	71	[c]				X	
2,3,7,8-TCDD (dioxin)	µg/L	1.8E-07		X		X		
Bis(2-ethylhexyl) Phthalate	µg/L	8.2	X	X	X			X
pH	SU	7.3-7.9	[d]					
<i>Constituents with concentrations that are not expected to change due to plant upgrades:</i>								
Boron	mg/L	0.4 <sup>[e]</sup>	X					X
Chloride	mg/L	369 <sup>[e]</sup>	X		X			X
Sodium	mg/L	223 <sup>[e]</sup>	X					X
TDS	mg/L	1,077 <sup>[f]</sup>	X		X			X
<b>Total</b>				<b>10</b>			<b>6</b>	<b>7</b>

[a] Based on data in annual and semi-annual reports unless noted otherwise

[b] Adjusted based on anticipated future effluent quality from new WRF (Tertiary-2.2 for unrestricted reuse per Title 22 Regulations). Projected concentrations of ammonia and total coliform do not exceed the water quality objectives but may receive effluent limits nevertheless.

[c] Basin Plan objectives for “soft” water (hardness < 100 mg/L) would trigger exceedances with the maximum effluent concentration.

[d] pH levels are currently very stable, however this could change with the treatment plant upgrade.

[e] Data are from six 24-hour composite samples taken between February 8, 2012 and February 14, 2012 (2012 Recycled Water Feasibility Study, Dudek, Draft March 9, 2012)

[f] Data from daily conductivity/TDS monitoring were provided from July 2012 through July 2013.

## 4. Future Considerations

Several regulatory actions at either the state or federal level are anticipated in the near future that may affect permit requirements or the regulatory burden associated with some of the discharge scenarios. The actions are briefly described below.

### Biological Integrity Assessment Implementation Plan

Starting in 2010, the SWRCB has been engaged in technical and stakeholder processes to develop a consistent methodology for using bioassessment data (indices of biological integrity, or IBIs) for impairment listings and identification of controllable pollutants causing biological community impairment that can be addressed by TMDLs, waste discharge permits, and other regulations. The SWRCB will adopt standardized metrics and monitoring protocols, and adopt statewide *guidance* for Regional Boards to interpret the biological data for 303(d) listing purposes, TMDL development and permit writing.<sup>11</sup> The SWRCB is beginning by addressing benthic invertebrates in streams, but intends to consider other types of community indices, such as for microalgae.

The SWRCB has already proposed: (1) the metric that will be used to interpret bioassessment data for stream benthic invertebrates (the California Stream Condition Index, or CSCI), (2) a reference stream data set and methods for defining reference conditions, (3) a stressor-identification framework (Causal Assessment), and (4) at least one tool for causal assessment (CADDIS) proposed for use in assigning responsibility for benthic community impairment to one or more pollutants (such as sediment or nutrients) or non-chemical stressors (such as hydromodification). The framework for implementation is still being developed (for example, addressing controversial issues such as expectations for modified stream channels).

The implementation of the CSCI in the regulatory setting is controversial and has implications for dischargers to wadeable streams. The “stressor ID” process has been demonstrated in case studies and at least one TMDL in Region 4 (2013 Malibu Creek and Lagoon TMDL for Sedimentation and Nutrients to Address Benthic Community Impairments) to provide a rationale for stringent nutrient regulation. In the case of the Malibu TMDL, benthic invertebrate index data and Causal Assessment were used as a basis for revising POTW nutrient allocations significantly downward from those promulgated in a previous (2003) nutrient TMDL (new allocations were 1.0 mg /L TN and 0.1 mg /L TP during summer months).

### Proposed Policy for Nutrients for Inland Surface Waters

The State Water Board is developing a nutrient policy for inland surface waters. The State Water Board intends to develop narrative nutrient objectives, with numeric guidance to translate the narrative objectives. This numeric guidance could include the “Nutrient Numeric Endpoint” (NNE) framework which establishes numeric endpoints based on the response of a water body to nutrient overenrichment (e.g. algal biomass, dissolved oxygen, etc.).

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<sup>11</sup> The currently applicable background information, technical documents, and advisory group information is available at [http://www.waterboards.ca.gov/plans\\_policies/biological\\_objective.shtml](http://www.waterboards.ca.gov/plans_policies/biological_objective.shtml).

Disjunct but overlapping processes have been underway since 2006 to evaluate approaches for regulating nutrient discharges to four different classes of inland water bodies:

- Streams and Lakes
- Coastal estuaries
- San Francisco Estuary (SFE, includes Suisun Bay)
- Sacramento-San Joaquin Delta

Much of the technical foundation for establishment of NNEs for wadeable streams had been developed with SWRCB funding and oversight, but without stakeholder involvement, prior to June 2014. The NNE process for inland water bodies (other than those for the SFE and the Delta, which appear to be continuing on separate tracks) was recently “reset”, and a formal stakeholder process for NNEs for inland waters (initially to address wadeable streams) began in June 2014.<sup>12</sup> The recent scientific work products produced by SCCWRP (expected for public release in August 2014) indicate that nutrient thresholds for wadeable streams derived using correlational approaches and statewide monitoring databases, if applied as effluent limits, would be unattainable without reverse osmosis. Consequently there is a recognition that alternative regulatory pathways may be important for establishing NPDES permit limits for N and P for POTWs. This possibility is part of the discussion between dischargers and regulators in the newly formed “Inland Water NNE SAG”. If offered in a formal framework, the alternative pathway may require dischargers to sponsor site-specific studies of nutrient responses in stream watersheds or conduct expensive modeling of the impacts on beneficial uses of management actions on watershed scales.

Although the current SWRCB website for the Nutrient Policy qualifies the *current process* as one that *excludes* enclosed bays and estuaries, much of the technical work to support NNE development for enclosed estuaries took place already through the California Estuarine Nutrient Numeric Endpoint Project<sup>13</sup> with the involvement of a technical team lead by SCCWRP, a regulatory advisory group (“STRTAG” comprised of SWRCB, Regional Board, USEPA and resource agency staff), and a Coastal Stakeholder Advisory Group (Coastal SAG) that had been meeting since 2009. The Coastal Estuary nutrient process appears to have been put on hold temporarily, and the SWRCB has prioritized development of an NNE policy for wadeable streams. However, as shown in the tentative schedule in Table , estuaries will be addressed in the Nutrient Policy in the next five years.

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<sup>12</sup> [http://www.waterboards.ca.gov/plans\\_policies/nutrients.shtml](http://www.waterboards.ca.gov/plans_policies/nutrients.shtml)

<sup>13</sup> <https://californiaestuarinenneproject.shutterfly.com/>

**Table 6. Tentative Schedule for Nutrient Policy Development in California.\***

Task	Science	Regulatory Amendments	
		Development	Adoption
Conceptual Approach	2014	2015	2017
Wadeable Streams	2014	2015	2017
Lakes	2014-2017	2017	2018
Estuaries and Non-wadeable streams/rivers	2014-2018	2018	2020

\*Timelines for the SFE and Delta have not been determined.

The Nutrient Policy creates significant regulatory uncertainty and risk for dischargers to wadeable streams. In addition, owing to potential application of new indicators of nutrient impairment in estuaries (such as new screening values for DO, pH, and benthic macroalgae or new IBIs for benthic infauna or sensitive fish), Morro Bay Estuary might become listed in the future for nutrient-related impairment. In that case, nutrient discharges to Chorro Creek might be reevaluated in the context of their effect on the estuary downstream. Regardless of conditions in the Morro Bay Estuary, the Chorro Creek Nutrient TMDL is subject to a reopening in July 2016. The Regional Board has the discretion to adjust nutrient allocations for POTWs in the TMDL if the targets for benthic algae and dissolved oxygen are unattained at that time. As part of the recent NNE-related technical work described above, SCCWRP is proposing that thresholds for impairment for benthic algal biomass should be much lower than those applied during the early “test runs” of the Benthic Biomass Tool. This may result in Regional Boards establishing lower nutrient targets in TMDLs across the state, and could affect the targets in the Chorro Creek Nutrient TMDL at some point in the future. Finally, although Morro Creek is not currently on the 303(d) list for nutrient-related impairments, its status might change if monitoring data are screened using NNEs recommended by the SWRCB.

### **State Policy for Toxicity Assessment and Control (Toxicity Policy)**

SWRCB Resolution 2005-0019 required revisions to the toxicity provisions in the SIP. In June 2010, the SWRCB released a draft “Policy for Whole Effluent Toxicity Assessment and Control” which included a new methodology for calculating toxicity (Test of Significant Toxicity, or TST) that had been described in a June 2010 document released by USEPA. Following public outreach and comments, peer review, and other steps, the SWRCB issued a revised draft policy in June 2012 that would promulgate new water quality objectives for toxicity for all inland surface waters, enclosed bays, and estuaries of the state. The new objectives would supercede the current toxicity control provisions in the SIP and all toxicity testing provisions in individual Basin Plans. The draft policy includes the following types of provisions:

- Numeric objectives for chronic and acute toxicity
- Chronic and acute toxicity limits
- Reasonable potential analysis and test species screening
- Accelerated monitoring and TRE implementation

The draft policy elicited significant concern from POTWs that discharge to inland waters. A partial list of POTW concerns follows.

Numeric Limits versus Triggers. Currently, most NPDES permits contain narrative objectives for toxicity and numeric triggers that prompt additional sampling and source investigation (e.g., Toxicity Reduction Evaluations, or TRE). This policy would result in numeric limits for toxicity, and dischargers would be considered to be in violation of their permits before there is a chance to determine the cause of the toxicity.

New Statistical Method for Defining Toxicity. The TST is a new probability-based method for calculating toxicity, based on a null hypothesis that a sample is toxic. Stakeholders have compared the performance of the TST and existing approaches (i.e., calculation of acute toxicity Toxic Units Acute (TUa) and Toxic Units Chronic (TUc)) using WET testing data. They argue that a high false positive error rate is inherent using the TST, and that use of the TST will lead to 303(d) listings for a high percentage of non-toxic waters.

Dischargers with no Dilution. Consideration of the true In-Stream Waste Concentration (IWC) is disallowed during the determination of “pass” or “fail” for dischargers that have no mixing zone or dilution credits.

Immediate Non-Compliance. The draft policy mandates that POTWs without dilution must produce effluent that is free of toxicity at all times. The draft policy includes a maximum daily effluent limitation (MDEL) that would result in an effluent limitation violation as a result of a single sample exceedance.

Higher Costs of Individual Tests. The TST is highly sensitive to the variability of test organism survival in test and control water. Consequently, in order to avoid invalid “fail” results, dischargers may have to pay for an increased number of replicates during routine toxicity tests.

Acute Toxicity Tests. The draft policy creates potential that Permits will contain requirements to conduct acute toxicity tests in addition to (more sensitive) chronic toxicity tests.

Reasonable Potential. The draft policy stipulates that all POTWs with average daily flow above 1 MGD have reasonable potential to cause toxicity *by rule*.

## **State Policy on Bacteria**

The SWRCB is proposing a statewide control program to protect recreational users from the effects of pathogens in California water bodies. The program would be adopted as amendments to both the Inland Surface Water, Enclosed Bays and Estuaries Plan and the California Ocean Plan. Significant proposed program elements may include: new water quality objectives for both fresh and marine waters based on the recently released (2012) USEPA recreational use criteria; a reference beach/natural source exclusion process and high flow exemptions; and revised beach notification requirements.

The USEPA’s 2012 recreational water quality criteria recommends use of either enterococci and E. coli for freshwater and only enterococci for marine water. Recommended criteria are provided in Table 7.

**Table 7. USEPA 2012 Recommended Recreational Use Standards for Bacteria.\***

	Enterococci		E. coli	
	30-day geomean	single sample threshold	30-day geomean	single sample threshold
<b>Marine</b>	30-35 cfu/100 mL	110-130 cfu/mL	N/A	N/A
<b>Fresh</b>	30-35 cfu/100 mL	110-130 cfu/mL	100-126 cfu/mL	320-410 cfu/mL

\*Ranges apply to different illness rates.

Preliminary considerations related to the Morro Bay WRF discharge options are as follows:

#### Ocean Outfall

- Receiving water limitations
  - Receiving water limitations for total coliform related to the REC uses might be dropped from future permits. However, the SHELL use objectives in the Ocean Plan (for fecal coliform) may not change as a result of the Bacteria Policy, and could remain as receiving water limitations.
  - Receiving water limitations for enterococcus will likely remain. The 2012 USEPA 30-day geomean standards are similar (30-35 cfu/100 mL, depending on the risk level chose) to those that are already in the Ocean Plan.
  - Following the 2012 USEPA recommendation, enterococcus in 10% of samples within a 30-day period should not exceed 110-130 cfu/100 mL. This objective is slightly more lenient than the current “single sample maximum” for enterococcus of 104/100 mL in the Ocean Plan.
- Estero Bay is not currently listed as impaired for pathogens on the 303(d) list. If that changes in the future, the new Bacteria Policy may provide clarity to the Regional Board regarding whether to apply natural source exclusion in a TMDL.

#### Discharge to Chorro Creek

- Bacteria limits for the CMC WWTP discharge are equivalent to the Title 22 standards for recycled water, and are not governed by the (more lenient) current REC1 and REC2 Basin Plan objectives for fecal coliform. The Bacteria Policy does not set out to alter the Title 22 standards.
- Chorro Creek and downstream Morro Bay Estuary are already subject to the bacteria targets in the Pathogen TMDL. However, the targets are for fecal coliform. The Bacteria Policy may replace fecal coliform with E. coli as the REC1 and REC2 indicator test organism. Depending on how the SWRCB implements the Bacteria Policy, the Pathogen TMDL might have to be reopened to revise the targets and allocations.

#### Discharge to Morro Creek

- The new USEPA criteria for E. coli might supercede the Basin Plan objectives for fecal coliform for REC1 and REC2, and might become the governing objectives.

#### High flow exemptions

- High flow exemptions might shield the Morro Bay WRF from bacteria exceedances during some of the conditions when they expect to need a discharge option.

