

City of Morro Bay

City Council Agenda

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.

**REGULAR MEETING
TUESDAY, MARCH 25, 2014
VETERANS MEMORIAL HALL - 6:00 P.M.
209 SURF ST., MORRO BAY, CA**

**Mayor Irons will be communicating by teleconference from the following location:
Phoenix Park Hotel, 520 North Capitol St. NW, Washington D.C. 20001
Meeting Room: Federal City (2nd Floor)**

ESTABLISH QUORUM AND CALL TO ORDER

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CLOSED SESSION REPORT

MAYOR & COUNCILMEMBERS' REPORTS, ANNOUNCEMENTS & PRESENTATIONS

PUBLIC PRESENTATIONS – None

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 MARCH 11, 2014; (ADMINISTRATION)

RECOMMENDATION: Approve as submitted.

A-2 APPROVAL OF MINUTES FOR THE SPECIAL CITY COUNCIL MEETING HELD ON MARCH 11, 2014; (ADMINISTRATION)

RECOMMENDATION: Approve as submitted.

A-3 APPROVAL OF MINUTES FOR THE REGULAR CITY COUNCIL MEETING HELD ON MARCH 11, 2014; (ADMINISTRATION)

RECOMMENDATION: Approve as submitted.

A-4 AUTHORIZATION TO FILL ONE RECREATION AND PARKS DEPARTMENT MAINTENANCE WORKER II POSITION – CONSOLIDATED MAINTENANCE; (RECREATION & PARKS)

RECOMMENDATION: Authorize an internal/external recruitment for a Maintenance Worker II position.

A-5 REQUEST FOR APPROVAL OF ASSIGNMENT OF LEASE AGREEMENT FOR LEASE SITE 93-95/93W-95W FROM THE HELD FAMILY TRUST AND THE SMITH W AND HANNAH W HELD FAMILY TRUST TO HARBOR CENTER LLC; (HARBOR)

RECOMMENDATION: Approve the attached Assignment and Assumption of the Lease Agreement for Lease Site 93-95/93W-95W from the Held Family Trust and the Smith W and Hannah W Held Family Trust to the Harbor Center LLC.

A-6 PROCLAMATION DECLARING THE MONTH OF APRIL “FAIR HOUSING MONTH; (PUBLIC SERVICES)

RECOMMENDATION: Approve as submitted.

B. PUBLIC HEARINGS

B-1 INTRODUCTION AND FIRST READING OF ORDINANCE 585; AMENDMENT TO TITLE 17 (ZONING TEXT AMENDMENT - #A00-013 AMENDING SECTION 17.48.320 SECONDARY UNIT ORDINANCE); (PUBLIC SERVICES)

RECOMMENDATION: Open the public hearing and receive testimony; accept the Planning Commission recommendation to adopt the proposed Ordinance amendment; and waive the reading of Ordinance 585 in its entirety and introduce for first reading by title and number only.

C. UNFINISHED BUSINESS - None

D. NEW BUSINESS

D-1 REVIEW AND DISCUSSION OF DRAFT URBAN FOREST MANAGEMENT PLAN; (PUBLIC SERVICES)

RECOMMENDATION: Review the Urban Forest Management Plan; provide comments and direct staff to return with a Resolution adopting the Urban Forest Management Plan and implementation measures.

D-2 CONSIDERATION OF ESTABLISHING AN AID TO AGENCIES PROCESS; (ADMINISTRATIVE SERVICES)

RECOMMENDATION: Discuss this issue and direct staff accordingly.

D-3 DISCUSSION OF FUNDING THE REQUEST FROM THE MORRO BAY 4TH, INC.; (ADMINISTRATION)

RECOMMENDATION: Review the e-mail request from Morro Bay 4th, Inc., discuss the request for funding, and advise staff accordingly.

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: 3/25/14

MINUTES – MORRO BAY CITY COUNCIL
SPECIAL CLOSED SESSION MEETING –
MARCH 11, 2014
CITY HALL CONFERENCE ROOM – 3:00 P.M.

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	Edward Kreins	Interim City Manager
	Joe Pannone	City Attorney

ESTABLISH QUORUM AND CALL TO ORDER

Mayor Irons called the meeting to order at 3:00pm.

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 Comment; seeing none, the public comment section was closed.

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

CS-1 CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Pursuant to Government Code Section 54956.8)

Property:	Portions of APN No. 066-331-039 (Lila Keiser Park, Cal Poly Storage, Fisherman's Gear Storage and nearby areas)
Agency Negotiators:	Jamie L. Irons, Mayor; Ed Kreins, Interim City Manager and Joseph W. Pannone, Interim City Attorney
Negotiating Party:	Dynegy Morro Bay, LLC
Under Negotiation:	Price and Terms of Payment

CITY COUNCIL RECONVENED TO OPEN SESSION – The City Council reconvened to open session; City Attorney Joe Pannone reported the Council did not take any reportable action pursuant to the Brown Act.

ADJOURNMENT

The meeting adjourned at 3:51pm.

Recorded by:

Jamie Boucher
City Clerk

MINUTES – MORRO BAY CITY COUNCIL
SPECIAL MEETING – MARCH 11, 2014
CITY HALL CONFERENCE ROOM – 4:00 P.M.

AGENDA NO: A-2

MEETING DATE: 3/25/14

Mayor Irons called the meeting to order at 4:00pm.

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	Edward Kreins	Interim City Manager
	Joe Pannone	City Attorney
	Jamie Boucher	City Clerk

I. ESTABLISH QUORUM AND CALL TO ORDER

II. ADVISORY BOARD INTERVIEWS

The City Council interviewed the following applicant for one vacant seat on the Public Works Advisory Board: David Sozinho.

The City Council voted by written ballot and City Clerk Jamie Boucher read the results:
David Sozinho (5 votes – Mayor Irons, Councilmembers Christine Johnson, Nancy Johnson, Leage, and Smukler)

Mr. Sozinho was given a term expiring January 31, 2017.

The City Council interviewed the following applicants for 1 vacant seat on the Planning Commission: Katherine Sorenson, Richard Sadowski, Paul Nagy, Gerald Luhr, and Jeffrey Cox.

The City Council voted by written ballot and City Clerk Jamie Boucher read the results:
Gerald Luhr (3 votes – Mayor Irons, Councilmembers Christine Johnson and Smukler)
Paul Nagy (2 votes – Councilmembers Nancy Johnson and Leage)
Katherine Sorenson (0 votes)
Jeffery Cox (0 votes)
Richard Sadowski (0 votes)

Mr. Luhr was given a term expiring January 31, 2015.

VI. ADJOURNMENT

The meeting was adjourned at 5:15pm

Recorded by:

Jamie Boucher
City Clerk

MINUTES - MORRO BAY CITY COUNCIL
REGULAR MEETING – MARCH 11, 2014
VETERAN'S MEMORIAL HALL – 6:00P.M.

PRESENT:	Jamie Irons	Mayor
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	George Leage	Councilmember
	Noah Smukler	Councilmember
STAFF:	Edward Kreins	Interim City Manager
	Joe Pannone	City Attorney
	Jamie Boucher	City Clerk
	Rob Livick	Public Services Director
	Cindy Jacinth	Associate Planner

Mayor Irons called the meeting to order at 6:00 p.m.

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE
PLEDGE OF ALLEGIANCE

CLOSED SESSION REPORT – Interim City Attorney Joe Pannone reported that with regards to the Closed Session Item: Government Code Section 54956.8, Conference with Real Property Negotiators regarding portions of APN No. 066-331-039 (Lila Keiser Park, Cal Poly Storage, Fisherman's Gear Storage and nearby areas) the Council did not take any reportable action pursuant to the Brown Act.

MAYOR AND COUNCILMEMBERS' REPORTS, ANNOUNCEMENTS & PRESENTATIONS

PUBLIC PRESENTATIONS

Morro Bay 50th Committee Presentation of Programs, Events and Financials – Joan Solu presented a Morro Bay 50th Celebration Community Planning Committee report. They are working with a wide variety of community groups, clubs, individuals, organizations and societies to provide this celebration. There have been 2 events, both more than self-sustaining – First Hike Morro Bay in conjunction with State Parks as well as the Morro Bay 50th Kick-off Celebration Dinner. She presented the financials and it is their goal that the entire 50th will be self-sustaining and as much money as possible will be returned to the City. The beneficiary for all events is the Central Coast Women for Fisheries legacy project "For those Who Wait" as well as future projects for the Morro Bay 50th. She provided a schedule of events, many of which are in collaboration with other organizations, which include Dahlia flower planting, Emergency Vehicle Car Show partnership, Morro Bay Car Show partnership, Community Bike Ride in partnership with the Citizen's Bike Committee, Fisherman's Pop Art Tunity partnership, Founder's Day Picnic, Celebrate Morro Bay History and Dahlia and Cypress Parade, Plant 50 Trees and Community Quilt Project. She said that everybody can help, you can friend their

Facebook page, volunteer for a program or event by contacting a board member and encouraged everybody to visit their web page – morrobay50th.com .

PUBLIC COMMENT

Joie Fenton, owner of Expedia CruiseShipCenters presented the business report. Joie, a Cruise and Vacation consultant, runs the business out of her home and can help you find your perfect vacation – cruises, escorted tours, flight, hotel, car, train - almost any reservation you may need. They are a Chamber of Commerce member.

Julianna Epperly advertised the Annual City-wide Yard Sale put on by Morro Bay Beautiful. The event is being held the weekend of April 5th and 6th from 8am-2pm. Their goal is to reduce the landfill, have people visit town staying overnight and eating out, making money and having fun. The Police and Fire Departments have an incredibly hard time that day and hopes that sellers encourage their buyers not block driveways and mail boxes. She also asked that signs not be put on telephone poles and nails not be put into trees. She thanked their sponsors.