### Percolation Ponds

- The Bacteria Policy would not affect a WDR for percolation ponds.

### **Proposed Revision of US EPA Human Health Criteria**

USEPA recently updated its national recommended water quality criteria for human health for 94 chemical pollutants to reflect newer scientific information and EPA policies, including updated fish consumption rates.<sup>14</sup> The new recommended criteria are significantly lower, in some cases, than the current criteria and higher, in some cases. In order for these new criteria to be implemented in NPDES permits in California, they would need to be incorporated into the California Toxics Rule.

The updated criteria were compared to the current Morro Bay/Cayucos effluent data. Only three of the subject constituents that are monitored in effluent were detected (i.e., cyanide, bis (2-ethylhexyl) phthalate, and cyanide) and concentrations for two of them exceeded the proposed criterion. However, concentrations of the same two constituents exceed the *current* CTR criteria, so there would be no difference in constituents requiring effluent limits should the 2014 proposed criteria be adopted.

### **Water Rights**

There may be regulatory implications associated with a WRF discharge that increases surface flow in either Morro or Chorro Creek with the expectation that effluent can be diverted from the stream later as capacity to reclaim water is developed. Under California Water Code Section 1211, changes in the discharge or use of treated wastewater that result in decreasing the flows in a portion of a watercourse must be approved by the SWRCB Division of Water Rights. Review of a “Change Petition” will be conducted pursuant to Water Code Section 1700 et seq. The petitioner must include sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water and must include information about measures to protect fish and wildlife. State and federal resource agencies will evaluate the Change Petition regarding impacts of the diversion on state or federally listed species or their habitat. The origin of the water to be diverted (foreign or natural) bears upon the legal analysis of water rights in Change Petitions. It may be advisable for the City to consider whether a water rights decision (i.e., conferring rights to the effluent) is necessary before commencing to discharge to either Creek. The legal analysis of water rights will be more complicated if the facility influent represents a combination of extracted groundwater (i.e., from city wells) and imported water.

Challenges faced by the City of San Luis Obispo (SLO) in implementing their recycled water program serves as an example of this issue. As discussed above, SLO has dedicated a portion of its Water Reclamation Facility effluent to maintain a minimum flow of 2.5 cfs in San Luis Obispo Creek for in-stream beneficial uses, in-stream habitat uses in particular. This minimum dedicated discharge is included in SLO’s Water Reuse Project’s SWRCB ‘Permit for Change in

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<sup>14</sup> The supporting technical information for each of the affected constituents is available on an interactive website table at <http://water.epa.gov/scitech/swguidance/standards/criteria/current/hhdraft.cfm>.

Place and Purpose of Use' and is a required term and condition of the Biological Opinion issued by NOAA Fisheries. SLO and several other agencies, including DFG and NMFS, have completed studies on the creek examining habitat and the abundance of federally threatened anadromous steelhead (*Oncorhynchus mykiss*). A study completed for SLO in 2004 as part of their Water Reuse Project found steelhead in greater abundance than was observed in previous surveys. The results of this study supported an increase in the dedication of a minimum discharge to San Luis Obispo Creek from 1.7 cfs to 2.5 cfs for in-stream beneficial uses, in-stream habitat uses in particular. Consequently, SLO cannot fully utilize the reclaimed water generated as part of the Water Reuse Project.

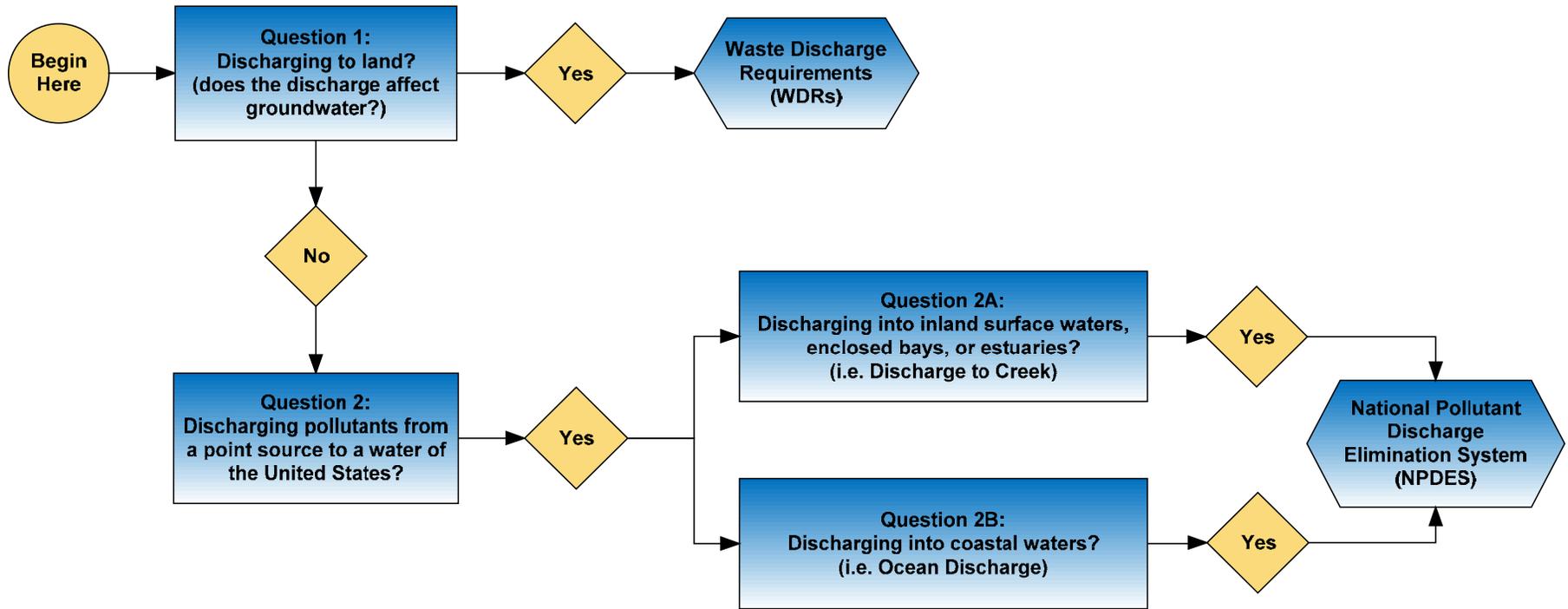
# **Attachment 1: Permit Application Procedures**

## **CATEGORIES OF PERMITS**

Discharges can be generally divided into the discharge of pollutants to surface waters or other types of discharges (i.e. waste discharges to land or discharges that affect groundwater).

Discharges to surface waters are regulated by permits issued under the National Pollutant Discharge Elimination System (NPDES) program while discharges of other types are permitted through Waste Discharge Requirements (WDR) under the Porter-Cologne Act. The figure below illustrates the distinction between the two categories of permits.

**“Which Permit Do I Need?”**



## WASTE DISCHARGE REQUIREMENTS (WDR)

Under the Porter Cologne Act, WDRs are required for types of discharges that affect groundwater, mainly the discharge of waste to land. Dischargers of pollutants must file a Report of Waste Discharge (ROWD) with the Regional Water Board to apply for Waste Discharge Requirements (WDRs) for these types of discharges. The application process for a WDR is discussed in this section.

### Required Information

Information that is required during the application process with a submittal of a ROWD for WDRs includes, but is not limited to, the following:<sup>15</sup>

- Facility information: the names, addresses, and telephone numbers of the facility owner(s), facility operator(s), and the owner(s) of the land;
- Reason for filing, such as whether the applicant proposes to change an existing discharge or create a new one;
- Location of the facility and discharge point, including the Assessor's Parcel Number(s) as well as the latitude and longitude;
- Description of the discharge by type and a complete characterization
  - a complete characterization includes, but is not limited to, design and actual flows, water supply, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods
- Site map, identifying the location of the facility;
- Planning information such as flood protection, erosion control, surface water control, and spill plan;
- Information and documents pertaining to the California Environmental Quality Act (CEQA), including the CEQA document, Environmental Impact Report, or Negative Declaration, if applicable; and
- Certification by the owner of the facility or the operator of the facility.

### Application Process

The entire process for developing and adopting the requirements normally takes about three months.<sup>16</sup> The steps to obtain WDRs are:

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<sup>15</sup> California Regional Water Quality Control Board, Central Coast Region. *Wastewater Permitting*  
[http://www.waterboards.ca.gov/centralcoast/publications\\_forms/forms/docs/form\\_200.pdf](http://www.waterboards.ca.gov/centralcoast/publications_forms/forms/docs/form_200.pdf)

<sup>16</sup> State Water Resources Control Board, Central Valley Region. *National Pollutant Discharge Elimination System (NPDES) - Individual Permits Information*.  
[http://www.waterboards.ca.gov/water\\_issues/programs/npdes/individual\\_permits.shtml](http://www.waterboards.ca.gov/water_issues/programs/npdes/individual_permits.shtml)

- i. File the Report of Waste Discharge (Form 200) with the necessary supplemental information with the Regional Water Board at least 120 days before beginning to discharge waste.
- ii. Regional Water Board staff reviews the application for completeness and may request additional information.
- iii. Once the application is complete, Regional Water Board staff determines whether to propose adoption of the WDRs, prohibit the discharge, or waive the WDRs.
- iv. If WDRs are proposed, staff prepares draft WDRs and distributes them to persons and public agencies with known interest in the project for a minimum 30 day comment period. Staff may modify the proposed WDRs based upon comments received from the discharger and interested parties.
- v. The Regional Board holds a public hearing with at least a 30 day public notification. The Regional Water Board may adopt the proposed WDRs or modify and adopt them at the public hearing by majority vote.

## **NATIONAL POLLUTANT DISCHARGER ELIMINATION SYSTEM**

As authorized by the CWA, the NPDES program protects water quality by regulating point sources that discharge pollutants directly into the waters of the United States, such as a lake, river, or ocean.

An individual NPDES permit is a permit specifically tailored to an individual facility. After receipt of a complete application, the permitting authority develops a permit for a particular facility based on the information contained in the application (e.g., type of activity, nature of discharge, receiving water quality). The permitting authority issues the permit to the facility for an effective period not to exceed five years. The discharger must reapply at least 180 days prior to the expiration date. The Regional Water Boards issue most of the individual permits in California while the State Water Board issues general permits that apply statewide and individual permits on a few occasions.

### **Required Information**

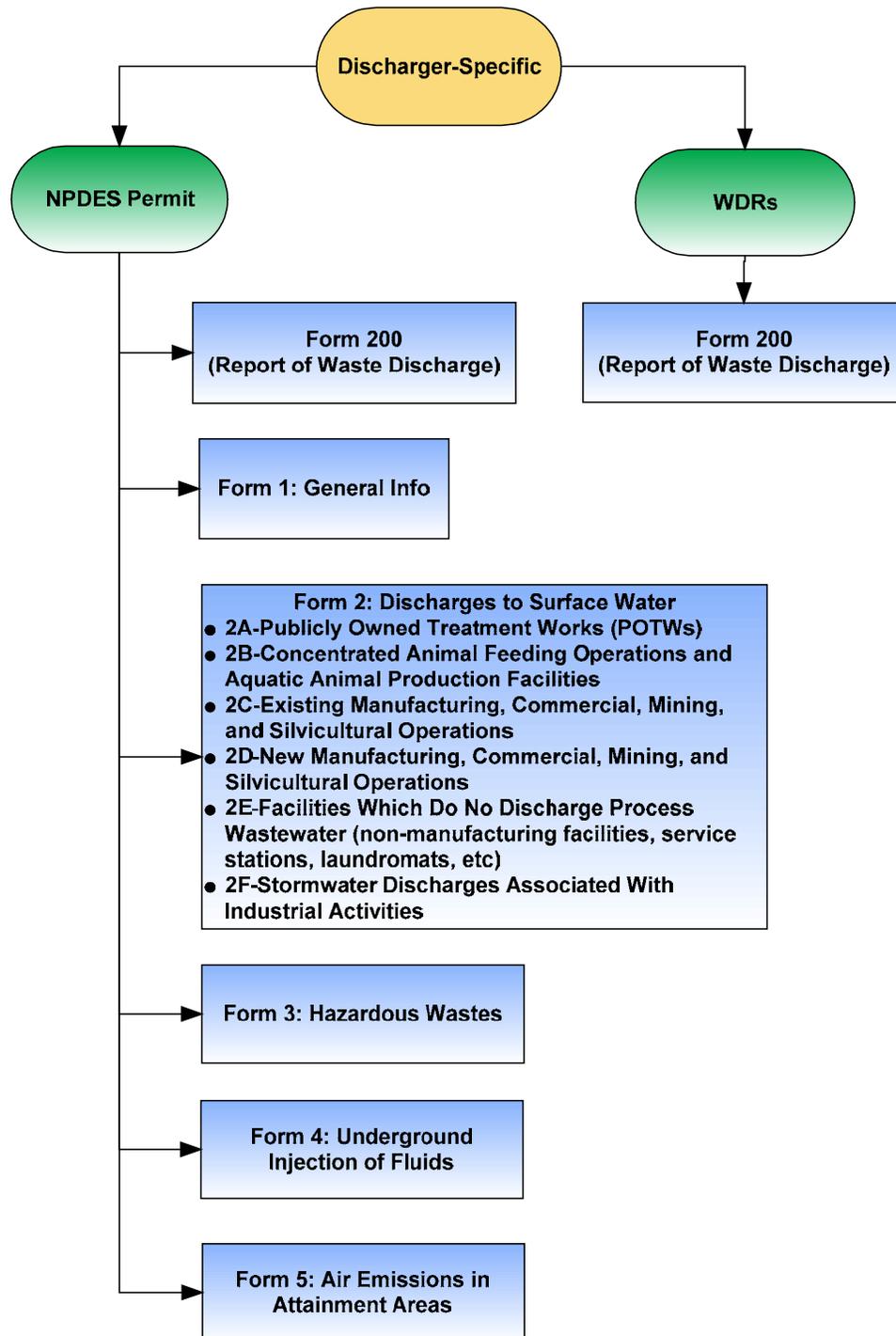
Submittal of an ROWD begins the application process for both WDRs and NPDES permits.<sup>17</sup> In addition to submitting the ROWD required information detailed in Section 2.1, a discharger applying for an NPDES permit must provide the following information:

- Site map identifying the surface water into which the discharge is proposed; and
- In addition, the discharger may be required to complete one or more of the following Federal NPDES permit application forms: Form 1, 2A, 2B, 2C, 2D, 2E, 2F, 3, 4, 5, Short Form A, and Standard Form A (see figure below).

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<sup>17</sup> California Regional Water Quality Control Board, Central Coast Region. *Wastewater Permitting*  
[http://www.waterboards.ca.gov/centralcoast/publications\\_forms/forms/docs/form\\_200.pdf](http://www.waterboards.ca.gov/centralcoast/publications_forms/forms/docs/form_200.pdf)

“Which Forms Do I Need?”<sup>18</sup>



<sup>18</sup> California Regional Water Quality Control Board, Central Valley Region. “Do I Need a Permit-What Forms Do I Need?” *Water Boards*. Last updated 1/02/2013.

## APPLICATION PROCESS

The process for application review and permit issuance by the Regional Water Board takes approximately six months, but may take longer depending upon the nature of the discharge. The typical steps to obtain an NPDES permit are:

- i. File Form 200 and the appropriate federal NPDES application forms with the Regional Board. Anyone proposing to discharge must file a complete application at least 180 days before beginning the activity.
- ii. Regional Board staff reviews the application for completeness and may request additional information
- iii. Once the application is determined to be complete, Regional Board staff forwards it to the US Environmental Protection Agency (USEPA) within 15 days. USEPA has 30 days to review the application for completeness and to request additional information from the discharger. After the request for additional information is met, USEPA has 30 days to forward comments to the Regional Board.
- iv. Regional Board staff determines if they should issue the NPDES permit or prohibit the discharge. If a permit should be issued, Regional Board staff prepares a proposed permit and forwards a copy to USEPA for review.
- v. USEPA review the application and has 30 days to object or submit comments to the Regional Board. USEPA may request an additional 60 days to review the proposed permit.
- vi. Following USEPA's review, Regional Board staff prepares a "Notice of Public Hearing" and mails it to the discharger with instructions for circulation. Regional Board staff also mails the public notice and proposed permit to persons and public agencies with known interest in the project. Regional Board staff may modify the proposed permit prior to the public hearing based on comments received from the discharger and interested parties.
- vii. The discharger must publish the notice for one day and submit proof of having complied with the instructions to the Regional Board within 15 days after the posting or publication.
- viii. The Regional Board holds a public hearing with at least 30 day public notification. The Regional Board may adopt the proposed permit or modify it and adopt it at the public hearing by majority vote. USEPA has 10 days to object to the adopted permit, and the objection must be satisfied before the permit becomes effective.

## Attachment 2: Beneficial Uses of Potential Receiving Waters and Applicable Water Quality Objectives

### Water Quality Objectives that Pertain to the Ocean Outfall (Estero Bay)

The beneficial uses of selected coastal waters in Region 3 are provided in Table 2-2 of the Basin Plan. The existing ocean outfall discharges into Estero Bay. The beneficial uses assigned to Estero Bay are as follows:

REC1	Water Contact Recreation
REC2	Non-Contact Water Recreation
SHELL	Shellfish Harvesting
IND	Industrial Service Supply
NAV	Navigation
MAR	Marine Habitat
COMM	Commercial and Sport Fishing
RARE	Rare, Threatened, or Endangered Species
WILD	Wildlife Habitat
MIGR	Migration of Aquatic Organisms

**Ocean Plan Objectives.** The Basin Plan assigns all current and future provisions of the Ocean Plan and the Thermal Plan<sup>19</sup> to all open coastal waters in their jurisdiction. Consequently the majority of the water quality objectives that governs discharges to Estero Bay are contained in the Ocean Plan. With the exception of REC1, REC2, and SHELL, water quality objectives in the Ocean Plan are not explicitly assigned to the beneficial uses listed above. The constituent classes addressed by the Ocean Plan are listed below.

#### Physical Characteristics (narrative objectives)

- Floating particulates<sup>20</sup>
- Oil and Grease<sup>5</sup>
- Light
- Deposition of inert solids

#### Chemical Characteristics (narrative objectives)

- DO, pH<sup>5</sup>, dissolved sulfide (allowable change from natural conditions)

<sup>19</sup> The Thermal Plan is not addressed in this memorandum.

<sup>20</sup> Section III. *Program of Implementation* of the Ocean Plan assigns numeric effluent limits for POTWs for Grease & Oil, Settleable Solids, Turbidity, and pH.

- Sediment quality (several metals and organics, ammonia, toxicity, radioactivity)
- Nutrients (disallows “objectional aquatic growths” or degradation of indigenous biota)
- Protection of Marine Aquatic Life<sup>21</sup> (numeric objectives)
  - Inorganics (arsenic, cadmium, chromium, copper, lead, nickel, selenium, silver, zinc, cyanide, total chlorine residual)
  - Ammonia
  - Toxicity
  - Organic compounds (5 constituents)
  - Radioactivity
- Protection of Human Health<sup>22</sup> (numeric objectives)
  - Noncarcinogens (20 constituents)
  - Carcinogens (42 constituents)

#### Biological Characteristics (narrative objectives)

- Three objectives addressing degradation of marine communities and quality of fish and shellfish for human consumption)

#### Radioactivity (narrative objective)

**Basin Plan Objectives for Ocean Water.** The Basin Plan assigns objectives for dissolved oxygen, pH and radioactivity to all ocean waters that differ from those in the Ocean Plan. In addition, the Basin Plan identifies specific numeric objectives for the MAR and SHELL beneficial uses.

#### Objectives for all Ocean Waters

- DO (numeric range)
- pH (numeric range)
- Radioactivity (narrative objective)

#### Objectives for MAR

- pH (allowable range)
- DO (numeric threshold)
- Metals (numeric objectives for 7 metals)

#### Objectives for SHELL

- Chromium (numeric objective)
- Bacteria (numeric objectives for total coliform)

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<sup>21</sup> Expressed as 6-month medians, daily maxima, and instantaneous maxima

<sup>22</sup> Expressed as 30-day averages

## Water Quality Objectives that Pertain to Creek Discharge

Beneficial uses for inland surface waters in Region 3 are provided in Table 2-1 of the Basin Plan, and are tabulated below. The beneficial uses assigned to Chorro Creek and Morro Creek are slightly different. The EST use is assigned to Morro Creek, but not Chorro Creek. It is not clear why the EST use is assigned to Morro Creek as there is no apparent estuarine habitat at the mouth of Morro Creek. Although Chorro Creek itself is not assigned the EST beneficial use, discharges to Chorro Creek would be evaluated with respect to their potential downstream effects on Morro Bay Estuary. This apparent disconnect could be discussed with Regional Board staff if one of these discharge scenarios were to be implemented. The BIOL use is assigned to Chorro Creek, but not Morro Creek.

### Beneficial Uses Assigned to Morro and Chorro Creeks in the Region 3 Basin Plan

USE		Morro Creek	Chorro Creek
REC1	Water Contact Recreation	X	X
REC2	Non-Contact Water Recreation	X	X
MUN	Municipal and Domestic Supply	X	X
AGR	Agricultural Supply	X	X
COMM	Commercial and Sport Fishing	X	X
RARE	Rare, Threatened, or Endangered Species	X	X
COLD	Cold Freshwater Habitat	X	X
WARM	Warm Freshwater Habitat	X	X
SPWN	Spawning, Reproduction, and/or Early Development (Fish)	X	X
MIGR	Migration of Aquatic Organisms	X	X
WILD	Wildlife Habitat	X	X
FRESH	Freshwater Replenishment	X	X
GWR	Ground Water Recharge	X	X
EST	Estuarine Habitat	X	
BIOL	Preservation of Biological Habitats of Special Significance		X

**California Toxics Rule (CTR).** Numeric objectives for several dozen “Priority Pollutants,” that apply to all inland waters, enclosed bays, and estuaries in California, were promulgated by USEPA in 2000 in the CTR<sup>23</sup>. CTR criteria are divided into several categories reflecting water quality required to avoid (1) acute and chronic toxicity for aquatic organisms, and (2) human health impacts from consumption of water and/or aquatic organisms; separate aquatic life criteria were developed for freshwater (streams, lakes) and salt water (enclosed bays and estuaries). The categories of criteria in the CTR that pertain to *freshwater with the MUN use* are pertinent to discharges to Morro Creek or Chorro Creek and are as follows:

- Freshwater Aquatic Life: Acute (32 constituents)

<sup>23</sup> Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule Federal Register / Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations. Adding Section 131.38 to 40 CFR

- Freshwater Aquatic Life: Chronic (30 constituents)
- Human Health: Consumption of Water & Organisms (90 constituents)

CTR criteria are implemented using the procedures described in the 2005 Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Policy (SIP). The SIP addresses matters such as monitoring requirements, test procedures and other compliance determinations, compliance schedules, water effect ratios (WER), metal translators, dilution and mixing zones, and derivation of effluent limits.

**Basin Plan Objectives.** The Basin Plan assigns Title 22 drinking water standards to all surface waters with the MUN use. Consequently discharges to either Morro Creek or Chorro Creek will be evaluated with regard to whether they cause exceedances of the Maximum Concentration Limits (MCLs) from Title 22 in receiving water. In addition, the Basin Plan assigns three other categories of objectives that are pertinent to discharges to one or both of the creeks: (1) general objectives that apply to all inland waters, (2) specific objectives for several other beneficial uses (AGR, REC1, REC2, COLD, WARM, SPWN), and (3) surface water objectives for salts that apply specifically to Chorro Creek. These Basin Plan objectives are outlined below.

#### General Objectives

- Color (allowable change from natural)
- Narrative objectives (prohibiting nuisance or adverse effect on beneficial uses)
  - Taste and Odors, Floating material, Suspended matter, Settleable Material, Biostimulatory Substances, Suspended Sediment
  - Temperature (narrative applies only to inland surface water)
  - Toxicity
  - Pesticides (narrative, except that total OC pesticides must not be detectable)
- pH (allowable range)
- Dissolved oxygen (numeric limit)
- Unionized ammonia (numeric limit)
- Other organics (numeric limits for methylene blue activated substances, phenols, PCBs and phthalate esters)

#### Objectives for MUN

- pH (allowable range)
- Title 22 Primary and Secondary Maximum Concentration Limits (MCL)
- Phenol (numeric limit)

#### Objectives for AGR

- pH (allowable range)
- Dissolved oxygen (numeric limit)

- Irrigation Supply (numeric limits for 18 inorganics)
- Livestock Watering (numeric limits for 16 inorganics)

#### Objectives for REC1 and REC2

- pH (allowable range)
- Fecal coliform (numeric limits)

#### Objectives for COLD and WARM

- pH
- Dissolved oxygen (numeric limit)
- Temperature (allowable change from natural)
- Toxic metals (cadmium, chromium, copper, lead, mercury, nickel, zinc)

#### Objectives for SPWN

- Cadmium (numeric limit)
- Dissolved oxygen (numeric limit)

#### Surface Water in Chorro Creek

- TDS, Cl, SO<sub>4</sub>, B, Na (annual means)

### **Water Quality Objectives that Pertain to Groundwater**

Discharge to percolation ponds would be considered by the Regional Board as a discharge to groundwater. Table 2-3 and Figure 2-2 in the Basin Plan identify the groundwater basins in Region 3. Morro Creek is in the Morro Valley Basin (Basin 3-41). Chorro Creek is in the Chorro Valley Basin (Basin 3-42). The beneficial uses assigned to *all groundwater* in Region 3 (except to the Soda Lake Sub-basin) are as follows<sup>24</sup>:

MUN	Municipal and Domestic Supply
AGR	Agricultural Supply
IND	Industrial Service Supply

In addition to the MUN and AGR objectives, the Basin Plan assigns objectives for salts and nitrogen (*total nitrogen*, not nitrate) to selected groundwater basins in the Central Coast Region; the Chorro Valley Basin is one of these basins. Although at the time of this writing, discharge to percolation ponds in the Chorro Valley Basin was not being considered; the groundwater objectives for the Chorro Valley Basin are included in the list below.

#### Objectives for MUN (for groundwater)

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<sup>24</sup> The Basin Plan does not include a table assigning beneficial uses to individual groundwater basins (as it does for many coastal and inland waters). Instead, at the beginning of Chapter 2, the Basin Plan indicates in a narrative that all groundwater in Region 3 is suitable for the MUN, AGR, and IND uses.

- Bacteria (7-day median for coliform bacteria)
- Title 22 Primary and Secondary Maximum Concentration Limits (MCL)

#### Objectives for AGR

- pH (allowable range)
- Dissolved Oxygen (numeric limit)
- Irrigation Supply (numeric limits for 18 inorganics)
- Livestock Watering (numeric limits for 16 inorganics, including for “Nitrate+Nitrite” and “Nitrite”)<sup>25</sup>

#### Objectives for Chorro Valley Basin

- TDS, Cl, SO<sub>4</sub>, B, Na, N (numeric limits, medians based on “data averages”)

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<sup>25</sup> The Livestock Watering limits in Table 3-4 of the Basin Plan for “Nitrate+Nitrite” and for “Nitrite” are 100 mg/L and 10 mg/L, respectively.

## Attachment 3: Effluent Water Quality Evaluation

Effluent water quality was compared to water quality objectives for each type of receiving water (surface water, ocean, percolation ponds) to determine which constituents would have effluent limits in each type of discharge permit. An exceedance would mean that an effluent limit would be required. For discharges to Chorro or Morro Creek, effluent limits would be very similar to the water quality objective because there would be no dilution available. However, effluent limits for the Ocean discharge would be much higher than the water quality objectives due to a dilution factor of at least 133:1 being applied.

### DISCHARGE TO SURFACE WATER

Both Chorro Creek and Morro Creek are assigned the MUN use, so Title 22 MCLs were included in the suite of objectives for RPA. Concentrations of ten constituents in effluent exceeded the lowest applicable objective. Hardness was assumed to be 150 mg/L.