Susan Stewart thanks the entire community for Morro Bay's 50th, a great celebration bringing everybody together. There was a good sign ordinance meeting and there will be subsequent meetings for other areas of the town. The next Business Forum will be an Economic Roundtable. She also stated that the Police Department has a dedicated staff person to deal with fraudulent credit card charges. The Botso movie has been doing very well worldwide. Mrs. Tognazinni passed away. She asked for a status report on the opening of Grandma's Frozen Yogurt and Gathering Place.

Joan Solu advertised the upcoming 25th Annual Dixon Spaghetti Dinner being held Friday, March 14th at the Community Center. All proceeds go to the Morro Bay Community Foundation which offers scholarships to children so they can participate in City sponsored youth activities.

Barry Brannin questioned why we are in such a bad water situation. He stated that if 5 years ago we had moved the plant we'd have water pumped back into our aquifer and we'd have water. He'd like to see a 4 year plan instead of a 5 year plan which he believes can be done with the innovative technology of a packaged plant.

Carla Wixom announced she is running for Mayor of Morro Bay. She pledges to run a positive and fact based campaign. She encouraged voters to educate themselves to fully understand the issues facing our community. She provided her phone number, 441-7057, should anybody have questions on her position on the issues. She looks forward to visiting with you as she walks the neighborhoods.

Paul Nagy stated that there is no easy way to fix the water problem and hopes that tomorrow's PWAB meeting will be helpful in finding good ideas. He proposed possible ideas for both water savings as well as locating new water. He stated that if Council makes the demands on new construction too great it could discourage new building which will result in a loss of development fees. He asked Council to keep in mind that new homes are a tiny addition to Morro Bay's total residential water use. Over the past 10 years, Morro Bay has averaged only 29 new homes/units a year, of which the addition to water usage is less than ½ of 1% per year.

Lastly, it would be unfair to applicants who already have filed for permits and paid fees to be included in whatever the Council decides in changes in permit requirements and retrofits.

The public comment period was closed.

A. CONSENT AGENDA

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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 FEBRUARY 25, 2014; (ADMINISTRATION)

RECOMMENDATION: Approve as submitted.

A-2 APPROVAL OF MINUTES FOR THE REGULAR CITY COUNCIL MEETING HELD ON FEBRUARY 25, 2014; (ADMINISTRATION)

RECOMMENDATION: Approve as submitted.

A-3 AUTHORIZATION TO FILL PUBLIC SERVICES DEPARTMENT VACANCIES (PLANNING MANAGER AND OFFICE ASSISTANT III/IV), RESTORATION OF THE PERMIT TECHNICIAN TO FULL TIME FROM $\frac{3}{4}$ TIME AND POTENTIAL RECRUITMENT TO FILL ANY RESULTING VACANCIES; (PUBLIC SERVICES)

RECOMMENDATION: Authorize an internal/external recruitment for the Planning Manager and Office Assistant III/IV positions; restore the Permit Technician Position to full time and depending on the outcome of the recruitments, an internal/external recruitment for any potential vacancy created.

A-4 WATER RECLAMATION FACILITY (WRF) PROJECT STATUS; (PUBLIC SERVICES)

RECOMMENDATION: Receive and file.

A-5 STATUS REPORT OF A MAJOR MAINTENANCE & REPAIR PLAN (MMRP) FOR THE EXISTING WASTEWATER TREATMENT PLAN (PUBLIC SERVICES)

RECOMMENDATION: Receive and file.

A-6 ADOPTION OF ORDINANCE NO. 584; AMENDING TITLE 17 OF THE CITY OF MORRO BAY MUNICIPAL CODE (ZONING ORDINANCE #A00-018); (PUBLIC SERVICES)

RECOMMENDATION: Adopt Ordinance No. 584; amending Title 17 of the City of Morro Bay Municipal Code (Zoning Ordinance #A00-018) approving amendments to the text of the Zoning regulations intended to implement programs in the adopted 2009-2013 Housing Element of the Morro Bay General Plan.

A-7 2013 TROLLEY SEASON SUMMARY; (PUBLIC SERVICES)

RECOMMENDATION: Receive and file.

A-8 DEFERRAL OF DYNEGY COMMUNITY DEVELOPMENT FUND PAYMENT;
(CITY ATTORNEY)

RECOMMENDATION: Authorize second deferral of Dynegy's Community Development Fund ("CDF") Payment originally due January 21, 2014, and once deferred to March 14, 2014, for approximately two more months until May 16, 2014, together with waiver of any applicable late fees or default claims related to the deferral.

A-9 REVIEW AND APPROVE THE PUBLIC ART PROPOSAL FOR A MURAL TO BE APPLIED ON TWO ELECTRICAL BOXES AT THE CORNER OF MAIN STREET AND QUINTANA BLVD IN MORRO BAY; (RECREATION & PARKS)

RECOMMENDATION: Review and approve the proposal from Ms. Morin and Ms. Britton to place a mural on two electrical boxes at the corner of Main Street and Quintana Blvd in Morro Bay. Staff recommends Alternative #1 below.

A-10 RESOLUTION 19-14 APPROVING THE PURCHASE OF A RIGHT OF WAY EASEMENT AND AUTHORIZING MAYOR TO ACCEPT THE OFFER OF DEDICATION/GRANT OF EASEMENT FOR CONSTRUCTION OF THE MUTLI-USE TRAIL THROUGH APN 066-416-002 ALONG THE DIRT EMBARCADERO;
(CITY ATTORNEY)

RECOMMENDATION: Adopt the attached Resolution No. 19-14 authorizing the purchase and acceptance of an easement for right of way purposes through a piece of real property with the Assessor's Parcel Number 066-461-002 along the Dirt Embarcadero.

Mayor Irons opened up the public comment period for items on the Consent Calendar; seeing none, the public comment period was closed.

Mayor Irons pulled Items A-2, A-4 and A-10; Councilmember Nancy Johnson pulled Item A-7.

MOTION: Councilmember Christine Johnson moved the City Council approve Items A-1, A-3, A-5, A-6, A-8 and A-9 of the Consent Calendar as presented. The motion was seconded by Councilmember Nancy Johnson and carried unanimously.

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

No's: None

A-2 APPROVAL OF MINUTES FOR THE REGULAR CITY COUNCIL MEETING HELD ON FEBRUARY 25, 2014; (ADMINISTRATION)

Mayor Irons pulled the minutes for an amendment to page 7, Item C-1 adding the phrase in bold; “Initially when it came before us, **we had a HAB advisory board member speak before us and request we send it** back for further evaluation...”

MOTION: Mayor Irons moved approval of Item A-2 with the amendments as proposed. The motion was seconded by Councilmember Smukler and carried unanimously 5-0.

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

No's: None

A-4 WATER RECLAMATION FACILITY (WRF) PROJECT STATUS; (PUBLIC SERVICES)

Mayor Irons requested 2 changes to the calendar of events of the Water Reclamation Facility. The first was to add on 1/3/13 “City Adopted Resolution No. 07-13 ~~recommending denial of the WWTP Project~~ **supporting the California Coastal Commission staff recommendation for denial.**” The second was to add: **02/13/14 - WRF Sub-Committee meeting to discuss the 5 time schedule and grant opportunities.**

MOTION: Mayor Irons moved approval of the WRF Project status as amended. The motion was seconded by Councilmember Christine Johnson and carried 4-1.

Ayes: Irons, C. Johnson, Leage, Smukler

No's: N. Johnson

Councilmember Nancy Johnson stated she will be voting no as she disagrees with the changes to the 1/3/13 description.

A-7 2013 TROLLEY SEASON SUMMARY; (PUBLIC SERVICES)

Councilmember Nancy Johnson recalls that this item was to be brought back to Council as a discussion item, not a Consent Item.

MOTION: Councilmember Nancy Johnson moved to defer discussion of this item until we get to Item D-1 - Consideration of Morro Bay Transit Options for Weekend Service. The motion was seconded by Councilmember Leage and carried unanimously 5-0.

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

No's: None

A-10 RESOLUTION 19-14 APPROVING THE PURCHASE OF A RIGHT OF WAY EASEMENT AND AUTHORIZING MAYOR TO ACCEPT THE OFFER OF DEDICATION/GRANT OF EASEMENT FOR CONSTRUCTION OF THE MUTLI-USE TRAIL THROUGH APN 066-416-002 ALONG THE DIRT EMBARCADERO; (CITY ATTORNEY)

Mayor Irons pulled this item so that City Attorney Joe Pannone can make the record clear. Mr. Pannone stated that no cash is going to transfer from the City to Dynegy, it is just credits.

MOTION: Councilmember Leage moved to approve Item A-10. 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

C-1 CITY COUNCIL 2014 ANNUAL MEETING SCHEDULE AS WELL AS DISCUSSION OF ALTERING THE PLANNING COMMISSION MEETING SCHEDULE; (ADMINISTRATION)

Interim City Manager Ed Kreins presented the staff report.

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

Carla Wixom reminded Council that Ms. Winholtz was adamant that the City Attorney be available for Planning Commission hearings so that legal issues could be addressed on the spot. Whatever night the meetings are held, we need consistency of our City Attorney's attendance.

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

Councilmember Smukler remembers meeting Mr. Fox, the City's Assistant City Attorney and recalls that his resume had a very impressive background in land use and planning; he doesn't see a problem with Mr. Fox being a Planning Commission representative. He is comfortable with moving forward on the Council side with our calendar as traditionally scheduled and leave it up to the Mayor and City Manager look at future agenda items and workload as we get closer to the months of cancelled meetings to assess whether we need a special meeting to ensure City business moves forward. While he regrets we may lose our Chair, he sees the benefit of moving the Planning Commission meetings to Tuesdays in an effort to synchronize the meetings and give our Planning Department as much of a benefit as possible.

Councilmember Nancy Johnson stated that before she can agree to moving Planning Commission meetings, she wants to discuss other options with Mr. Livick. She asked about the possibility of having Planning Commission on the first and third Mondays of the month. It was brought up that the Monday Community Dinners were held at the Vet's Hall on Mondays. Councilmember Johnson asked about the possibility of holding Planning Commission meetings at the Community Center.