#### Comparison of Effluent Data with Water Quality Objectives Pertinent to Discharges to Creek

Constituent	Units	Detected Effluent Maximum	Basin Plan						Title 22	CTR <sup>[a]</sup>			Lowest Objective	Exceeds
			Table 3.4						MCL	Acute	Chronic	HH		
			MUN	Irrig Supply	Live-stock	WARM & COLD	SPWN	Chorro Creek						
<i>Constituents with concentrations likely to change based on the plant design/upgrades:</i>														
Ammonia (as N)	mg/L	ND <sup>[b]</sup>	0.03	-	-	-	-	-	-	-	-	-	0.025	Basin Plan MUN (unionized)
Nitrate + Nitrite (as N)	mg/L	10 <sup>[b]</sup>	-	-	100	-	-	-	10	-	-	-	10	MCL
<i>Constituents with concentrations that may incidentally change due to upgrades:</i>														
Antimony	µg/L	11	-	-	-	-	-	-	6	-	-	14	6	MCL X
Arsenic, Total	µg/L	1.5	50	100	200	-	-	-	10	340	150	-	10	MCL
Beryllium	µg/L	1.2	-	100	-	-	-	-	4	-	-	-	4	MCL
Cadmium, Total	µg/L	0.64	10	10	50	30	3	-	5	7.1	3.4	-	3	SPWN <sup>[c]</sup>
Chromium III, Total	µg/L	1.8	-	100	1,000	-	-	-	50	2,420	289	-	50	MCL
Chromium Total	µg/L	2.6	50	100	1,000	50	-	-	50	2,420	289	-	50	MCL

Constituent	Units	Detected Effluent Maximum	Basin Plan						Title 22	CTR <sup>[a]</sup>			Lowest Objective Exceeds		
			Table 3.4						MCL	Acute	Chronic	HH			
MUN	Irrig Supply	Live-stock	WARM & COLD	SPWN	Chorro Creek										
Chromium VI, Total	µg/L	2.6	-	100	1,000	-	-	-	10	16	11	-	10	MCL	
Copper, Total	µg/L	22	-	200	500	30	-	-	1,300	21	13	1,300	13	CTR Chronic	X
Cyanide	µg/L	94	-	-	-	-	-	-	150	22	5.2	700	5.2	CTR Chronic	X
Lead, Total	µg/L	1.8	50	5,000	100	30	-	-	15	137	5.3		5.3	CTR Chronic	
Mercury	µg/L	0.088	2	-	10	0.2	-	-	2	-	-	0.05	0.05	CTR HH	X
Nickel, Total	µg/L	4.3	-	200	-	400	-	-	100	661	74	610	74	CTR Chronic	
Selenium, Dissolved	µg/L	2.7	10	20	50	-	-	-	50	-	5.0	-	5	CTR Chronic	
Selenium, Total	µg/L	2.7	10	20	50	-	-	-	50	-	-	-	10	MUN	
Silver, Total	µg/L	4.6	50	-	-	-	-	-	100	8.2	-	-	8.2	CTR Acute	
Zinc, Total	µg/L	71	-	2,000	25,000	200	-	-	5,000	169	169	-	169	CTR Chronic <sup>[d]</sup>	
2,3,7,8-TCDD (dioxin)	µg/L	1.8E-07	-	-	-	-	-	-	3E-05	-	-	1.3E-08	1.3E-08	CTR HH	X
Bis(2-ethylhexyl) Phthalate	µg/L	8.2	4	-	-	-	-	-	4	-	-	1.8	1.8	CTR HH	X
Toluene	µg/L	0.28	-	-	-	-	-	-	150	-	-	6,800	150	Primary MCL	
Halomethanes <sup>[e]</sup>	µg/L	0.25	-	-	-	-	-	-	80	-	-	-	80	Primary MCL	
Radionuclides – gross alpha	pCi/L	3.79	-	-	-	-	-	-	15	-	-	-	15	Primary MCL	

Constituent	Units	Detected Effluent Maximum	Basin Plan						Title 22	CTR <sup>[a]</sup>			Lowest Objective	Exceeds
			Table 3.4						MCL	Acute	Chronic	HH		
			MUN	Irrig Supply	Live-stock	WARM & COLD	SPWN	Chorro Creek						
Radionuclides – gross beta	pCi/L	19	-	-	-	-	-	-	[f]	-	-	-	[f]	Primary MCL
pH	SU	7.3-7.9	6.5-8.5						-	-	-	-	6.5-8.5	Basin Plan [g]
<i>Constituents with concentrations that are not expected to change due to plant upgrades:</i>														
Boron	mg/L	0.4 <sup>[h]</sup>	-	0.75	5	-	-	0.2	-	-	-	-	0.2	Chorro Ck X
Chloride	mg/L	369 <sup>[h]</sup>	-	-	-	-	-	50	250	-	-	-	50	Chorro Ck X
Sodium	mg/L	223 <sup>[h]</sup>	-	-	-	-	-	50	-	-	-	-	50	Chorro Ck X
Sulfate	mg/L	-	-	-	-	-	-	50	250	-	-	-	50	Chorro Ck
TDS	mg/L	1,077 <sup>[i]</sup>	-	-	-	-	-	500	500	-	-	-	500	Chorro Ck X

[a] CTR metals criteria for cadmium, chromium III, copper, lead, nickel, silver, and zinc were calculated assuming a creek hardness of 150 mg/L. This is greater than the Basin Plan limit for “soft” water (100 mg/L), therefore “hard” Basin Plan objectives were applied.

[b] Adjusted based on anticipated future effluent quality from new WRF (Tertiary-2.2 for unrestricted reuse per Title 22 Regulations).

[c] Cadmium in effluent would exceed the “soft” Basin Plan objective for SPWN of 0.4 µg/L.

[d] Zinc in effluent would exceed the “soft” Basin Plan objective for WARM & COLD of 4 µg/L.

[e] Halomethanes are defined in the Ocean Plan as the sum of bromoform, methyl bromide (bromomethane), and methyl chloride (chloromethane). However, the MCL of 80 µg/L is for trihalomethanes, defined in Title 22 as the sum of bromoform, chloroform, dibromochloromethane, and dichlorobromomethane.

[f] The Title 22 primary MCL for radionuclides – gross beta is 4 mrem/yr, while the effluent data are in units of pCi/L. The individual emitters must be converted from pCi/L to mrem/yr before this comparison can be made.

[g] pH levels are currently very stable, however this could change under the new treatment system.

[h] Data are from six 24-hour composite samples taken between February 8, 2012 and February 14, 2012 (2012 Recycled Water Feasibility Study, Dudek, Draft March 9, 2012).

[i] Data from daily conductivity/TDS monitoring were provided from July 2012 through July 2013.

## DISCHARGE TO OCEAN

As noted above, data are compared to water quality objectives to determine if an effluent limit would be warranted. Effluent limits would actually be much greater than the objectives for this scenario since a dilution factor of 133:1 would be included in the effluent limit calculation.

### Comparison of Effluent Data with Water Quality Objectives in the Ocean Plan.

Constituent	Units	Detected Effluent Maximum	Chronic Toxicity Estimate	Human Health 30-Day Average	Marine Life 6-Month Median	Daily Max	Instant. Max	Lowest Objective	RP <sup>[a]</sup>
<i>Constituents with concentrations likely to change based on the plant design/upgrades:</i>									
Ammonia (as N)	mg/L	ND <sup>[b]</sup>	4	-	0.6	2.4	6	0.6	Marine Life 6-Month Med. [c]
Total Coliform	MPN/100mL	2.2 <sup>[b]</sup>	-	-	-	-	10,000	1,000	REC1 30-day 5-sample average [c]
Chronic Toxicity	TUc	10	-	-	-	1	-	1	Daily Max
<i>Constituents with concentrations that may incidentally change due to upgrades:</i>									
Antimony	µg/L	11	-	1,200	-	-	-	1,200	HH 30-Day Average
Arsenic, Total	µg/L	1.5	19	-	8	32	80	8	Marine Life 6-Month Med.
Beryllium	µg/L	1.2	-	0.033	-	-	-	0.033	HH 30-Day Average
Cadmium, Total	µg/L	0.64	8	-	1	4	10	1	Marine Life 6-Month Med.
Chromium III, Total	µg/L	1.8	-	190,000	-	-	-	190,000	HH 30-Day Average
Chromium VI, Total	µg/L	2.6	18	-	2	8	20	2	Marine Life 6-Month Med.
Copper, Total	µg/L	22	5	-	3	12	30	3	Marine Life 6-Month Med. X
Cyanide	µg/L	94	10	-	1	4	10	1	Marine Life 6-Month Med. X
Lead, Total	µg/L	1.8	22	-	2	8	20	2	Marine Life 6-Month Med.
Mercury	µg/L	0.088	0.4	-	0.04	0.16	0.4	0.04	Marine Life 6-Month Med.
Nickel, Total	µg/L	4.3	48	-	5	20	50	5	Marine Life 6-Month Med.
Selenium	µg/L	2.7	-	-	15	60	150	15	Marine Life 6-Month Med.
Silver, Total	µg/L	4.6	3	-	0.7	2.8	7	0.7	Marine Life 6-Month Med.

Constituent	Units	Detected Effluent Maximum	Chronic Toxicity Estimate	Human Health 30-Day Average	Marine Life 6-Month Median	Daily Max	Instant. Max	Lowest Objective	RP <sup>[a]</sup>
Zinc, Total	µg/L	71	51	-	20	80	200	20	Marine Life 6-Month Med.
2,3,7,8-TCDD (dioxin)	µg/L	1.8E-07	-	3.9E-09	-	-	-	3.9E-09	HH 30-Day Average X
Bis(2-ethylhexyl) Phthalate	µg/L	8.2	-	3.5	-	-	-	3.5	HH 30-Day Average
Chloroform	µg/L	0.61	-	130	-	-	-	130	HH 30-Day Average
Non-Chlorinated Phenolics <sup>[d]</sup>	µg/L	3.3	-	-	30	120	300	30	Marine Life 6-Month Med.
Toluene	µg/L	0.28	-	85000	-	-	-	85,000	HH 30-Day Average
Halomethanes <sup>[e]</sup>	µg/L	0.25	-	-	-	-	-	130	REC1 30-day 5-sample average

[a] The reasonable potential analysis was performed following the Ocean Plan method.

[b] Adjusted based on anticipated future effluent quality from new WRF (Tertiary-2.2 for unrestricted reuse per Title 22 Regulations). The current effluent maximum is 900 MPN/100mL with a 7-day median maximum of 50 MPN/100mL. These levels are expected to diminish with the treatment plant upgrades.

[c] The maximum concentrations are insufficient to perform the Ocean Plan RPA. Individual data points are necessary.

[d] Non-chlorinated phenolics include 2,4-Dimethylphenol, 4,6-Dinitro-2-Methylphenol, 2,4-Dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, and Phenol.

[e] Halomethanes are defined in the Ocean Plan as the sum of bromoform, methyl bromide (bromomethane), and methyl chloride (chloromethane).

Basin Plan objectives for ocean water (MAR and SHELL uses) were compared to effluent data with and without the Ocean Plan RPA procedure. The Basin Plan objective for cadmium was lower than that in the Ocean Plan, and exceeded by the effluent maximum concentration, however there was no reasonable potential for cadmium following the Ocean Plan method. It is unclear whether the metal nickel is appropriate to compare with a “nickel salts” objective from the Basin Plan. None of the Basin Plan objectives for MAR and SHELL uses would trigger reasonable potential following the Ocean Plan method.

#### Comparison of Effluent Data with Basin Plan Objectives for the Ocean

Constituent	Units	Detected Effluent Maximum	Basin Plan MAR use	Basin Plan SHELL use	Notes	RP <sup>[a]</sup>
<i>Constituents with concentrations likely to change based on the plant design/upgrades:</i>						
Total Coliform	MPN/100mL	2.2 <sup>[b]</sup>	-	70	Lower than Ocean Plan	[c]
<i>Constituents with concentrations that may incidentally change due to upgrades:</i>						
Cadmium, Total	µg/L	0.64	0.2	-	Lower than Ocean Plan	
Chromium Total	µg/L	1.8	50	10		
Copper, Total	µg/L	22	10	-		
Lead, Total	µg/L	1.8	10	-		
Mercury	µg/L	0.088	0.1	-		
Nickel salts	µg/L	(4.3 nickel)	2	-		
Zinc, Total	µg/L	71	20	-		

[a] The reasonable potential analysis was performed following the Ocean Plan method.

[b] Adjusted based on anticipated future effluent quality from new WRF (Tertiary-2.2 for unrestricted reuse per Title 22 Regulations).

[c] The maximum concentration is insufficient to perform the Ocean Plan RPA. Individual data points are necessary.

## DISCHARGE TO LAND

There were no effluent data to compare to the Basin Plan objectives for Chorro Valley Groundwater Basin (boron, nitrogen, TDS, sulfate, chloride, sodium). However, the maximum sum of ammonia-N and nitrate-N in the effluent dataset of 24 mg N/L (occurring in January 2011) would exceed the Basin Plan objective for nitrogen.

### Comparison of Effluent Data for Detected Constituents with Objectives Pertinent to Discharge to Groundwater (via Land)

Constituent	Units	Detected Effluent Maximum	Basin Plan			Title 22	Lowest Objective	Exceeds	
			Chorro Ground	Irrigation Supply	Livestock Watering	MCL			
<i>Constituents with concentrations likely to change based on the plant design/upgrades:</i>									
Nitrogen	mg/L	10 <sup>[a]</sup>	5	-	-	-	5	Basin Plan Chorro Groundwater	X
Nitrate + Nitrite (as N)	mg/L	10 <sup>[a]</sup>	-	-	100	10	10	Primary MCL	
Total Coliform	MPN/100mL	2.2 <sup>[a]</sup>	-	-	-	-	2.2	Basin Plan MUN 7-day median	
<i>Constituents with concentrations that may incidentally change due to upgrades:</i>									
Antimony	µg/L	11	-	-	-	6	6	Primary MCL	X
Arsenic, Total	µg/L	1.5	-	100	200	10	10	Primary MCL	
Beryllium	µg/L	1.2	-	100	-	4	4	Primary MCL	
Cadmium, Total	µg/L	0.64	-	10	50	5	5	Primary MCL	
Chromium III, Total	µg/L	1.8	-	100	1,000	50	50	Primary MCL	
Chromium VI, Total	µg/L	2.6	-	100	1,000	10	10	Primary MCL	
Copper, Total	µg/L	22	-	200	500	1,300	200	Irrigation Supply	
Cyanide	µg/L	94	-	-	-	150	150	Primary MCL	
Lead, Total	µg/L	1.8	-	5,000	100	15	15	Primary MCL	
Mercury	µg/L	0.088	-	-	10	2	2	Primary MCL	
Nickel, Total	µg/L	4.3	-	200	-	100	100	Primary MCL	
Selenium	µg/L	2.7	-	20	50	50	20	Irrigation Supply	
Silver, Total	µg/L	4.6	-	-	-	100	100	Secondary MCL	
Zinc, Total	µg/L	71	-	2,000	25,000	5,000	2,000	Irrigation Supply	

Constituent	Units	Detected Effluent Maximum	Basin Plan			Title 22	Lowest Objective		Exceeds
			Chorro Ground	Irrigation Supply	Livestock Watering	MCL			
2,3,7,8-TCDD (dioxin)	µg/L	1.8E-07	-	-	-	3E-05	3E-05	Primary MCL	
Bis(2-ethylhexyl) Phthalate	µg/L	8.2	-	-	-	4	4	Primary MCL	X
Toluene	µg/L	0.28	-	-	-	150	150	Primary MCL	
Halomethanes <sup>[b]</sup>	µg/L	0.25	-	-	-	80	80	Primary MCL	
<i>Constituents with concentrations that are not expected to change due to plant upgrades:</i>									
Boron	mg/L	0.4 <sup>[c]</sup>	0.2	0.75	5	-	0.2	Basin Plan Chorro Groundwater	X
Chloride	mg/L	369 <sup>[c]</sup>	250	-	-	250	250	Basin Plan Chorro Groundwater	X
Sodium	mg/L	223 <sup>[c]</sup>	50	-	-	-	50	Basin Plan Chorro Groundwater	X
Sulfate	mg/L	-	100	-	-	250	100	Basin Plan Chorro Groundwater	
TDS	mg/L	1,077 <sup>[d]</sup>	1,000	-	-	500	500	Secondary MCL	X

[a] Adjusted based on anticipated future effluent quality from new WRF (Tertiary-2.2 for unrestricted reuse per Title 22 Regulations). The current effluent maximum is 900 MPN/100mL with a 7-day median maximum of 50 MPN/100mL. These levels are expected to diminish with the treatment plant upgrades.

[b] Halomethanes are defined in the Ocean Plan as the sum of bromoform, methyl bromide (bromomethane), and methyl chloride (chloromethane). However, the MCL of 80 µg/L is for trihalomethanes, defined in Title 22 as the sum of bromoform, chloroform, chlorodibromomethane, and dichlorobromomethane.

[c] Data are from six 24-hour composite samples taken between February 8, 2012 and February 14, 2012 (*2012 Recycled Water Feasibility Study*, Dudek, Draft March 9, 2012).

[d] Data from daily conductivity/TDS monitoring were provided from July 2012 through July 2013.

## NON-DETECTED CONSTITUENTS IN EFFLUENT

### Constituents for which all Sample Results were Non Detects

Thallium	Bis(2-chloroethyl)Ether	gamma-BHC (Lindane)
1,1,1-Trichloroethane (1,1,1-TCA)	Bis(2-chloroisopropyl)Ether	Heptachlor
1,1,2,2-Tetrachloroethane	Carbon tetrachloride	Heptachlor epoxide
1,1,2-Trichloroethane (1,1,2-TCA)	Chlordanes (total) <sup>[a]</sup>	Hexachlorobenzene
1,1-Dichloroethylene (1,1-DCE)	Chlorinated Phenolics <sup>[b]</sup>	Hexachlorobutadiene
1,2-Dichloroethane (1,2-DCA)	Chlorobenzene	Hexachlorocyclopentadiene
1,2-Diphenylhydrazine	Chlorodibromomethane	Hexachloroethane
1,3-Dichloropropene	DDTs (total) <sup>[c]</sup>	Isophorone
1,4-Dichlorobenzene (p-DCB)	Dichlorobenzenes <sup>[d]</sup>	Methylene Chloride
2,4,6-Trichlorophenol	Dichlorobromomethane	Nitrobenzene
2,4-Dinitrophenol	Dieldrin	N-Nitrosodimethylamine (NDMA)
2,4-Dinitrotoluene	Diethyl Phthalate	N-Nitrosodi-n-Propylamine
2-Methyl-4,6-Dinitrophenol	Dimethyl Phthalate	N-Nitrosodiphenylamine
3,3-Dichlorobenzidine	Di-n-Butyl Phthalate	PAHs (total) <sup>[e]</sup>
Acrolein	Endosulfan I	PCBs (total) <sup>[f]</sup>
Acrylonitrile	Endosulfan II	Tetrachloroethylene (PCE)
Aldrin	Endosulfan Sulfate	Toxaphene
Benzene	Endrin	Tributyltin
Benzidine	Ethylbenzene	Trichloroethylene (TCE)
Bis(2-Chloroethoxy)Methane	Fluoranthene	Vinyl Chloride

[a] Total chlordanes include a-chlordane, a-chlordene, cis-nonachlor, gamma-chlordane, gamma-chlordene, oxychlordane, and trans-nonachlor.

[b] Chlorinated phenolics include 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, pentachlorophenol, and 2,4,6-trichlorophenol.

[c] DDTs includes 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

[d] Dichlorobenzenes includes 1,2-Dichlorobenzene and 1,3-Dichlorobenzene.

[e] PAHs includes Acenaphthene, Anthracene, Benzo(a)anthracene, Benzo(a)Pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluorene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene.

[f] Total PCBs include aroclors 2016, 1221, 1232, 1242, 1248, 1254, and 1260.

## OBJECTIVES FOR WHICH EFFLUENT DATA WERE NOT AVAILABLE

It should be noted that not all of these constituents are required for compliance determination, and many are not commonly monitored by dischargers.

### Constituents with Applicable Criteria/Objectives and No Effluent Sample Data in Semi-Annual Reports

Constituent	Drinking Water		Basin Plan				CTR	Proposed CTR	Ocean Plan
	Title 22	PHG	MUN	AGR Irrigation/ Livestock	WARM & COLD/ SPWN	Chorro Crk			
<b>Bacterial<sup>[a]</sup></b>									
Enterococcus							X		X
<b>Inorganics</b>									
Asbestos	X	X						X (MUN)	
Aluminum	X	X	X	X					
Barium	X	X	X						
Cobalt				X					
Fluoride	X	X		X					
Iron, dissolved	X			X					
Iron, total				X					
Lithium				X					
Manganese, dissolved	X			X					
Manganese, total				X					
Molybdenum				X					
Vanadium				X					
Arsenic, Dissolved	X	X	X	X				X <sup>[b]</sup>	X
Cadmium, Dissolved	X	X	X	X	X			X <sup>[b]</sup>	X
Chromium III, Dissolved	X			X				X (fresh) <sub>[b]</sub>	X
Chromium VI, Dissolved	X	X		X				X <sup>[b]</sup>	X
Copper, Dissolved	X	X		X	X			X <sup>[b]</sup>	X

Constituent	Drinking Water		Basin Plan					CTR	Proposed CTR	Ocean Plan
	Title 22	PHG	MUN	AGR Irrigation/ Livestock	WARM & COLD/ SPWN	Chorro Crk	SHELL			
Lead, Dissolved	X		X	X	X			X <sup>[b]</sup>		X
Nickel, Dissolved	X			X	X			X <sup>[b]</sup>		X
Silver, Dissolved			X					X <sup>[b]</sup>		X
Zinc, Dissolved				X	X			X <sup>[b]</sup>		X
<b>Nitrogen</b>										
Nitrate (as NO3) <sup>[c]</sup>	X		X							
Nitrite (as N)	X			X						
Nitrogen							X (ground)			
<b>Organics</b>										
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	X	X	X							
1,1-Dichloroethane (1,1-DCA)	X	X	X							
1,2,3-Trichloropropane	X	X								
1,2,4,5-Tetrachlorobenzene										X
1,2,4-Trichlorobenzene	X	X								X
1,2-Dibromo-3-chloropropane (DBCP)	X	X	X							
1,2-Dichloropropane	X	X	X					X	X	
1,2-Trans-Dichloroethylene	X							X	X	
2,4,5-TP (Silvex)	X	X	X							X
2,4,5-Trichlorophenol										X
2,4-Dichlorophenoxyacetic acid (2,4-D)	X	X	X							X
2,4-Dimethylphenol <sup>[d]</sup>								X	X	
2-Chloronaphthalene								X	X	

Constituent	Drinking Water		Basin Plan					CTR	Proposed CTR	Ocean Plan
	Title 22	PHG	MUN	AGR Irrigation/ Livestock	WARM & COLD/ SPWN	Chorro Crk	SHELL			
Benzo(b)Fluoranthene								X	X	
Alachlor	X	X								
alpha-BHC								X	X	
Atrazine	X	X	X							
Bentazon	X	X	X							
beta-BHC								X	X	
Bis(2-chloromethyl)Ether									X	
Bromoform								X	X	
Butylbenzyl Phthalate								X	X	
Carbofuran	X	X	X							
cis-1,2-Dichloroethylene	X	X	X							
Dalapon	X	X								
Di(2-ethylhexyl)adipate	X	X								
Diazinon										
Dinoseb	X	X								
Diquat	X	X								
Endosulfan Sulfate								X	X	
Endothal	X	X								
Endrin Aldehyde								X	X	
Ethylene dibromide (EDB)	X	X	X							
Glyphosate	X	X	X							
MBAS	X		X							
Methoxychlor	X		X							X
Methyl Bromide								X	X	

Constituent	Drinking Water		Basin Plan				CTR	Proposed CTR	Ocean Plan
	Title 22	PHG	MUN	AGR Irrigation/ Livestock	WARM & COLD/ SPWN	Chorro Crk			
Methyl tertiary butyl ether (MTBE)	X								
Molinate	X		X						
Monochlorobenzene	X		X						
Oxamyl	X								
Phenol <sup>[d]</sup>			X				X	X	
Picloram	X								
Simazine	X		X						
Styrene	X								
Thiobencarb	X		X						
trans-1,2-Dichloroethylene	X		X						
Trichlorofluoromethane (Freon 11)	X		X						
Xylenes	X		X						
<b>Radionuclides</b>									
Radium-226 + Radium-228	X								
Strontium-90	X								
Tritium	X								
Uranium	X								
<b>Ions</b>									
Bromate	X	X							
Chlorite	X	X							
Perchlorate									
Sulfate	X						X		
<b>Others</b>									
Haloacetic Acids (five) (HAA5)	X								

Constituent	Drinking Water		Basin Plan				CTR	Proposed CTR	Ocean Plan
	Title 22	PHG	MUN	AGR Irrigation/ Livestock	WARM & COLD/ SPWN	Chorro Crk			
Dissolved Oxygen			X						

[a] Effluent data for total coliform were collected 5 days per week, however the data were not included in the semi-annual reports used for this analysis. All total coliform was assumed to be fecal.

[b] CTR criteria is promulgated for total metals, however the dissolved metals objectives are also available.

[c] The nitrate-N sampling data suffices for nitrate compliance.

[d] Non-chlorinated phenolics monitoring was performed to comply with Ocean Plan objectives, however the CTR contains criteria for the individual constituents.

## Appendix F

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*Initial Findings on Grants and Strategy*  
Kestrel Consulting, September 2014



September 15, 2014

Project: Morro Bay Water Reclamation Facility Funding Strategy

City of Morro Bay  
595 Harbor Street  
Morro Bay, CA 93442

Attention: Mr. Robert Livick  
Public Services Director

Subject: Initial Findings on Grants and Strategy

Dear Mr. Livick:

As requested, Kestrel Consulting, Inc. conducted a review of grants and loans that may be available for planning and construction of a Water Reclamation Facility (Project) at one of two locations within San Luis Obispo County in the next 1-2 years. The goals of the Project are as follows<sup>1</sup>:

- Produce tertiary, disinfected wastewater in accordance with Title 22 requirements for unrestricted urban irrigation
- Distribute reclaimed wastewater for public and private landscape areas, agriculture, or groundwater recharge.
- Allow for onsite composting
- Design for energy recovery
- Design to treat contaminants of emerging concern in the future
- Design to allow for other possible municipal functions

Conceptual planning for the Project is underway and will continue into 2015. Construction could occur as soon as 2016, and the City is considering alternative project delivery options, such as design-build. To inform this effort, Kestrel was charged with addressing the following questions:

- What is the maximum amount of grants to be reasonably expected?
- What grants and loans are available now for the Project?
- Are there unique funding opportunities associated with either of the two sites?
- Does alternative project delivery pose any significant constraints on availability of grants or loans?
- What is a recommended approach to grants and strategy for Morro Bay?

#### Qualifications

Kestrel Consulting Inc., has assisted local governments in California with grants and loans for water, energy and environmental projects since 2000. We provide strategic planning and consultation around grants and loans, and expert assistance with funding proposals. We have secured over \$43 million in state and federal grants for our clients who are primarily located in

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<sup>1</sup> An excerpt from the Options Report (1/10/14)

coastal counties. We have also assisted clients with loans from the Clean Water State Revolving Fund and Safe Drinking Water State Revolving Fund. Our experience is focused on funding for water infrastructure, along with environmental efforts, including watershed restoration and climate change adaptation.