Councilmember Christine Johnson is comfortable with maintaining the current City Council schedule. She believes that Council and staff appreciate the break in the summer and meetings can always be scheduled if needed. As far as the Planning Commission meetings, Public Services is asking for a more efficient way of doing business, it's hard to deny that request.

Mayor Irons stated that the original discussion was to determine the most efficient way to conduct the most business. It was determined that it would be helpful for Planning Commission meetings to line up which is the discussion we are having now. If you want to make the decision to change, you have to do it; either now or continue with the same schedule knowing that in January, 2015 everybody on Planning Commission knows it will change. He is willing to consider going with the status quo until January 2015 with the condition that we are noticing our Planning Commissioner's now. In the spirit of consistency with Mr. Grantham's work on the Planning Commission, he is willing to go with that.

Councilmember Nancy Johnson would agree with a motion to not change until January. If we are talking about efficiency, she still thinks that by moving the meeting to the Community Center on a Monday, we are giving the Planning Department another entire work day.

MOTION: Councilmember Leage moved to approve the 2014 schedule as it currently is. The motion was seconded by Councilmember Nancy Johnson and carried 3-2.

Ayes: Irons, N. Johnson, Leage

No's: C. Johnson, Smukler

Councilmember Smukler heard the need to help expedite projects and the flow of meetings; he is inclined to try and focus on that further and so will be voting no.

Councilmember Christine Johnson reaffirmed that the vote would be to maintain our current schedule for both the Council meetings and the Planning Commission meetings; no other recommendations. That was confirmed by staff.

D. NEW BUSINESS

D-1 CONSIDERATION OF MORRO BAY TRANSIT OPTIONS FOR WEEKEND SERVICE; (PUBLIC SERVICES)

Public Services Management Analyst Janeen Burlingame presented the staff report.

The public comment period for Item D-1 was opened; seeing none, the public comment period was closed.

Councilmember Smukler stated that we heard from riders that weekend service is necessary and would be appreciated. It would be nice to get this going sooner than requested; off season of the trolley is our biggest need. He would like to see us be able to pull some of the TDA funds from the Senior Limo project and put them towards weekend service so it could start now instead of waiting until July 2014. Ms. Burlingame surmised it would take approximately \$4,200 to start the service by March 29th. Councilmember Smukler liked that idea as with a March 29th start date, it would allow for some time to advertise.

Councilmember Nancy Johnson is in favor of getting Saturday service started; she just wants to ensure the \$4200 comes from TDA funds and not the general fund.

Councilmember Christine Johnson appreciated Ms. Burlingame's staff report. She sees a real need for the weekend service and agrees with the transfer of funds from TDA so it can begin earlier. She also appreciates the champion organization, the Lions Club, moving forward with the senior limo service which she emphasized, won't compete with our current transit system.

MOTION: Councilmember Smukler moved to authorize the reallocation of a portion of 13/14 TDA funds to enable Saturday service as recommended as soon as possible. The motion was seconded by Councilmember Leage and carried unanimously 5-0.

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

No's: None

A-7 2013 TROLLEY SEASON SUMMARY; (PUBLIC SERVICES)

Management Analyst Janeen Burlingame was asked to provide a brief summary of this item.

Councilmember Nancy Johnson wondered how soon you will be able to present the recommendations listed in the report. In the past, we've been given this information right before budget time and it's usually been too late to do anything about them. Ms. Burlingame stated that these recommendations aren't City recommendations but instead things generated from the North Coast Surveying Project. She hasn't had the time to meet with MV to go through each of them to determine what the best course of action on them would be. She hoped these discussions could occur in the next month and be brought back to Council by late April.

The public comment period for Item A-7 was opened; seeing none, the public comment period was closed.

MOTION: Councilmember Nancy Johnson moved approval of Item A-7. The motion was seconded by Councilmember Leage and carried unanimously 5-0.

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

No's: None

MOTION: Mayor Irons moved to reconsider Item C-1, Annual Meeting Schedule. The motion was seconded by Councilmember Christine Johnson and carried unanimously, 5-0.

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

No's: None

Mayor Irons wanted to reconsider the item, when it first came up it was all about scheduling and being more efficient. When it comes down to it, the planning schedule is more efficient on Tuesdays; it's prudent to act on that now and move the Planning Commission schedule to Tuesdays.

The public comment period was re-opened for Item C-1; seeing none, the public comment period was closed.

MOTION: Mayor Irons moved to approve the Planning Commission schedule and move the meetings to the first and third Tuesday's of the month. The motion was seconded by Councilmember Smukler and carried 3-2.

Ayes: Irons, C. Johnson, Smukler

No's: N. Johnson, Leage

Councilmember Nancy Johnson stated that she had offered a compromise that would give planning an extra day by moving to Mondays. She will be voting no on the motion.

MOTION: Mayor Irons moved to keep City Council meetings at its current schedule for 2014 as discussed in the staff report. The motion was seconded by Councilmember Leage and carried unanimously 5-0.

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

No's: None

D-2 REVIEW AND APPROVAL OF CITY OF MORRO BAY RECREATION AND PARKS DEPARTMENT PARTNERSHIP POLICY - RESOLUTION 18-14; (RECREATION & PARKS)

Interim City Manager Ed Kreins presented the staff report.

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

Chuck Stowell asked whether or not this policy will make it more difficult or easier for volunteers or organizations. He has a concern that sometimes there are too many steps needed to take place to try and do something good. Mr. Kreins replied that he feels it will make it easier as it stipulates up front what is necessary in order to proceed with a program.

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

Councilmember Nancy Johnson feels this is a fabulous idea and likes the fact there will be clarity and steps from and for both sides to take.

Councilmember Smukler feels this consistency will be favorable for anybody coming forward.

Councilmember Christine Johnson stated it's good to begin with a policy and work with it having the ability to modify it when necessary.

Mayor Irons stated that it's the department's mission to help build strong communities and neighbors. Based on that, the scope of this policy identifies that path and is in support of this policy. He did question the possible need to send it back to the Recreation & Parks Commission in a year for review.

MOTION: Mayor Irons moved to approve Item D-2, Resolution 18-14, providing a Partnership Policy as reviewed and recommended by the Recreation & Parks Commission and include having the policy come back in one year for review by the

Recreation & Parks Commission. The motion was seconded by Councilmember Leage and carried unanimously 5-0.

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

No's: None

E. COUNCIL DECLARATION OF FUTURE AGENDA ITEMS

Mayor Irons requested a review of the County Declaration of Local Emergency due to drought; discuss our water projections and resources including the desal plant; discuss and consider declaring a local emergency for Morro Bay to come back within 30 days; Councilmembers Smukler, Leage and Christine Johnson concurred.

ADJOURNMENT

The meeting adjourned at 8:41pm.

Recorded by:

Jamie Boucher
City Clerk



AGENDA NO: A-4

MEETING DATE: 03/25/2014

Staff Report

TO: Honorable Mayor and City Council **DATE:** 03/17/2014

FROM: Michael Wilcox, Acting Recreation and Parks Director

SUBJECT: Authorization to Fill One Recreation and Parks Department Maintenance Worker II Position – Consolidated Maintenance

RECOMMENDATION:

Staff recommends that Council authorize an internal/external recruitment for a Maintenance Worker II position.

ALTERNATIVES:

Staff does not believe that alternatives are available, as this position is critical to the functionality of the department.

FISCAL IMPACT:

The requested position to be filled is a General Fund position. There will be no additional financial impact on the General Fund resulting from this action, as the position was allocated and funded in the adopted FY 2013/14 budget. This Maintenance Worker II position is currently funded at Step 5, \$47,930 annually, with the employee paying 100% of the employee PERS contribution. The salary range for this position is step 1, \$39,432 to step 5 \$47,930. This individual, if new to the City, would be hired under the City's retirement program set at 2% @ 62 with the employee paying 100% of the employee PERS contribution.

BACKGROUND/DISCUSSION:

Recently, a Maintenance Worker II employee within the Maintenance Division separated from the City. This position provides a skill level essential for maintaining the City's current Parks and Streets systems. The continued funding of this position will allow the Department to maintain the current expected level of service to the Morro Bay community and City Departments, as well as provide for Council's desired infrastructure improvements. This position is primarily assigned to Park and Street maintenance, however, as part of the consolidation crew, may perform tasks in other areas assigned to the Department.

Additionally, staff requests authorization to fill any vacancies in the Department's Maintenance Division which may occur as a result of filling the requested Maintenance Worker II position. This pre-authorization, if needed, would expedite, and allow for greater efficiency in the recruitment process.

Prepared By: MW

Dept Review: MW

City Manager Review: _____

City Attorney Review: _____

Per Budget Resolution No. 37-13, it is necessary to request Council approval to begin recruitment for this position. The language on page XIV in the 2013/14 budget states:

“City Council directs that the hiring freeze for positions in the City workforce continue for those positions funded within the General Fund, with the exception of safety personnel, and the City Council reserves the right to review any vacancies on a case-by-case basis as to its official policy...”

CONCLUSION:

Staff recommends that Council allow staff to conduct the recruitment to fill the vacant Maintenance Worker II position, as well as any subsequent vacancies that this process may produce in the Recreation and Parks Department.



AGENDA NO: A-5

MEETING DATE: March 25, 2014

Staff Report

TO: Honorable Mayor and City Council

DATE: March 13, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Request for Approval of Assignment of Lease Agreement for Lease Site 93-95/93W-95W from the Held Family Trust and the Smith W and Hannah W Held Family Trust to Harbor Center LLC

RECOMMENDATION

Staff recommends that the City Council approve the attached Assignment and Assumption of the Lease Agreement for Lease Site 93-95/93W-95W from the Held Family Trust and the Smith W and Hannah W Held Family Trust to the Harbor Center LLC.