- **What is the maximum amount of grants to be reasonably expected?**

*The short answer is not more than 25% of the total project cost, and 10% is probably more realistic.*

Almost all state and federal grants require a matching contribution. The required match may be as little as 10% of the project cost, but more commonly, a required match is 50-75% of the total project cost. Note this is not a percentage of the grant amount, but rather the total project. So for example, if you had a \$50 million project and a 75% required match, the maximum grant would be \$12.5 million. However, in order for a grant proposal to be competitive, it is almost always necessary to exceed the minimum match requirement. Retroactive costs, such as planning or site acquisition, often cannot count toward the match, which is usually restricted to expenditures made during the period of the grant agreement.

- **What grants and loans are available now for the Project?**

#### Grants

Kestrel has done a complete assessment of state and federal grant programs that could potentially contribute to planning and/or construction of the Project, and there are very few grants available. The City of Morro Bay has the good fortune to:

- Not be economically disadvantaged
- Have low unemployment
- Be too large for “rural” eligibility
- Not be in Metropolitan Water District’s service area

These are all factors in being eligible for certain grants. Therefore, only the following grant programs are viable options for the Project.

#### FEDERAL GRANT PROGRAMS

##### US Bureau of Reclamation Title 16 Grant Program

The Title 16 grant program is the only federal grant of any significance that might be available for the City of Morro Bay. There are three prerequisites for the Title 16 construction grant: 1) the Project must be authorized by Congress for up to a specific dollar amount, 2) a feasibility study that meets specific requirements must be completed and approved by the Bureau, and 3) Congress must appropriate funds for the construction Project. This is a minimum three-year process.

The bad news is that many agencies are already in line for construction funding, *and* Congress has not authorized any new funding for construction projects since the Recovery Act of 2009. If Morro Bay were to be successful in steps 1, 2 and 3, then this grant program could potentially fund up to 25% of the project cost, up to \$20 million. The Title 16 federal grants require a minimum 75% match.

The Bureau must approve the feasibility study before a construction grant can be received. Having an approved feasibility study can also facilitate the appropriation by Congress.

Most years, the Bureau of Reclamation offers the WaterSMART: Title 16 Feasibility Study competitive grant program, which may contribute up to 50% of the cost of a feasibility study. These grants are capped at \$150,000 and require a 50% local match. Again, the bad news is that competition for these grants is tough. In the last round (2013) there were thirty applications and only 8 were funded (26%) in the 17 state western region.

#### Other WaterSMART Grants

The Bureau of Reclamation offers other types of WaterSMART grants most years. The majority of these grants are less than \$300,000 and they support whatever objective the Bureau is focusing on that year in the 17 western states. For example, in 2013 the focus was energy efficiency and sustainability in wastewater treatment. The Bureau awards a handful of larger WaterSMART grants each year – up to \$1,500,000 – however, Morro Bay is not likely to be competitive for these based on the size of the population, demographics and location.

As Project plans solidify, the City could potentially apply for a WaterSMART grant of up to \$300,000 for features of the Project that align with the Bureau's objectives and schedule for that particular year.

There are no other significant federal grants for construction available to Morro Bay.

#### STATE GRANT PROGRAMS

Most of California's major grant programs for water infrastructure originate from the sale of statewide water bonds, which have been approved by voters. Examples of these include the parks and water bonds, Propositions 40, 50, & 84. Funding from Propositions 40 and 50 has been completely exhausted, and Proposition 84 is 96% spent. A new statewide water bond, Proposition 1, will be on the ballot this November. The measure, upon voter approval, would enact the **Water Quality, Supply, and Infrastructure Improvement Act of 2014**. The \$7.15 billion bond will include funding for several grant programs that could provide some funds toward Project construction:

- \$810 million for expenditures on, and competitive grants and loans to integrated regional water management plan projects, and
- \$725 million for water recycling and advanced water treatment technology projects.
- \$2.7 billion for water storage projects - including underground storage, dams, reservoirs.

If the bond passes, then this funding would flow into two existing grant programs: the Department of Water Resources' (DWR) Integrated Regional Water Management Grant Program and the State Water Board's Water Recycling Facilities Grant Program. A new grant program would be established for the water storage funds. Grant guidelines would be revised or developed through a public process prescribed in the legislation. This would occur in early 2015, however, we might assume that the guidelines for the first two programs are likely to at least resemble their most recent iterations. In that case, it is realistic to expect that either one of these programs could potentially contribute \$1-3 million toward construction of a water reclamation facility or storage component. If voters approve the bond in November, the soonest competitive grant programs might open would be late 2015, with awards made in the first half of 2016. That is the earliest these new funds would be available.

The new water bond notwithstanding, the *only* state grant program that currently supports construction of water recycling facilities, and that *may* have construction funding available for the City of Morro Bay is the (Prop 84) Integrated Regional Water Management Grant Program. The Central Coast Region may still have up to \$6 million available in 2015 in this program, however, DWR is currently evaluating whether to award these funds to current applicants that requested drought emergency funding. It is also unclear that the Project will be at a sufficient state of readiness to be truly competitive.

Other state grants might support innovative stormwater features or public access or recreation features that might be included in a facility master plan. But these grants would likely be in the hundreds of thousands of dollars, and really depend on the design, timing and benefits of what is proposed.

California's electric utilities are required to increase the amount of renewable energy in their portfolios, including biogas from wastewater treatment. Waste-to-energy components of the Project may be eligible for Pacific Gas and Electric's Self-Generation Incentive Program, which provides a rebate per watt produced. The amount varies on the amount of energy produced and the location of the facility. The rebate program is authorized and funded through the end of 2015.

## LOANS

The Clean Water State Revolving Fund (CWSRF) loan program originates from federal funds that come to the State Water Board from the USEPA. The state administers the loan program and also contributes funds. Wastewater treatment projects are financed through CWSRF at the regular rate, which is determined at the time of the loan. The rate is typically  $\frac{1}{2}$  of the General Obligation bond rate. Throughout 2013 and 2014, the interest rate has been approximately 2%. The program will loan up to \$50 million per project. Communities that meet the "economically disadvantaged" criteria may be eligible for a portion of the loan principal to be "forgiven". The City of Morro Bay does not meet these criteria.

Because of California's drought, recycled water projects are currently eligible for a reduced interest rate on CWSRF loans. The interest rate is approximately 1% annually, and is available for applications submitted through December 2015. It is possible to use the CWSRF loans for both planning and construction. The application process is extensive, and completed environmental documents are required for construction loans, but applications are accepted year-round. CWSRF may also be used for loan guarantees.

The California Infrastructure and Economic Development Bank (IBank) has broad authority to issue tax-exempt and taxable revenue bonds, provide financing to public agencies, provide credit enhancements, acquire or lease facilities, and leverage State and Federal funds. The IBank's current relevant programs include the Infrastructure State Revolving Fund (ISRF) Program, Exempt Facility Revenue Bond Program, Governmental Bond Program. Infrastructure loans are available in amounts ranging from \$50,000 to \$25,000,000, with loan terms of up to 30 years. Interest rates are set on a monthly basis and currently range from 2-5%. Financing applications are continuously accepted.

- **Are there unique funding opportunities associated with either of the two sites?**

*The short answer is “not likely” but it’s too soon to tell. Much depends on the final design of the Project and if the Proposition 1 water bond is approved by voters.*

The two sites now in consideration are: Site B - Morro Valley Rancho Coalina and Site D - California Men’s Colony. The merits and opportunities associated with each site have been explored in the Final Options Report, and continue to be evaluated.

Generally speaking, a water reclamation facility at Site B could have a higher potential for uses of recycled water including groundwater recharge (storage). Proposition 1 includes a new competitive grant program for water storage projects. If the bond is approved, then this grant program is likely to have a preference for projects that reduce dependence on imported water. An example would be if the City of Morro Bay proposed to inject and store highly-treated recycled water in the aquifer and pump it out at a later date in-lieu of State Water Project water. With such a project and a competitive grant proposal, it is reasonable to think that the state could contribute up to 25% of the cost of construction.

A facility located at Site D might have different and potentially fewer uses for recycled water, but greater potential for cost-sharing among regional partners, as well as expanded waste to energy systems. Until this Project is defined more clearly, it is difficult to assess grants that might be site-specific.

- **Does alternative project delivery pose any significant constraints on availability of grants or loans?**

*The short answer is “no.”*

Most state and federal grant programs for water infrastructure do not allow private companies to receive grants directly. If suitable grants were identified, then the City would be the applicant. If funds were awarded, then the City would apply the grant toward the design-build contract costs.

The following types of organizations are eligible for CWSRF Loans: cities, counties, districts, joint powers authorities, state agencies, non-profits, and private entities indirectly. If a new organization/authority is established for the purpose of supporting a regional facility, then as long as it is one of these types of organizations, it would be eligible.

According to the State Water Board’s Policy for Implementing the CWSRF (May 2013), and confirmed by SWRCB staff, there are no limitations regarding alternative project delivery methods. The CWSRF may fund projects using the Design-Build process. In general the State Water Board looks at eligibility as “what is built”, not “how it’s built”.

I-Bank Loans are available to municipalities as well as some private businesses.

### **What is a recommended approach to grants and strategy for Morro Bay?**

- If the project schedule allows, initiate the process for Title 16 funding by meeting with your local Representative. Meet with Bureau of Reclamation officials to discuss the project relative to their objectives. Complete a Title 16 Feasibility Study. Even if the Title 16 funds are not initially available, this program may be useful for future phases of the Project.



- Many City Councils have passed resolutions of support for Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, to underscore the importance of this funding to local projects.
- If the Water Bond passes, it will be very important for the City to participate in development of guidelines for the key grant programs to ensure that the Project would be eligible. These meetings would occur in Sacramento in early 2015.
- Engage in the San Luis Obispo regional water management group that serves as the vehicle for Integrated Regional Water Management grants.
- Be aware of greenhouse gas emissions and energy impacts associated with different alternatives, as this is something that is evaluated and scored in almost all state funding.
- If the City would rather use a CWSRF loan than issue municipal bonds, initiate the loan application at least 9 months before funding is needed.
- Kestrel Consulting can assist with any of these steps, either in advisory capacity or more directly.

If you have any questions or need other information, please do not hesitate to call. I am looking forward to presenting this information to the City Council on October 14.

Sincerely,

KESTREL CONSULTING, INC.

Monica Reid

Principal Consultant



## Things to Know About Grants for Public Works Projects

Monica Reid, Principal Consultant

Kestrel Consulting, Inc.

9/15/14

### Overview of Grant Programs

Grants are generally made available by federal or state agencies for the express purpose of changing the “status quo”, “standard operating procedure”, or current behavior on a specific issue. Often grants are used to advance certain state or federal objectives, such as improving energy efficiency, reducing pollution or creating jobs. For example, grants may be offered for the purposes of removing an unsustainable imported water supply and replacing it with a more sustainable local or regional water supply. A few grant programs are more like “entitlements”, where funding is awarded to a city or a region based on a formula that might be tied to population or demographics. Most grants, however, are won through competition. Grant proposals are scored according to certain criteria. The proposals with the highest scores win.

Some state grant programs operate with a specific funding source, such as the Environmental License Plate Fund. In this case, additional fees for car registrations are collected and deposited into a special fund which is then distributed through grants to local agencies for environmental projects. However, most state grants originate from the sale of statewide bonds, which have been approved by voters. Examples of these include the parks and water bonds, Propositions 40, 50, & 84. Funding from Prop 40 & 50 has been exhausted, Prop 84 is almost gone, and the next statewide water bond, Proposition 1 will require general voter approval in November 2014.

### Grant Application Process

The process of applying for and securing a grant can take a significant amount of time. Preparing a competitive grant application can take 2-6 months depending on the complexity of the project and the information required by the grant program. Reviewing, scoring, and ranking grant proposals can take between 3-8 months, with another 1-2 months needed before final decisions are made. Another 2-4 months are needed to negotiate a final grant agreement or contract, at which time the applicant can begin work on the project. Therefore, it's not unusual for the grant application process to take between 12-18 months from start to finish.

In addition, grant programs are very competitive and the odds of success are generally low. For example California state agencies frequently receive 2-4 times as many grant applications as they have available funding. Sometimes it is necessary to apply more than once. For example, if a proposal receives a high score, but not high enough to be awarded a grant, the proposal might be revised and submitted the next year. Last, many grant programs have limits on who may apply. For example, the Integrated Regional Water Management Grant Program funded by Prop 84, and potentially by Prop 1, does not allow individual cities to apply on their own, but rather they must work through a regional consortium that submits a slate of projects for consideration from that region.

### Grants are not for “Business as usual”

Most grant programs aim to provide incentives to encourage cities to advance a specific objective and promote a different way of “doing business”. These programs reward projects that will demonstrate new, innovative approaches, or a new technology, or some other advancement in the field of interest. Since grants are also very competitive, an average “run of the mill” project is usually overlooked for funding. One of the best strategies for securing grants is to address a significant problem that is faced by many organizations, or to develop an innovative component to a project, or both.

### Grant Costs & Management

The cost to prepare a competitive grant proposal can range from \$10,000 to \$200,000 or more, depending upon the complexities and requirements of the grant program. The applicant must also provide a financial match, which can be 20%-75% or more of the total project cost. Administration and management of a grant can be very time consuming. Most overhead charges and administrative costs are not usually eligible for reimbursement. These costs must be covered by the applicant and can amount to 10%-20% of the total project cost.

The applicant must also possess adequate cash reserves to be able to “float” project costs until the funding agency provides reimbursement. Reimbursements can take from 1-4 months to be received and only cover up to 90% of the invoiced amount. The final 10% is paid, once the project has been completed and all lingering issues, such as contractor disputes or labor compliance issues are resolved to the funding agency’s satisfaction. In some cases, this may take up to two years. Some smaller local agencies have found this cash-flow issue to be a significant limitation that affects their ability to apply for certain grants.

Finally, some grants may have on-going monitoring and reporting requirements that can extend for years after the project is completed and all grant funds have been expended. The applicant is expected to cover these costs and provide this information on an annual basis.