ALTERNATIVES

1. Approve the Assignment of the Lease Agreement
2. Deny the Assignment of the Lease Agreement

FISCAL IMPACT

There is no fiscal impact to this approval of Assignment of Lease Agreement.

BACKGROUND

All City lease agreements require prior approval of the City Council in the case of a transfer (sale or assignment) of a Lease Agreement. In July, 2013, the City executed a new 47-year lease for Lease Site 93-95/93W-95W located at 901 Embarcadero, commonly known as the Harbor Center. The lease is owned by two Held family trusts.

DISCUSSION

The Helds have formed a corporation, the Harbor Center LLC, whose ownership and controlling interests are the same two trusts that the lease is currently assigned to. Therefore, this Assignment is a transfer from a two-trust ownership to an LLC ownership under those same trusts.

CONCLUSION

The Helds are tenants in good standing, and staff recommends that the City Council approve the Assignment of the Lease Agreement for Lease Site 93-95/93W-95W as-presented.

Prepared By: EE

Dept Review: _____

City Manager Review: _____

City Attorney Review: _____

This document is recorded for the Benefit of the City of Morro Bay and is exempt from recording fees, pursuant to Government Code Sections 6103 and 27383.

RECORDING REQUESTED BY:
City of Morro Bay

WHEN RECORDED MAIL TO:
City of Morro Bay
City Attorney
595 Harbor Street
Morro Bay, CA 93442

Space above reserved for use of
County Recorder

ASSIGNMENT AND ASSUMPTION AGREEMENT

This assignment is made and entered into this 8th day of April, 2014, by and between Smith W and Hannah W Held Family Trust and Held Family Trust (hereinafter referred to as "Assignors") and HARBOR CENTER, LLC, a California limited liability company (hereinafter referred to as "Assignee").

1. Assignee acknowledges the City of Morro Bay (the "City") has leased the premises to Assignor under the Master Lease dated July 1, 2013, approved by the City's City Council Resolution 17-13 on March 12, 2013, and known as Morro Bay Lease Site 93-95/93W-95W (the "Master Lease"). Assignee acknowledges any assignment of the Master Lease is subject to prior approval of the City's City Council and is also subject to prior execution between Assignors and Assignee.
2. Assignee agrees (i) to comply with all the terms and conditions of the Master Lease, (ii) to assume all liabilities required under the Master Lease and any amendments, (iii) to defend, indemnify and hold harmless the City and its officers, employees and representatives from and against, any and all claims, lawsuits, costs and expenses, including reasonable attorney's fees and court costs arising from, or in any way related to the Master Lease, and (iv) to maintain liability insurance in the manner, form and amount required by Master Lease and any amendments, thereto, with the City, its officers, employees and representatives, included as an additional insureds without the offset against the City's insurance.
3. Assignors hereby assign to Assignee all rights, title and interest they have in the Master Lease.

Assignors confirm to the City neither they, Smith W Held, Hannah W Held, Gordon G Held nor Julia V Held have actual knowledge or reasonable cause to believe any release of hazardous substance has come to be located on/or beneath the real property during the term of Assignors' occupation of the leased premises that has not been reported pursuant to Health & Safety code #253597.

Dated: March 18, 2014

Smith W Held
Smith W Held, Trustee of the Smith W Held and
Hannah W Held Family Trust

Dated: March 18, 2014

Hannah W Held
Hannah W Held, Trustee of the Smith W Held and
Hannah W Held Family Trust

Dated: March 14, 2014

Gordon G. Held
Gordon G. Held, Trustee of Held Family Trust

Dated: March 14, 2014

Julia V. Held
Julia V. Held, Trustee of Held Family Trust

The undersigned consents to and accepts, on and after April 8, 2014, assignment & assumptions of the payment of rent, including all percentage of gross sales rent, and performance of all duties and obligations as set forth in the Master Lease.

Dated: March 18, 2014

Smith W Held
Smith W Held,
Its Manager
HARBOR CENTER, LLC

The City, Lessor named in the Master Lease, consents to this Assignment upon the conditions set forth above. The City also consents to the agreements by Assignee to assume on and after April 8, 2014, the payment of rent, including all percentage of gross sales rent, and performance of all duties and obligations as set forth in the Master Lease. This Assignment has been approved by the City's City Council prior to the date set forth below.

City of Morro Bay

Dated: _____, 2014

By: Jamie L Irons, Mayor
City of Morro Bay

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of SAN FRANCISCO

On 3-14, 2014 before me, ALFRED K. TAM
(Here insert name and title of the officer)

personally appeared GORDON G. HELD AND JULIA V. HELD

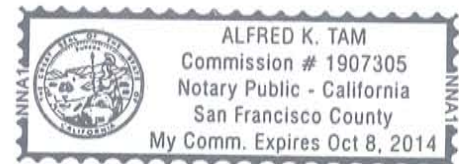
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

[Signature]
Signature of Notary Public

(Notary Seal)



ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

ASSIGNMENT AND ASSUMPTION
(Title or description of attached document)

AGREEMENT
(Title or description of attached document continued)

Number of Pages 2 Document Date 3-14-2014

(Additional information)

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☐ Corporate Officer

(Title)

- ☐ Partner(s)
☐ Attorney-in-Fact
☐ Trustee(s)
☐ Other _____

INSTRUCTIONS FOR COMPLETING THIS FORM

Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/she/~~they~~, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California

County of San Luis Obispo }

On March 18, 2014 before me, Jessica Renea Wadley, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Smith W Held and
Hannah W Held
Name(s) of Signer(s)



who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Jessica Renea Wadley
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Assignment and Assumption Agreement

Document Date: 3-18-14 Number of Pages: 2

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Smith W Held

- ☐ Corporate Officer — Title(s): _____
- ☒ Individual
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer's Name: Hannah W Held

- ☐ Corporate Officer — Title(s): _____
- ☒ Individual
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here



**A PROCLAMATION OF THE CITY COUNCIL
OF THE CITY OF MORRO BAY
DECLARING THE MONTH OF APRIL
“FAIR HOUSING MONTH”**

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

WHEREAS, the City of Morro Bay (City) is joining with the United States Department of Housing and Urban Development (HUD) and other housing agencies in celebrating the anniversary of the National Fair Housing Law, Title VII of the Civil Rights Act of 1968; and

WHEREAS, the City of Morro Bay encourages fair housing through sales and rentals, as well as through its housing rehabilitation programs; and

WHEREAS, the law mandates no person shall be discriminated against because of race, color, religion, sex, handicaps, familial status, sexual orientation or national origin in the sale, rental, or advertising of dwelling, in the provisions of brokerages services, or in the availability of residential real estate related transactions; and

WHEREAS, if any City resident believes he or she has been discriminated against, then the resident should contact the Department of Fair Employment and Housing District Office at 1732 Palma Dr., #200, Ventura, CA 93003, (805) 654-4514. The Fair Housing Information Office helps ensure all residents of the City of Morro Bay and surrounding communities are treated fairly and all the property owners and landlords abide by the letter and spirit of the Fair Housing Law; and

WHEREAS, the City of Morro Bay, the State of California, HUD and various local agencies are working together to ensure equal treatment of all citizens, we urge everyone to practice the Fair Housing Law.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Morro Bay does hereby proclaim the month of April as “Fair Housing Month” in the City of Morro Bay.

IN WITNESS WHEREOF I have hereunto
set my hand and caused the seal of the City
of Morro Bay to be affixed this 25th day of
March, 2014.

CHRISTINE JOHNSON, VICE MAYOR
City of Morro Bay, California



AGENDA NO: B-1

MEETING DATE: March 25, 2014

Staff Report

TO: Honorable Mayor and City Council

DATE: March 18, 2014

FROM: Cindy Jacinth, Associate Planner

SUBJECT: Introduction and First Reading of Ordinance 585; Amendment to Title 17 (Zoning Text Amendment - #A00-013 Amending Section 17.48.320 Secondary Unit Ordinance)

RECOMMENDATION:

Staff recommends that the City Council:

- 1) Open the public hearing and receive testimony; and
- 2) Accept the Planning Commission recommendation to adopt the proposed Ordinance amendment that would allow for modification to Title 17; and
- 3) Move to waive reading of Ordinance 585 in entirety and introduce for First Reading by Number and Title only; and
- 4) Direct staff to submit a Local Coastal Program (LCP) Amendment to Coastal Commission.

ALTERNATIVES

- 1) Reject Ordinance 585 thereby maintaining existing Secondary Unit regulations at MBMC 17.48.320.
- 2) Direct staff to submit Ordinance 576 as an LCP Amendment for certification by Coastal Commission.

FISCAL IMPACT

The proposed amendments will have negligible effect of City finances.

INTRODUCTION

At the February 11, 2014, City Council meeting staff brought forward Planning Commission recommendations for modifications to the Secondary Unit Ordinance as Zoning Text Amendment A00-013, amending Title 17 of the Morro Bay Municipal Code (MBMC) including Section 17.48.320. City Council voted to accept Planning Commission recommendations and directed staff to bring back the revised Ordinance. Staff has incorporated the modification and is presenting Ordinance 585 for an Introduction and First Reading. As part of the City's Local Coastal Program (LCP), Ordinance 585, which seeks to amend the Zoning Ordinance, will require certification by the California Coastal Commission.

Prepared By: CJ

Dept Review: RL

City Manager Review: _____

City Attorney Review: _____

DISCUSSION

Ordinance 576, as adopted in 2012, eliminated the requirement for a conditional use permit on proposed second units greater than 900 square feet. Planning Commission is recommending the requirement for a conditional use permit apply to proposed second units greater than 900 square feet, up to a maximum square footage of 1200 square feet. The Commission is also recommending for any proposed second unit that would require two parking spaces, tandem parking only be allowed subject to a conditional use permit.

At the February 11, 2014, meeting, City Council accepted the recommendations forwarded by Planning Commission, which are consistent with Government Code Section 65852.2, requiring cities to establish standards to allow for ministerial secondary dwelling units, as well as provide an option to build a secondary dwelling unit or guest house in all zones that permit single-family dwellings.

The other modifications adopted by Ordinance 576 have been incorporated into Ordinance 585, which, if adopted, will repeal those provisions of the MBMC that were established by Ordinance 576. Ordinance 585 could then be incorporated into a LCP amendment for Coastal Commission certification.

ENVIRONMENTAL DETERMINATION

A Negative Declaration was prepared for the project as there were no environmental impacts associated with the project. The environmental document was posted for review and comment for a thirty day period that concluded on November 29, 2011. The State Clearing House number is 2011101073.

PUBLIC NOTICE:

Notice of this item was published in the San Luis Obispo Tribune newspaper on March 14, 2014 as a 1/8 page notice meeting the legal requirements for projects affecting over 1,000 property owners.

CONCLUSION:

California Government Code Section 65852 seeks to address the issue of affordable housing, making secondary units (also known colloquially as “granny units”) easier to permit, as well as to allow them to be permitted as ministerial actions and without a public hearing. However, because Morro Bay is located in the Coastal Zone, the Government Code goes on to state: “Nothing in Government Code Sections 65852.2 or 65852.150 shall be construed to supersede or in any way alter or lessen the effect or application of the California Coastal Act except that the local government shall not be required to hold public hearings for coastal development permit applications for second units.” (Government Code subsection 65852.2(j).) Noticing for interested parties and those properties within 100 feet of the second unit property will be required.

Staff recommends introduction of the proposed Zoning Text Amendment through Ordinance 585, which thereby would approving Zoning Text Amendment A00-013 and directing staff to forward an LCP amendment to the California Coastal Commission.

ATTACHMENTS

- 1— Ordinance No. 576 as adopted by Council on March 27, 2012, with Exhibit “A”
- 2— Ordinance No. 585 with Exhibit “A” and Revised Zoning District tables

Link to February 11, 2014 City Council staff report

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/2039>

Links to earlier meeting minutes:

City Council 2/11/14 Minutes, Agenda Item B-1:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/2057>

City Council 3/22/11 Minutes, Agenda Item D-1:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/1242>

Planning Commission 12/7/11 Minutes, Agenda Item B-4:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/1468>

Planning Commission 1/4/12 Minutes, Agenda Item B-1:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/1493>

City Council Meeting 2/14/12 Minutes, Agenda Item B-2:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/1500>

City Council Meeting 3/13/12 Minutes, Agenda Item B-1:

<http://morro-bay.ca.us/ArchiveCenter/ViewFile/Item/1537>

ORDINANCE NO. 576

**AN ORDINANCE OF THE CITY OF MORRO BAY
ANNOUNCING FINDINGS AND ADOPTING AMENDMENTS TO TITLE 17 OF THE
MUNICIPAL CODE TO ESTABLISH PROVISIONS FOR MINISTERIAL REVIEW OF
SECONDARY DWELLING UNITS AND GUESTHOUSES IN ALL ZONES WHERE
SINGLE FAMILY HOMES ARE A PERMITTED USE.**

THE CITY COUNCIL
City of Morro Bay, California

Case No. A00-013 (Local Coastal Plan/Zoning Ordinance Amendment)

WHEREAS, it is the purpose of the Zoning Ordinance of the City of Morro Bay to establish a precise and detailed plan for the use of land in the City based on the General Plan; and

WHEREAS, California State Law §65852.2 requires Cities to establish standards to allow for ministerial secondary dwelling units so as to increase the supply of smaller, affordable housing while ensuring that they remain compatible with the existing neighborhood; and

WHEREAS, the proposed amendments meet the intent of the State Law by providing for an option to build a secondary dwelling unit or guest house in all zones that permit single family dwellings and have no more than one single family home existing on the property; and

WHEREAS, it is important to have clear, consistent, easy to use regulations within the Zoning Ordinance; and

WHEREAS, the Planning Commission of the City of Morro Bay, on December 7, 2011 after a duly noticed PUBLIC HEARING, did forward a recommendation, by adoption of Planning Commission Resolution No. 01-11 that the City Council amend Title 17 (Zoning Ordinance) to comply with the State legislation (AB 1866) as contained in attached Exhibit "A"; and

WHEREAS, on the 13th day of March 2012, the City Council of the City of Morro Bay did hold a duly noticed PUBLIC HEARING to consider the amendment regulating Secondary Unit and Guesthouse as contained in attached Exhibit "A" and

WHEREAS, the City Council finds that a Negative Declaration was prepared to evaluate the environmental impacts of the proposed Ordinance amendments, and determined that no significant impacts would result from the adoption of these amendments; and

WHEREAS, following the PUBLIC HEARING, and upon consideration of the testimony of all persons, both written and oral, the City Council accepted the Planning Commission recommendation and approved the amendment based on the following findings:

1. The Zoning Ordinance Amendment proposal is consistent with the State Statute AB 1866 and includes similar language, which was previously in effect.
2. The proposed Zoning Ordinance Amendments will not be injurious or detrimental to the health, safety, comfort, general welfare or well-being of the persons residing or working in the neighborhood.
3. That the proposed amendment is in general conformance with the City's General Plan and Local Coastal Plan.

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

SECTION 1: Title 17 of Morro Bay Municipal Code (Zoning Ordinance) is amended as contained in Exhibit "A", attached hereto and made a part of this Ordinance:

SECTION 2: To implement the amendment adopted herein, the City Council of the City of Morro Bay, California, hereby directs as follows:

1. That the above recitations are true and correct and constitute the findings of the Council in this matter; and
2. The City Council of the City of Morro Bay hereby finds that the Local Coastal Program Implementation Program (Zoning Ordinance) Amendments are in compliance with the intent, objectives, and all applicable policies and provisions of the California Coastal Act; and
3. Pursuant to Section 17.64.080 no amendment to Title 17 shall be legally effective in the coastal zone until the amendment is certified by the Coastal Commission.

SECTION 3: If any section, subsection, sentence, clause or phrase of this ordinance is for any reason declared to be unconstitutional and invalid, such decision shall not affect the validity of the remaining portion of this ordinance. The City Council hereby declares that it would have passed this ordinance and every section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional or invalid.

SECTION 4: This Ordinance amending the Zoning Code shall not become effective until final certification by the California Coastal Commission. Within fifteen (15) days after adoption by

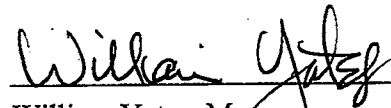
the City Council, the Ordinance shall be published once, together with the names of the Council Members voting thereon, in a newspaper of general circulation within the City.

INTRODUCED at the regular meeting of the City Council held on the 13th day of March 2012, by motion of Councilmember Borchard and seconded by Councilmember Johnson.

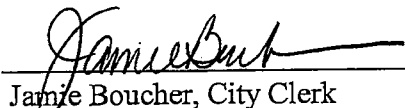
PASSED, APPROVED, AND ADOPTED, by the City Council of the City of Morro Bay, on the 27th day of March 2012 by the following vote to wit:

AYES:	Borchard, Johnson, Leage, Yates
NOES:	Smukler
ABSTAIN:	None
ABSENT:	None

ATTEST:

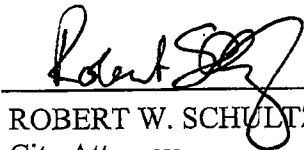


William Yates, Mayor
City of Morro Bay



Jamie Boucher, City Clerk
City of Morro Bay

APPROVED AS TO FORM:



ROBERT W. SCHULTZ, Esq.
City Attorney

EXHIBIT "A"

17.48.320

SECONDARY UNITS

The purpose of this Section is to provide affordable low- and moderate-income housing. The following supplemental regulations are intended to comply with government Code Sections 65852.150 and 65852.2 on second units and implement the general plan, by allowing second units in all R districts subject to the following requirements. Nothing in Government Code Sections 65852.2 or 65852.150 shall be construed to supersede or in any way alter or lessen the effect or application of the California Coastal Act except that the local government shall not be required to hold public hearings for coastal development permit applications for second units." (Government Code Section 65852.2(j)) Noticing for interested parties and those properties within 100 feet of the second unit property will be required. Approvals of second units in the appealable zone will continue to be appealable to the Coastal Commission.

A. Location

Said unit may be located, as an accessory use, on any lot zoned for single-family or multi-family uses in accordance with the District Tables in Chapter 17.24 where a primary residential use has been previously established or proposed to be established in conjunction with said unit. Only one-second unit or one guesthouse is permitted per one primary single family dwelling on the same lot:

B. Lot Coverage

Maximum lot coverage allowed for the District that they are located in.

C. Design

Said unit shall be consistent and/or reasonably compatible with the architectural style of the main residence and the neighborhood, and shall be located on the same lot as the primary residence.

D. Size

The total floor area, not including a garage, for a detached secondary unit shall not exceed 1,200 square feet as per State guidelines. The increased floor area of an attached second unit shall not exceed 30 percent of the existing living area.

E. Parking

A minimum of one additional parking space per bedroom, not to exceed two spaces, shall be provided. The parking space can be open and uncovered, however may not be in tandem with the required parking of the principal dwelling unit but can be located in setbacks areas and in tandem if both spaces are for the secondary unit. The principal dwelling unit must conform to the parking requirements of Chapter 17.44 "Off-Street Parking and Loading:"

F. Compliance with Title 14

A secondary unit shall be in conformance with all applicable provisions of Title 14 of the Morro Bay Municipal Code in addition to the applicable requirements for height, setback, lot coverage, etc. pursuant to the provisions of Chapter 17.24.

17.12.545 Secondary Dwelling Unit.

"Secondary dwelling unit" means an attached or detached residential dwelling unit, which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the primary dwelling. This term also means "second unit" for the purposes of Sections 65852.150 and 65852.2 of the California Government Code.