### Kestrel Consulting Recommends This Approach

Taking into consideration all the issues and costs associated with grants, we recommend that the Public Services Department should use a systematic and strategic approach to decide when it’s appropriate to apply for a grant. First, assess what is needed by identifying a list of future projects and resource limitations. Next rely on staff and specialized consultants to stay informed on funding opportunities. When a funding opportunity appears to match up with an identified project or group of projects, an analysis should be performed at many levels to evaluate the likelihood of success and the costs and benefits of preparing an application. If the department decides to apply, the grant proposal may be developed by consultants, staff or more likely, a combination of both. If a grant is awarded to the department they may decide to manage it “in-house” or hire a contractor to manage it, depending upon the resource limitations of the department at that time. In conclusion, we recommend a strategic, thoughtful, systematic approach to identify needs, evaluate grant opportunities, and clearly weigh the likelihood of success before applying for grants.

	CFDA Number	Title	Agency/Office	Assistance Type	Median Award	Notes from Kestrel Consulting
1	10.054	Emergency Conservation Program	USDA/Farm Serv Agcy	C		n/a - funding and assistance to farmers to repair damaged farmland or install water conservation.
2	10.675	Nat'l Urban&Community Forestry Challenge	USDA/FS		\$180,000	n/a - focus on urban forests
3	10.693	Watershed Restoration&Enhancement Agree	USDA/Forest Service	B		n/a protect habitat and achieve USFS goals & obj
4	10.76	Water&Waste Disposal Systems for Rural Com	USDA/RUS	B,E,F	#VALUE!	Not eligible. population> 10,000
5	10.763	Emergency Community Assistance Grants	USDA/RUS	B		n/a - Drinking water program. Population >10,000
6	10.77	Water&Waste Disposal Loans&Grants	USDA/Rural Utilities Ser	B,E		Not eligible. population>10,000
7	10.901	Resource Conservation & Development	USDA/NRCS	K		n/a
8	10.902	Soil and Water Conservation	USDA/NRCS	K		n/a
9	10.923	Emergency Watershed Protection	USDA/NRCS	B	\$800,000	n/a
10	10.925	Agricultural Water Enhancement Program	USDA/NRCS	C		n/a - small grants to farmers
11	10.93	Regional Conservation Partnership Program	USDA/NRCS	B		n/a "on-farm improvements"
12	11.3	Public Works Development Facilities Program	DOC/EDA		N/A	not eligible due to low unemployment,high income
13	11.302	Planning Program&Local Tech Assist Program	DOC/EDA	B	\$83,000	does not align with EDA's current investment priorities
14	11.419	Coastal Zone Mgt Admin Awards	DOC/NOAA	A,B		only States may apply, supports Coastal Programs
15	11.42	Coastal Zone Mgt Estuarine Research Reserves	DOC/NOAA	B		not applicable for WWTP
16	11.469	Congressionally identified awards&projects	DOC/NOAA	B	N/A	n/a for water reclamation facility
17	12.101	Beach Erosion Control Projects	DOD/ACOE	K		n/a - not related to erosion
18	12.108	Snag&Clear for Flood Control (CAPsec208)	ACOE		50,000	n/a - not related to flood control
19	12.109	Protection Clearing Straightening Channels	ACOE			n/a - not related to this
20	12.13	Estuary Habitat Restoration Program	DOD/Army	B	N/A	n/a- restoration-centric
21	14.218	Community Dev Block Grants/Entitlement Gran	HUD	A	\$2.96 million	not likely due to income levels
22	14.703	Sustainable Communities Regional Planning	HUD/Office of Sustain	B		n/a - planning grants focused on multi-benefit

## Assistance Type:

A: Formula Grants

B: Project Grants

C: Direct Payments for a Specified Use

D:

E: Direct Loans

F: Guaranteed Insured/Loans

G:

H:

I : Use of Property, Facilities

J:

K: Advisory Services and Counseling

	CFDA Number	Title	Agency/Office	Assistance Type	Median Award	Notes from Kestrel Consulting
23	15.504	Title XVI Water Reclamation & Reuse	DOI/BuRec	A		Yes- see memo
24	15.506	Water Desalination R&D Program	DOI/BuRec	B	N/A	n/a - unless a new technology is piloted
25	15.511	Cultural Resources Mgt	DOI/BLM	B	N/A	n/a - not a cultural resources project
26	15.53	Water Conservation Field Services Program	DOI/BuRec	B		n/a - not "water conservation"
27	15.548	Reclamation Rural Water Supply Program	DOI/BuRec	B		Focused on rural drinking water supply.
28	15.554	Cooperative Watershed Mgt Program	Bureau of Reclamation	B	\$81,609	n/a - watershed groups
29	15.554	WaterSMART	DOI/BuRec	B	\$100,000	n/a for construction, possible for later add-ons
30	15.608	Fish & Wildlife Mgt Assistance	DOI/FWS	B		n/a
31	15.614	Coastal Wetlands Planning, Protec, Restoration	DOI/FWS	B		n/a
32	15.623	North American Wetlands Conservation Act	DOI/FWS		N/A	n/a
33	15.63	Coastal Program	DOI/FWS	B	\$13,000	small grants, TE Species focus, n/a
34	15.631	Partners for Fish & Wildlife Program	DOI/FWS	B	\$25,000	small grants n/a
35	15.655	Migratory Bird Monitoring, Assessment&Consrv	DOI/FWS	B		n/a
36	15.657	Endangered Species Conservation	DOI/FWS	B	N/A	n/a
37	15.669	Cooperative Landscape Conservation	DOI/FWS	B		planning for landscape-scale conservation
38	66.041	Climate Showcase Communities Grant Program	EPA/OAR	B	\$12,600	focus on GHG Reduction programs
39	66.202	Congressionally Mandated Projects	EPA/Office of CFO	B		"earmarks" - even these move through existing programs
40	66.418	Construction Grants for Wastewater Treatment	EPA/OW	B		defunct program, now CWSRF
41	66.424	Surveys, Studies, Investigations, Demos...	EPA/Office of Water	B		env justice, drinking water focus
42	66.436	Surveys, Studies, Investigations, Demos...	EPA/Office of Water	B		env. Justice focus, surveys
43	66.439	Targeted Watershed Grants	EPA/Office of Water	B		watershed focused, smaller grants
44	66.44	Urban Waters Small Grants	EPA/Office of Water	B	\$50,000	small grants for research
45	66.456	National Estuary Program	EPA/Office of Water	B		habitat focused

## Assistance Type:

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CFDA Number	Title	Agency/Office	Assistance Type	Median Award	Notes from Kestrel Consulting
46	66.458	Clean Water State Revolving Fund	EPA/Office of Water		Yes, through SWRCB, see memo
47	66.46	Nonpoint Source Implementation Grants	EPA/Office of Water	A	\$2.8 million not eligible
48	66.461	Regional Wetland Program Development Grant	EPA/Office of Water	B	n/a
49	66.462	Five-Star Restoration Program	EPA/Office of Water	B	\$25,000 n/a - small grants for restoration
50	66.472	Beaches Environ Assessment&Coastal Act	EPA/Office of Water	B	\$250,000 n/a, Grants for Monitoring Beaches
51	66.51	Surveys, Studies, Investigations and Spec Purp	EPA/ORD	B	n/a studies
52	66.611	Environmental Policy and Innovation Grants	EPA/Office of Adminis	B	small grants for env. Economics studies, no \$\$ in FY15
53	66.717	Source Reduction Assistance Grant Program	EPA		\$50,000 small grants, n/a
54	66.814	Brownfields Training, Research& Tech	EPA/OSWER	B	n/a for WRF
55	66.818	Brownfields Assessment & Cleanup	EPA/OSWER	B	possible if a Brownfield is the chosen site
56	97.039	Hazard Mitigation Grant Program	FEMA		N/A n/a
57	97.047	Pre-Disaster Mitigation Program	FEMA		N/A n/a
58		Aquatic Ecosystem Restoration (CAP sec 206)	ACOE		\$199,592 n/a
59		Beneficial Uses of Dredged Mat (CAPsec204)	ACOE		\$130,241 n/a
60		Community Based Marine Debris Preven&Rem	NOAA/MDP		\$75,000 n/a
61		Environmental Solutions for Communities	Nat'l Fish&Wildlife Foun		\$40,000 n/a
62		Land & Water Conservation Fund	DOI/NPS		\$85,000 n/a
63		Project Mods for Improvement of the Environ	ACOE		\$145,465 Only applies to ACOE structures
64		Small Flood Damage Reduc Prog (CAPsec205)	ACOE		\$191,023 n/a
65		Wetlands Program Development Grants	EPA/Office of Water		\$220,000 n/a
		<b><u>KESTREL ALSO RESEARCHED</u></b>			
		All State Water Board Grant Programs			
		All Dept. of Water Resources Grant Programs			
		All Resources Agency Programs			
		All California Energy Commission programs			
		All Cap and Trade Auction Revenue programs			
		All federal grant programs for water treatment/recycling			

Assistance Type:

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- G:
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# City of Morro Bay

Morro Bay, CA 93442

(805) 772-6200

[www.morro-bay.ca.us](http://www.morro-bay.ca.us)

November 7, 2014

Mayor Irons

Mayor Pro Tem Johnson

Councilpersons: Smukler, Leage and Johnson

C/O Jamie Boucher, City Clerk

595 Harbor St

Morro Bay CA 93442

Dear Honorable Mayor and Council:

As the Chairman of the Morro Bay Water Reclamation Facility Citizens Advisory Committee (WRFCAC) I was authorized to transmit to you the recommendation of the WRFCAC regarding your upcoming decision for the WRF siting preference.

The WRFCAC was able to receive the presentation by staff and John F. Rickenbach Consulting regarding Item C-2 on the November 5, 2014 WRFCAC agenda: *Presentation of City of Morro Bay New Water Reclamation Facility Project Comparative Site Analysis: Regional CMC Facility vs. Rancho Colina*. It is clear that the report is not yet complete since it is lacking the CMC engineering analysis and cost comparisons to the Rancho Colina site.

Based on information presented during item C-2 and the discussion that followed it became apparent that the siting decision is premature. Therefore, by unanimous vote (complete motion included below) of those committee members present (Steve Shively was absent), the WRFCAC recommends that the City Council take the following action:

1. Do not make a final decision on November 12, 2014 and instead defer the decision regarding the preferred site location until the WRFCAC can review the complete siting report and make a fully informed recommendation to City Council.
2. Direct staff to prepare final reports for a tentatively scheduled WRFCAC meeting on December 3, 2014.
3. Reschedule the City Council meeting for final review on or after December 9, 2014 so that the incoming Councilmembers are included in the deliberation and final decision.

FINANCE  
595 Harbor Street

ADMINISTRATION  
595 Harbor Street

FIRE DEPT.  
715 Harbor Street

PUBLIC SERVICES  
955 Shasta Avenue

HARBOR DEPT.  
1275 Embarcadero Road

CITY ATTORNEY  
595 Harbor Street

POLICE DEPT.  
870 Morro Bay Boulevard

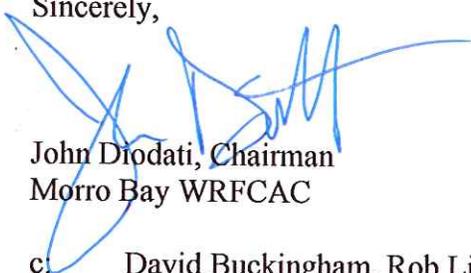
RECREATION & PARKS  
1001 Kennedy Way

November 7, 2014  
Page 2

The WRCCAC understands this is a difficult and vital decision to the future of the City and believes that complete information is required to make that decision. In order to accommodate these recommendations, the WRFCAC tentatively scheduled a meeting on Wednesday, December 3, 2014.

I anticipate I will be available and at the November 12, 2014 City Council meeting, should you have any questions.

Sincerely,



John Diodati, Chairman  
Morro Bay WRFCAC

cc: David Buckingham, Rob Livick, Jamie Boucher



## MEMORANDUM

To: John Rickenbach, JFR Consulting; Rob Livick, Rick Sauerwein, and Bruce Keogh, City of Morro Bay; Rick Koon, Cayucos Sanitary District

From: Michael Nunley, PE

Date: 11/6/2014

Re: Morro Bay WRF – CMC Capacity Evaluation

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Eric Casares, Carollo Engineers' lead project engineer for the California Men's Colony (CMC) Capacity Evaluation, provided the following update:

- Carollo is awaiting the data necessary to complete calibration of their model of the existing treatment plant process. However, sufficient data has been provided to allow for an initial analysis of the capacity of the existing facility.
- Based on this analysis, they have concluded that there is not sufficient capacity in the existing oxidation ditches (two units), secondary clarifiers (two units), tertiary filtration (8 units), or ultraviolet (UV) disinfection system to accommodate flows from the City of Morro Bay and Cayucos Sanitary District. The plant's contractual commitments and current flows will not leave enough capacity to accommodate either the City or District.
- At this time, Carollo has concluded that new oxidation ditches (two or three comparable to the current size), new clarifiers (two or three comparable to the current size), and at a minimum a doubling of the tertiary filters and UV disinfection system will be required. It is unclear at this time if the current site can accommodate these new facilities or if the facility would need to expand outside the current site. Site piping, earthwork, and supporting facilities will also be required.
- The solids dewatering system (centrifuges) has not yet been analyzed. Opportunities may be available to extend the processing time in order to minimize the number of new centrifuges that may be required.



AGENDA NO: C-2

MEETING DATE: 11/12/14

## Staff Report

**TO:** Honorable Mayor and City Council

**DATE:** November 5, 2014

**FROM:** David Buckingham, City Manager

**SUBJECT:** Adoption of Ordinance No. 589 Adding Section 5.04.275 to the Morro Bay Municipal Code Relating to the Time Limited Suspension and Refund of Penalties for Certain Businesses that Pay Business License Taxes Due and Owing

**RECOMMENDATION:**

Staff recommends the City Council adopt Ordinance No. 589 after reading the title only and waiving further reading.

**SUMMARY:**

Ordinance 589 was introduced at the Special Council meeting held on November 6, 2014. This is the legally required second reading for non-urgency ordinances. After the second reading, by title only with further reading waived, it is recommended the Council adopt the ordinance, which will then become effective on the 31<sup>st</sup> day after its adoption.