17.44.020.C. e.iii. Secondary Dwelling Unit. In accordance with the provision of Section 1748.320(E) of this title.

17.48.315 GUESTHOUSES/QUARTERS AND ACCESSORY LIVING AREAS

Where provided by this Title, guesthouses/quarters and habitable structures for accessory living area may be permitted in conjunction with a dwelling unit, subject to these further requirements:

A. Guesthouse Restrictions

A guesthouse shall not contain more than six hundred forty (640) square feet of habitable floor area containing not more than one bedroom and bathroom nor shall it exceed thirty (30) percent of the floor area of the main residence, and no cooking or food preparation or food storage facilities shall be provided.

B. Location.

Guesthouses may be established on any lot in any R or AG district where a primary single-family dwelling has been previously established or is proposed to be established in conjunction with construction of a guesthouse. Only one-guesthouse or second unit is permitted per one primary single-family dwelling on the same lot.

ORDINANCE NO. 585

**AN ORDINANCE OF THE CITY OF MORRO BAY ANNOUNCING FINDINGS AND
ADOPTING AMENDMENTS TO TITLE 17 OF THE MUNICIPAL CODE
TO ESTABLISH PROVISIONS FOR MINISTERIAL REVIEW OF
SECONDARY DWELLING UNITS AND GUESTHOUSES IN ALL ZONES
WHERE SINGLE-FAMILY HOMES ARE A PERMITTED USE**

THE CITY COUNCIL
City of Morro Bay, California

Case No. A00-013 (Local Coastal Plan/Zoning Ordinance Amendment)

WHEREAS, it is the purpose of the Zoning Ordinance of the City of Morro Bay to establish a precise and detailed plan for the use of land in the City based on the General Plan; and

WHEREAS, it is important to have clear, consistent, and easy to use and interpret regulations within the Zoning Ordinance; and

WHEREAS, California State Law §65852.2 requires cities to establish standards to allow for ministerial secondary dwelling units so as to increase the supply of smaller, affordable housing while ensuring that they remain compatible with the existing neighborhood; and

WHEREAS, the proposed amendments meet the intent of State Law by providing for an option to build a secondary dwelling unit or guest house in all zones that permit single family dwellings and have no more than one single family home existing on the property; and

WHEREAS, the Planning Commission of the City of Morro Bay, on December 7, 2011, after a duly noticed PUBLIC HEARING, did forward a recommendation, by adoption of Planning Commission Resolution No. 01-11 that the City Council amend Title 17 (Zoning Ordinance) to comply with the State legislation (AB 1866); and

WHEREAS, on the 13th day of March 2012, the City Council of the City of Morro Bay did hold a duly noticed PUBLIC HEARING to consider the amendment regulating Secondary Unit and Guesthouse as contained in Ordinance 576; and

WHEREAS, the Planning Commission of the City of Morro Bay, on October 16, 2013, after a duly noticed PUBLIC HEARING, did reconsider zoning code amendments in Ordinance 576 and did forward a recommendation by motion the City Council amend Title 17 (Zoning Ordinance) to comply with the State legislation (AB 1866); and

WHEREAS, on the 25th day of March, 2014, the City Council of the City of Morro Bay did hold a duly noticed PUBLIC HEARING to consider the amendment regulating Secondary Units and Guesthouses as contained in attached Exhibit “A;” and

WHEREAS, the City Council finds a Negative Declaration was prepared to evaluate the environmental impacts of this Ordinance, and determined no significant impacts would result from the adoption of this Ordinances; and

WHEREAS, following the PUBLIC HEARING, and upon consideration of the testimony of all persons, both written and oral, the City Council accepted the Planning Commission recommendation and approved the amendment.

NOW, THEREFORE, the City Council of the City of Morro Bay does ordain, as follows:

SECTION 1: The City Council finds:

1. The above recitations are true and correct and constitute the findings of the Council in this matter.
2. The Zoning Ordinance Amendment proposal is consistent with the State Statute AB 1866 and includes similar language, which was previously in effect.
3. The previous amendments to the City’s Zoning Ordinance, adopted by Ordinance 576, did not reflect the values of the community.
4. The proposed Zoning Ordinance Amendments will not be injurious or detrimental to the health, safety, comfort, general welfare or well-being of the persons residing or working in the neighborhood.
5. The proposed amendment is in general conformance with the City’s General Plan and Local Coastal Plan.
6. The Local Coastal Program Implementation Program (Zoning Ordinance) Amendments are in compliance with the intent, objectives, and all applicable policies and provisions of the California Coastal Act; and
7. Pursuant to Morro Bay Municipal Code Section 17.64.080, no amendment to Title 17 shall be legally effective in the coastal zone until the amendment is certified by the Coastal Commission.

SECTION 1: Based upon all the foregoing, Title 17 of Morro Bay Municipal Code (Zoning Ordinance) is amended as contained in Exhibit “A,” attached hereto and made a part of this Ordinance:

INTRODUCED at the regular meeting of the City Council held on the 25th day of March 2014, by motion of _____ and seconded by _____.

PASSED, APPROVED, AND ADOPTED, by the City Council of the City of Morro Bay, on the ____ day of _____, _____ by the following vote to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

Jamie L. Irons, Mayor
City of Morro Bay

Jamie Boucher, City Clerk
City of Morro Bay

APPROVED AS TO FORM:

Joseph W. Pannone
City Attorney

EXHIBIT “A”

17.48.320 SECONDARY UNITS

The purpose of this Section is to provide affordable low- and moderate-income housing. The following supplemental regulations are intended to comply with government Code Sections 65852.150 and 65852.2 on second units and implement the general plan, by allowing second units in all R districts subject to the following requirements. Nothing in Government Code Sections 65852.2 or 65852.150 shall be construed to supersede or in any way alter or lessen the effect or application of the California Coastal Act except that the local government shall not be required to hold public hearings for coastal development permit applications for second units.” (Government Code Section 65852.2(j)) Noticing for interested parties and those properties within 100 feet of the second unit property will be required. Approvals of second units in the appealable zone will continue to be appealable to the Coastal Commission.

A. Location

Said unit may be located, as an accessory use, on any lot zoned for single-family or multi-family uses in accordance with the District Tables in Chapter 17.24 where a primary residential use has been previously established or proposed to be established in conjunction with said unit. Only one-second unit or one guesthouse is permitted per one primary single family dwelling on the same lot:

B. Lot Coverage

Maximum lot coverage allowed for the District that they are located in.

C. Design

Said unit shall be consistent and/or reasonably compatible with the architectural style of the main residence and the neighborhood, and shall be located on the same lot as the primary residence.

D. Size

The total floor area, not including a garage, for a detached secondary unit shall not exceed ~~1,200-900~~ square feet as per State guidelines with an allowable size up to 1,200 square feet with a Conditional Use Permit pursuant to Chapter 17.60. The increased floor area of an attached second unit shall not exceed 30 percent of the existing living area.

E. Parking

A minimum of one additional parking space per bedroom, not to exceed two spaces, shall be provided. The parking space can be open and uncovered, however may not be in tandem with the required parking of the principal dwelling unit but can be located in setbacks areas and ~~in tandem if both spaces are for the secondary unit where more than one space is required for a secondary unit, tandem spaces shall only be allowed with a Conditional Use Permit pursuant to Chapter 17.60~~. The principal dwelling unit must conform to the parking requirements of Chapter 17.44 “Off-Street Parking and Loading:”

F. Compliance with Title 14

A secondary unit shall be in conformance with all applicable provisions of Title 14 of the Morro Bay Municipal Code in addition to the applicable requirements for height, setback, lot coverage, etc. pursuant to the provisions of Chapter 17.24.

17.12.545 Secondary Dwelling Unit.

“Secondary dwelling unit” means an attached or detached residential dwelling unit, which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the primary dwelling. This term also means “second unit” for the purposes of Sections 65852.150 and 65852.2 of the California Government Code.

17.44.020.C. e.iii. Secondary Dwelling Unit. In accordance with the provision of Section 1748.320(E) of this title.

17.48.315 GUESTHOUSES/QUARTERS AND ACCESSORY LIVING AREAS

Where provided by this Title, guesthouses/quarters and habitable structures for accessory living area may be permitted in conjunction with a dwelling unit, subject to these further requirements:

A. Guesthouse Restrictions

A guesthouse shall not contain more than six hundred forty (640) square feet of habitable floor area containing not more than one bedroom and bathroom nor shall it exceed thirty (30) percent of the floor area of the main residence, and no cooking or food preparation or food storage facilities shall be provided.

B. Location.

Guesthouses may be established on any lot in any R **or** AG district where a primary single-family dwelling has been previously established or is proposed to be established in conjunction with construction of a guesthouse. Only one-guesthouse or second unit is permitted per one primary single-family dwelling on the same lot.