Prepared By: JB

Dept Review: \_\_\_\_\_

City Manager Review: \_\_\_\_\_

City Attorney Review: \_\_\_\_\_

**ORDINANCE NO. 589**

**AN ORDINANCE OF THE CITY COUNCIL OF THE  
CITY OF MORRO BAY, CALIFORNIA  
ADDING SECTION 5.04.275 TO THE MORRO BAY MUNICIPAL CODE  
RELATING TO THE TIME LIMITED SUSPENSION AND REFUND OF  
PENALTIES FOR CERTAIN BUSINESSES THAT PAY  
BUSINESS LICENSE TAXES DUE AND OWING**

THE CITY COUNCIL  
City of Morro Bay, California

**WHEREAS**, Morro Bay Municipal Code, Section 5.04.050 requires businesses, trades, professions, callings, and occupations pay license fees as established annually in the Business License Rate; and

**WHEREAS**, the City Council of the City of Morro Bay determined an audit of its business licensing program was appropriate and necessary so as to ensure the City those businesses required to obtain business licenses were doing so (the “Program”); and,

**WHEREAS**, on July 8, 2014, the City Council approved an agreement with Municipal Auditing Services, LLC (“MAS”) to conduct the audit of the City’s business licensing program for the past four years, which involves contacting all businesses doing business in the City to determine if they had obtained the necessary business licenses; and,

**WHEREAS**, MAS commenced the audit in August, 2014, and based upon its initial contacts with businesses doing business in the City, several community members indicated concerns with the Program’s implementation; and,

**WHEREAS**, City staff participated in a community forum, interacted with numerous businesses within the City regarding the Program’s implementation and determined many concerns were the result of downsizing in the City staff due to the recent significant national recession, which caused the City not to have the personnel and resources to actively monitor and administer its business license rules and regulations for several years; and,

**WHEREAS**, based upon the information City staff received from the City’s business community regarding the confusion and uncertainty generated by the Program, at the regular meeting of the City Council conducted on October 28, 2014, the City Manager recommended to the City Council and the City Council directed staff take the necessary steps to amend the Morro Bay Municipal Code to refund all penalties paid by businesses who have come into compliance with the City’s business licensing requirements since the audit was commenced and to suspend and refund all penalties for those businesses that come into compliance with the City’s business licensing requirements within ninety (90) days after the date the ordinance becomes effective.

**NOW, THEREFORE, the City Council of the City of Morro Bay does ordain as follows:**

**SECTION 1:** Section 5.04.275 is hereby added to the Morro Bay Municipal Code to read as follows:

Section 5.04.275      Limited time Suspension and Refund of Penalties.

- A. Notwithstanding any other provision of this title, the imposition of penalties, applicable to any person as set forth in section 5.04.270, shall be suspended, if, at any time between July 8, 2014, through March 13, 2015 (the “Amnesty Period”), that person responsible for payment of business license taxes in accordance with to this title pays all business license taxes then due and owing to the City.
- B. Within sixty days after the effective date of this section, City shall refund any penalties paid for failure to timely obtain a business license to any person who paid business license fees in accordance with to this title during the Amnesty Period.
- C. As of March 14, 2015, this section shall be repealed and of no further force and effect, unless otherwise provided by the City Council through an amendment to this section.

**SECTION 2:** This Ordinance shall take effect 30 days after its adoption. The City Clerk, or her duly appointed deputy, shall attest to the adoption of this Ordinance and shall cause this Ordinance to be published and posted in the manner required by law.

**INTRODUCED** at a special meeting the of the City Council of Morro Bay, held on the 6th day of November, 2014 by motion of Councilmember \_\_\_\_\_, seconded by Councilmember \_\_\_\_\_.

**PASSED AND ADOPTED** on the \_\_\_\_ day of \_\_\_\_\_, 2014, by the following vote:

AYES:  
NOES:  
ABSENT:

\_\_\_\_\_  
JAMIE L. IRONS, Mayor

ATTEST:

\_\_\_\_\_  
JAMIE BOUCHER, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
JOSEPH W. PANNONE, City Attorney



AGENDA NO: C-3

MEETING DATE: 11/12/14

## Staff Report

**TO:** Honorable Mayor and City Council

**DATE:** November 5, 2014

**FROM:** David Buckingham, City Manager

**SUBJECT:** Adoption of Ordinance No. 590 Adding Section 5.08.220 to the Morro Bay Municipal Code Relating to Requirements for Low Revenue Businesses to Obtain Business Licenses

**RECOMMENDATION:**

Staff recommends the City Council adopt Ordinance No. 590 after reading the title only and waiving further reading.

**SUMMARY:**

Ordinance 590 was introduced at the Special Council meeting held on November 6, 2014. This is the legally required second reading for non-urgency ordinances. After the second reading, by title only with further reading waived, it is recommended the Council adopt the ordinance, which will then become effective on the 31<sup>st</sup> day after its adoption.

Prepared By: JB

Dept Review: \_\_\_\_\_

City Manager Review: \_\_\_\_\_

City Attorney Review: \_\_\_\_\_

**ORDINANCE NO. 590**

**AN ORDINANCE OF THE CITY COUNCIL OF THE  
CITY OF MORRO BAY, CALIFORNIA  
ADDING SECTION 5.08.220 TO THE MORRO BAY MUNICIPAL CODE  
RELATING TO REQUIREMENTS FOR LOW REVENUE  
BUSINESSES TO OBTAIN BUSINESS LICENSES**

THE CITY COUNCIL  
City of Morro Bay, California

**WHEREAS**, Morro Bay Municipal Code, section 5.04.050 requires certain businesses, trades, professions, callings, and occupations to pay license fees as established annually in the Business License Rate Schedule; and

**WHEREAS**, based on recent community comments and concerns, at its meeting of October 28, 2014, the City Council of the City of Morro Bay passed a motion adopting staff's recommendation and directing staff to prepare an ordinance to amend the Morro Bay Municipal Code to require businesses that generate low annual revenue to still obtain a business license but only pay a minimal business license fee intended to cover some or all of the City's costs to process and issue the business license.

**NOW, THEREFORE, the City Council of the City of Morro Bay does ordain as follows:**

**SECTION 1:** Section 5.08.220 is hereby added to the Morro Bay Municipal Code to read as follows:

**5.08.220 – Low Revenue Business**

- A. Notwithstanding any other provision of this title and subject to subsection C. below, as of July 8, 2014, the regular business license tax set forth in the Business License Rate Schedule is suspended for any business that demonstrates it generates annual gross receipts of less than Seven Thousand Five Hundred Dollars (\$7,500.00) ("Low Revenue Business"), as shown through submittal of tax returns for its previous tax year or by other means acceptable to the Collector.
- B. The suspension set forth in subsection A., above, shall remain in effect until such time as the City Council may amend or repeal this section.
- C. Each Low Revenue Business shall obtain a current business license in accordance with this title and pay a license fee in accordance with the Business License Rate Schedule; provided, that the license fee for each Low Revenue Business shall not be greater than the amount necessary for the City to recover some or all of the costs incurred by the City in processing and issuing that business license.

- D. Any person who paid a business license tax for a Low Revenue Business on or after July 8, 2014, shall be entitled to receive a refund of the amount paid in excess of the license fee described in subsection C., above.

**SECTION 2:** This Ordinance shall take effect 30 days after its adoption. The City Clerk, or her duly appointed deputy, shall attest to the adoption of this Ordinance and shall cause this Ordinance to be published and posted in the manner required by law.

**INTRODUCED** at a special meeting the of the City Council of Morro Bay, held on the 6th day of November, 2014 by motion of Councilmember \_\_\_\_\_, seconded by Councilmember \_\_\_\_\_.

**PASSED AND ADOPTED** on the \_\_\_\_ day of \_\_\_\_\_, 2014, by the following vote:

AYES:

NOES:

ABSENT:

\_\_\_\_\_  
JAMIE L. IRONS, Mayor

ATTEST:

\_\_\_\_\_  
JAMIE BOUCHER, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
JOSEPH W. PANNONE, City Attorney



AGENDA NO: D-1

MEETING DATE: November 12, 2014

## Staff Report

**TO:** Honorable Mayor and City Council                      **DATE:** October 27, 2014

**FROM:** Eric Endersby, Harbor Director

**SUBJECT:** Introduction and First Reading of Ordinance No. 588 Amending Section 15.04.150 of the Morro Bay Municipal Code Relating to Commercial Fishing Vessel Slip Qualifications

### RECOMMENDATION

Staff recommends the City Council accept public testimony, move to waive reading of Ordinance 588 in its entirety, and introduce for first reading by number and title only, Ordinance 588.

### ALTERNATIVES

Council may elect not to make this change.

### FISCAL IMPACT

There is no fiscal impact associated with the adoption of this Ordinance.

### BACKGROUND

During Harbor Advisory Board (HAB) consideration of commercial fishing vessel slip waiver appeals this past March and June, the issue of slip qualifications was questioned by several commercial fishermen with regard to the method by which the City determines a vessel is "qualified" to obtain and retain a City slip.

Currently, per Morro Bay Municipal Code (MBMC) section 15.04.150 and Resolution 23-91, commercial fishermen must provide annual proof of \$1,000 worth of fish landing receipts or tickets for every net documented ton of their vessel on their Coast Guard documentation, or \$5,000 minimum in tickets. Alternately, to qualify fishermen can show proof of 90 days of fishing effort by evidence of landing tickets and/or fuel receipts.

### DISCUSSION

The intent of the current qualification requirement is to establish a vessel in a City commercial slip is indeed an active, working commercial fishing vessel. As currently written, using the vessel's net documented tonnage as the measuring stick provides no true realistic measure of a vessel's fishing capacity as net documented tonnage is determined by several factors, some of which have nothing to

Prepared By: EE

Dept Review: EE

City Manager Review: \_\_\_\_\_

City Attorney Review: \_\_\_\_\_

do with the vessel's carrying or fishing capability or capacity. Depending on the method in which the vessel was measured and documented by the Coast Guard, net documented tonnage can be deemed punitive for the purposes of the City's current qualification method when a smaller vessel has a large documented net tonnage.

Staff met with representatives of the commercial fishermen's organization, and as a result, they circulated a questionnaire to their members for input. On September 4, 2014, with those results in hand, staff brought this issue to the HAB.

HAB unanimously recommended City Council revise Morro Bay Municipal Code 15.04.150 eliminating reference to earnings by net ton, and insert a more simplified method as follows:

“Such use shall be verified by proof of vessels measuring 26 feet in length or less to qualify with fish tickets for \$5,000 per year, and for vessels measuring greater than 26 feet in length to qualify with fish tickets totaling \$10,000 per year.”

Ordinance 588, in redline format, contains both the original and new language as recommended by HAB and staff. It also includes updated language reflecting Fish and Wildlife's new name, as well as the applicability of Resolution 23-91 instead of Resolution 90-85. Resolution 23-91, which rescinded and replaced Resolution 90-85 and sets forth an alternate method of slip qualification based on proof of 90 days of fishing effort, remains unchanged and in effect with this proposed change.

### **CONCLUSION**

Making this revision will provide a simpler, more fair and consistent method of commercial slip qualification. Staff recommends Council accept public testimony and move to introduce Ordinance 588 for first reading by number and title only.

**ORDINANCE NO. 588**

**AN ORDINANCE OF THE CITY COUNCIL OF THE  
CITY OF MORRO BAY, CALIFORNIA  
AMENDING SECTION 15.04.150 OF THE MORRO BAY MUNICIPAL CODE  
RELATING TO COMMERCIAL FISHING VESSEL SLIP QUALIFICATIONS**

THE CITY COUNCIL  
City of Morro Bay, California

**WHEREAS**, Section 15.04.150 currently refers to vessels' net tonnage as a qualifying measuring guide to be eligible for a Morro Bay commercial slip; and

**WHEREAS**, net documented tonnage of a vessel in most cases does not truly represent the fishing potential of the vessel for qualification.

**NOW, THEREFORE, the City Council of the City of Morro Bay does ordain as follows:**

**SECTION 1:** Section 15.04.150 of the Morro Bay Municipal Code is hereby amended to read as follows:

A. "Vessels of a commercial nature" means vessels for which the state of California, Department of Fish and ~~Game~~Wildlife has issued a current commercial fishing license, and whose owner or operator holds a current commercial fishing license, and which, within the current calendar year, has been actively used for commercial fishing activities.

B. Such use shall be evidenced by one of the following: (i) for any vessel measuring 26 feet or less, gross earnings or fish sales totaling a minimum of \$5,000 per year must be provided, (ii) for any vessel measuring greater than 26 feet in length, gross earnings or fish sales totaling a minimum of \$10,000 per year must be provided, ~~proof that the vessel has grossed a minimum of one thousand dollars for each net ton capacity of the vessel, with a minimum of five thousand dollars or that~~(iii) the vessel has fished at least ninety days in the calendar year.

C. Gross earnings or fish sales shall be evidenced by state of California, Department of Fish and ~~Game~~Wildlife commercial fish receipts or by the official commercial fish receipts of other west coast states.

D. Proof of ninety days fishing shall be established as provided for in Resolution ~~90-8523-91~~ ~~or~~ as may be amended by the city council, except that use of float plans for qualification purposes is eliminated.

**SECTION 2:** This Ordinance shall take effect 30 days after its adoption. The City Clerk, or her duly appointed deputy, shall attest to the adoption of this Ordinance and shall cause this Ordinance to be published and posted in the manner required by law.

**INTRODUCED** at a regular meeting the of the City Council of Morro Bay, held on the 12th day of November, 2014 by motion of Councilmember \_\_\_\_\_, seconded by Councilmember \_\_\_\_\_.

**PASSED AND ADOPTED** on the \_\_\_\_ day of \_\_\_\_ , 2014, by the following vote:

AYES:

NOES:

ABSENT:

\_\_\_\_\_  
JAMIE L. IRONS, Mayor

ATTEST:

\_\_\_\_\_  
JAMIE BOUCHER, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
JOSEPH W. PANNONE, City Attorney