17.24.020 Agricultural (AG) District Table

Unless otherwise designated, the following uses, or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage	
Principle Permitted Uses: The following uses are permitted in the AG zone: crop farming; viticulture; livestock farming and grazing; accessory uses and buildings including but not limited to barns, corrals and storehouses, which are normally incidental to other permitted uses; equestrian boarding facilities for not more than four horses.	No	25 ft.	General: 20 acres Between Little Morro Creek Rd. & Morro Creek: 40 acres or pursuant to 17.24.020.B.4	General: 20 acres	25 ft.	25 ft.	25 ft.	25 ft.	NA	5%	
One single-family residence	No.			1/ Lot	Corral, barns & other animal enclosures: 75 ft. from dwelling (see 17.16.050)					2%	
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.											
Temporary produce stand											
Conditionally Permitted Uses: The following may be permitted in the AG zone subject to a Conditional Use Permit: farm labor quarters; public coastal accessways; greenhouse and nurseries; other uses per the land use plan of Section 17.24.020.B if the appropriate findings are made by the Planning Commission.	Yes										

17.24.030 Suburban Residential (RA) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage
Single-family dwelling.	No	25 ft. (no wall may exceed 30 ft.)	20,000 sq. ft.	20,000 sq. ft.	20 ft.	10 ft garage entrance 20ft..	10% of ave. with 10 ft maximum requirement	20% of the depth of the lot with 20 ft. maximum	35% minimum permeable surface	45%
Crop and tree farming; viticulture; farming and if one acre or more grazing, of not more than two (2) cattle or horses per acre or not more than four (4) sheep or goats per acre.					Refer to Chapter 7.16 for animal keeping setbacks					
Rabbit and chicken ranching involving not more than twelve (12) animals										
Expressly prohibited: commercial dairies and kennels;										
Accessory uses and buildings normally incidental to other permitted uses but not including commercial uses, and located in accordance with Title 7; home occupations										
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.	No	25 ft. (no wall may exceed 30 ft.)	N/A	1 per lot in conjunction	20 ft.	10 ft.	10 %	20%	35% minimum permeable surface	45%
Temporary Produce Stands	Yes		10 acres				10 % of ave. width with 10 ft. maximum requirement	20% of the depth of the lot with 20 ft. maximum		
Additional Residences for Agricultural Employees										
Equestrian Boarding										
Special Use Permits pursuant to 17.30	Yes		Per CUP							
Antennas and Wireless										

17.24.040 Single family Residential (R-1) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage
One single-family dwelling	No	25 ft.	Refer to subdivision regulations for sizes for new lots	1/lot or pursuant to Section 17.24.040	20 ft.	20% of ave. width of lot with 10 ft. maximum and 5 ft. minimum	10% of ave. width of lot with 5 ft. maximum and 3 ft. minimum	10% if ave. depth of lot with 10 ft. maximum and 6 ft minimum	N/A	45%
Home occupations: structures and uses (include. home oc.) normally incidental to primary use		(No wall may exceed 30 ft.)								
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.	No	25 ft.	N/A	1 unit per lot in conjunction with a primary unit	20 ft.	20% of ave.	10% of ave.	10% of ave.	N/A	45%
Community housing project	Yes		1 per CUP	5,000 sq. ft. or per overlay zone						
Special Use Permits pursuant to 17.30	Yes	PER CUP								

17.24.050 Duplex Residential (R-2) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage
All principally permitted uses in the R-1 district.	No	25 ft.	Refer to Subdivision regulations for sizes for new lots	2,900 sq. ft.	20 ft.	20% of ave. width of lot with 10 ft. maximum and 5 ft. minimum Garage entrance 20ft.	10% of ave. width of lot with 5 ft. maximum and 3 ft. minimum	5 ft.	N/A	50 %
Duplexes (single structure); second single family dwellings										
Home occupations; structures and uses normally incidental to primary use										
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.	No	25 ft.			20 ft.	20% of ave. width of lot	10% of ave. width of lot	5 ft.	N/A	50 %
Apartment units/Bed and Breakfast	Yes									
Community Housing projects									10,000 sq. ft.	
Mobile home parks and other permitted uses as stated in Section 17.40.060									2 acres	
Parking lots-only to serve residential uses			Per CUP	N/A					Plan required 15% minimum permeable surface	
Special Use Permits pursuant to 17.30	Yes	Per CUP								

17.24.060 Multiple Family Residential (R-3) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage
All principally permitted uses in the R-1 and R-2 districts.	No	25 ft.	Refer to Subdivision Regulations for sizes for new lots	2,175 sq. ft.	15 ft. Garage entrance 20 ft.	20% of ave. width of lot with 10 ft. maximum and 5 ft. minimum Garage entrance 20ft.	5 ft.	5 ft. except where abuts an R-1 or R-2 zone, in which case the R-1 criteria applies	N/A	60%
Home occupations: structures and uses normally incidental to primary use		Plan required 15% minimum permeable surface								
Apartment units										
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.	No	25 ft.			15 ft.	20% of ave. width of lot	5 ft.	5 ft. except where abuts an R-1	N/A	60%
Rooming and boarding house: bed and breakfast establishment	Yes			2,900 sq. ft.						
Community Housing project				6,000 sq.ft.						
Parking Lot				3 acres					N/A	
Mobile home park				3 acres					2,900 sq. ft.	
Special Use Permits pursuant to 17.30	Yes	Per CUP								

17.24.070 Multiple Residential (R-4) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage	
All principally permitted uses listed in the R-1, R-2, and R-3 districts.	No	30 ft.	Refer to Subdivision	1,800 sq. ft.	15 ft./ Garage entrance 20 ft.	20% of ave. width of lot with 15 ft. maximum and 10 ft. minimum Garage entrance 20 ft.	5 ft.	5 ft. except where abuts an R-1 or R-2 zone, in which case the R-1 criteria applies	N/A	60%	
Home occupations; structures and uses normally incidental to primary uses			Regulations for sizes for new lots	1 unit per lot in conjunction with a primary unit					Plans required N/A	60%	
Apartment units											
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.	No	30 ft.		1 unit per lot in conjunction with a primary unit	15 ft./ Garage entrance 20 ft.	20% of ave. width of lot with 15 ft. maximum and 10 ft. minimum Garage entrance 20 ft.	5 ft.	5 ft. except where abuts an R-1 or R-2 zone, in which case the R-1 criteria applies			permeable surface
Community housing project	6,000 sq. ft.		3 acres								
Rest home; rooming and boarding houses											
Hotel and Motel; Bed and Breakfast establishment				750 sq. ft.							
Mobile Home Park											
Commercial uses and services, including but not limited to newsstands, gifts and notions, coffee shops, self service laundries ,and bike rental, which are normally incidental to hotels, motels and mobile home parks, if such uses are provided without direct access to a public street	Yes										
Parking lots											
Professional, governmental and general business offices which do not engage in retail sales on the premises											
Special Use Permits pursuant to 17.30	Yes		Per	CUP							

17.24.080 Coastal Resource Residential (CRR) District Table

Unless otherwise designated, the following uses or other uses which are found to be similar and consistent with the General Plan and Local Coastal Plan may be allowed with the appropriate permits and licenses.	Conditional Use Permit Required.	Maximum Building Height	Minimum Building Site Area	Minimum Lot Area Per Unit	Minimum Front Yard Setback	Minimum Side Yard Setback (Exterior Yard)	Minimum Side Yard Setback (Interior Yard)	Minimum Rear Yard Setback	Landscaping	Maximum Lot Coverage
One single-family dwelling Structures and uses normally incidental to the primary use; home occupation	No	14 ft./ 25 ft. (refer to special standards)	20,000 sq. ft. If cluster development 6,000 sq. ft. interior & 7,000 sq. ft. corner. (Refer to Cluster Requirements)	1 unit per lot	20 ft. (In addition garage shall be 20 ft. from sidewalk).	10 ft.	10% of the width of the lot with 6 ft minimum	10 ft. from property lines and from designated view corridor lines.		30% If clustered: Refer to Cluster Requirements
Guest house (no kitchen)	No pursuant to Section 17.48.315								Plan required	
Guest house (no kitchen) pursuant to 17.48.315 regulations or Secondary Unit pursuant to 17.48.320 regulations.		14 ft./ 25 ft. (refer to special standards)		1 unit per lot in conjunction with a primary unit on the same lot	20 ft. (In addition garage shall be 20 ft. from sidewalk).	10 ft.	10% of the width of the lot with 6 ft minimum	10 ft. from property lines and from designated view corridor lines.		30% If clustered: Refer to Cluster Requirements



AGENDA NO: D-1

MEETING DATE: March 25, 2014

Staff Report

TO: Mayor and City Council DATE: March 18, 2014

FROM: Rob Livick, PE/PLS – Public Services Director/City Engineer
Damaris Hanson – Engineering Technician IV

SUBJECT: Review and Discussion of Draft Urban Forest Management Plan

RECOMMENDATION

Staff recommends the City Council

1. Review the Urban Forest Management Plan
2. Provide any comments or recommended changes
3. Provide direction as to which components are to be implemented
4. Direct staff to return with a Resolution adopting the Urban Forest Management Plan and implementation measures

ALTERNATIVE

Direct staff to return the Urban Forest Management Plan to Public Works Advisory Board and Planning Commission for further discussions and revisions.

FISCAL IMPACT

No direct fiscal impact at this time other than staff time only in the preparation of the plan.

SUMMARY

The Urban Forest Management Plan (UFMP), Attachment 1, will guide the City toward a healthy, sustainable urban forest. As part of the plan, the trees in the commercial districts have been surveyed using a Geographic Positioning System (GPS) unit and incorporated into a Geographic Information System (GIS) mapping program. This enables the City to have a better idea of the health, age, species diversity, and the overall quality of the trees in this area. The UFMP will help to determine specific levels of funding needed for tree maintenance and tree planting over a multi-year period. The plan developed goals which provide objectives and actions in order to achieve these goals. The plan is a living document that will grow with the urban forest and evolve with new goals, objectives and actions as needed.

Prepared By: DH_____

Dept Review: RL_____

City Manager Review: _____

City Attorney Review: _____

Public Works Advisory Board Recommendation

The UFMP was taken to the Public Works Advisory Board (PWAB) on April 19, 2013 where it was continued to the June 20, 2013 meeting. At this meeting PWAB moved to forward the UFMP to the City Council and recommend approval with the following recommended changes:

1. Eliminate the proposal to change the responsibility of the tree maintenance for City-owned trees from the City to residents; and
2. Add language to include as an objective under Goal 5 “Tree Conversation” that makes explicit the need to protect existing and future trees.

Additionally, the amount of expenditures for residential tree maintenance has been clarified with additional data from the Recreation & Parks Maintenance Superintendent. The amount spent on an annual basis to maintain the urban forest in residential areas is approximately \$20,000 per year.

Planning Commission Recommendation

The UFMP was taken to the Planning Commission on November 20, 2013. At this meeting Planning Commission moved to forward the UFMP to the City Council with the recommendation that all the trees in public spaces be incorporated into the UFMP. Planning Commission also had concerns about the current tree replacement policies and that the City should retain the authority to maintain hazardous trees located in residential areas when necessary. The Commission was concerned about the hazard and financial liability a homeowner might have under the proposed plan, staff stated that we need to work with legal counsel to devise solutions to these issues before developing and changing any ordinance language.

BACKGROUND

The urban forest contributes to the well-being of the residents, businesses, and visitors of Morro Bay in many ways. Trees provide economic, environmental and social benefits.

Economic benefits:

- Research shows that businesses on treescaped streets show 20% higher income streams compared to businesses in strip mall settings.
- Home and business values increase \$15,000-25,000 with street trees verses streets with no trees.

Environmental benefits:

- Trees contribute to improving our air quality, water quality, and provides wildlife habitat.
- Tree leaf and branch structures absorb approximately 30% precipitation, allowing for evaporation back into the atmosphere.
- Carbon dioxide is absorbed by the photosynthetic process, but other emissions such as nitrogen oxides, carbon monoxide, and volatile organic compounds are reduced significantly from the proximity to trees.
- Trees provide a canopy for birds to enjoy, as well as root structure and a setting important for insects and bacterial life below the surface.

Social benefits:

- Trees make the urban life a more aesthetically pleasing environment by providing a buffer from the buildings and hardscape of urban infrastructure.
- Trees have been credited with improving the health, and emotional wellbeing of people. The advantage of trees goes beyond the physical benefits, by creating a more calming, visually pleasing environment.

DISCUSSION

The Urban Forest Management Plan serves as a guide for perpetuating and enhancing Morro Bay's public trees. For the purposes of this plan, public trees are those located within the City Rights-of-Way (Street Trees). The plan establishes guiding principles and associated goals that result in specific strategies for addressing the needs of the public trees. Those goals were developed from community input, City needs, environmental and urban conditions. They are also flexible enough to account for future changes.

The plan is essential in guiding the City toward a healthy sustainable Urban Forest. Proper tree selection and placement is vital to our Urban Forest future. An Urban Forest Management Plan is an essential tool for protecting this valuable resource. The plan discusses the makeup of our tree population through the tree inventory. It looks at the health of our trees and addresses the questions:

- Is this the right tree in the right place?
- Is there adequate species diversity?
- How can we improve age diversity with our aging population of trees?

The tree inventory will help generate lists of trees requiring priority removal and pruning that staff can carry out within the limits of budget and time constraints. The plan will help determine the right tree for the right place, by identifying specific tree species that grow better in the different microclimate areas in Morro Bay. City Council's adoption of the UFMP is the next significant step in Morro Bay's efforts to enhance the beautification of Morro Bay.

The UFMP has developed goals with objectives and actions to follow in order to implement those goals.

Goal 1: Defining Public trees

The City has wide Rights-of-Way and, therefore, much of the public uses sections of unpaved Rights-of-Way as an extension of their property. For the most part, the trees planted in the residential Rights-of-Way were planted by the residents for their personal pleasure/benefit. Due to the vast number of trees planted in these wide Rights-of-Way in the residential areas, it is a large financial and liability burden to the City. The City spends most of the annual tree budget on these trees, approximately \$20,000. The City would like to encourage residents to continue to plant and maintain trees. In order to enhance and maintain the urban forest to the desired level, the City will need to limit the scope of trees to one the

City can manage. With the cost savings of not maintaining public trees in the residential areas, more money could be spent on replanting and maintaining public trees in the commercial/downtown districts. Currently the City has guidelines for private trees, but in order to protect private trees the City would need to adopt a tree ordinance for private trees. Staff recommends a modification to Title 12 of the Morro Bay Municipal Code to clarify the ownership and maintenance responsibility for trees in the Rights-of-Way (Attachment 2 highlighted sections).

Goal 2: Enhancing the Urban Forest

The enhancement of the Urban Forest considers the life cycle of the Urban Forest and recognizes it is a dynamic, natural system. Establish and maintain an optimal level of age and species diversity and increased numbers of trees to maximize ecosystem benefits provided by the urban forest, (maintain air quality, reduce energy use, moderate stormwater runoff, and provide a favorable environment for city residents).

Goal 3: Protecting Wildlife

Morro Bay is a bird sanctuary and therefore protecting the nesting birds is essential. Further define the nesting season and explore Best Management Practices for the nesting birds and tree trimming during this time.

Goal 4: Educate the Public on the Benefits of Trees

Provide the public with a general understanding of the value and benefits that the Urban Forest provides. Educate residents, business owners, and the development community with best management practices, including planting and care of trees.

Goal 5: Tree Conservation

Conservation of the Urban Forest is important to preserve the forest for future generations. The conservation efforts include maintenance standards for ongoing management of trees. The City's Urban Forest should be maintained with standards that are consistent with good cultural best management practices.

CONCLUSION

The Urban Forest is a dynamic natural system that is constantly changing. The UFMP establishes guiding principles and associated goals that result in specific strategies for addressing the needs of public trees. The residents and visitors of Morro Bay deserve a healthy urban forest that is conserved for future generations. Therefore, sound guardianship of this unique and attractive community is necessary if the quality of life is to be maintained.

ATTACHMENT

ATTACHMENT 1: Urban Forest Management Plan

ATTACHMENT 2: Memo from former Interim City Attorney (highlighted sections)

Urban Forest Management Plan

“A Plan for the Public Trees of Morro Bay”



Morro Bay City Tree species is the Monterey Cypress (*Cupressus macrocarpa*)

When one tugs at a single thing in nature, he finds it attached to the rest of the world.

--John Muir--

Acknowledgements

City Council

Jamie Irons, Mayor
Noah Smukler, Vice Mayor
Nancy Johnson, Councilmember
George Leage, Councilmember
Christine Johnson, Councilmember

City Staff

Rob Livick, Public Services Director
Joe Woods, Recreation and Parks Director
Mike Wilcox, Maintenance Supervisor
Damaris Hanson, Engineering Technician IV
Logan Budd, Forestry/GIS Intern

USDA Forest Service

Through the California Department of Forestry and Fire Protection
Urban and Community Forest Program
California Urban Forest Council and the Inland Urban Forest Council

Volunteer Tree Committee

Ann Reisner, Cory Paul, Gabriel Frank, Jim Mayer, Melinda Elster, Noah Smukler,
Norm Mayer, Robert Schreiber, Sean Ellis, Taylor Newton, Wally McCray

URBAN FOREST MANAGEMENT PLAN - “A PLAN FOR THE PUBLIC TREES OF MORRO BAY”

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Executive Summary

The preservation of the natural environment is essential to the resident and visitors of Morro Bay. The coastal setting and its stunning beauty of this area attracts people to visit and live here. The residents and visitors of Morro Bay deserve a healthy urban forest that is conserved for future generations. Therefore sound guardianship of this unique and attractive community is necessary if the quality of life is to be maintained. Many of such measures will have to be in the area of conservation and the maintenance of the urban forest. The Urban Forest Management Plan (UFMP) is a living document and a long range policy guide that will respond and develop over time.

The UFMP will require close partnership between policy makers, staff and the community. The UFMP will help the Public Services and the Recreation and Parks Departments define the goals for City of Morro Bay public trees. This UFMP is the road map for these departments and the Tree Committee to follow in order to get the desired results for the trees located in the public right of ways. The UFMP establishes guiding principles and associated goals that result in specific strategies for address the needs of public trees.



Vision Statement

A healthy urban forest with a thriving, sustainable mix of tree species which are cared for and valued by both the City and citizens of Morro Bay. As an essential environmental, economical and community asset, the urban forest provides an attractive location for businesses, residents and visitors. The Urban Forest Management Plan seeks to increase age and species diversity in the public tree population, and enhance the character and aesthetics of our City for the people who live and work here.

Mission Statement

The Urban Forest Management Plan seeks to ensure that all benefits of a healthy urban forest are available to Morro Bay's residents and visitors for future generations. The UFMP accomplishes this by increasing age and species diversity in the public tree population, augmenting biomass and canopy coverage, and enhancing the character and aesthetics of our City by achieving exemplary conservation and sustainable practices for the public trees from all who live, work and visit here.



Why we need an UFMP

The Urban Forest Management Plan serves as a guide for perpetuating and enhancing Morro Bay's public trees. Public trees are the trees located within the City Rights of Way. This UFMP establishes guiding principles and associated goals that result in specific strategies for addressing the needs of public trees. These goals were developed from community input, City needs, environmental and urban conditions. They are flexible enough to account for future changes.

The discipline of urban forestry strongly advocates for species and age diversity in the urban forest so that an invasive species cannot devastate the entire urban forest. From the picture below you can see that most trees present in 1931 were the Blue Gum Eucalyptus and were planted primarily as wind breaks.



Image 1: Morro Bay Aerial Photo (1931)

Morro Bay's entire urban forest has more than 1,500 trees. There are 675 trees in the City Rights of Way (public trees). The tree population is aging and these trees will eventually need to be removed and replaced. Of the Monterey Pines that were planted in the 1950's, many have succumbed to the turpentine beetle, and the few that are left have begun to reach the end of their useful life. Removal of these trees is a big "hit" to the community since they are so large and also provide a larger canopy cover compared to the small 15 gallon tree that planted in their place. The Red flowering eucalyptuses, while a beautiful tree, are in small undersized tree wells and the trees drop woody seed capsules on the sidewalk posing a hazard to pedestrians.

This UFMP is essential in guiding the City toward a healthy sustainable urban forest. Proper tree selection and placement is vital to our Urban Forest future. An Urban Forest Management Plan is an essential tool for protecting this valuable resource. This UFMP discusses the makeup of our tree population through the tree inventory. It looks at the health of our trees and addresses the questions:

- Is this the right tree in the right place?
- Is there adequate species diversity?
- How can we improve age diversity with our aging population of trees?

The management plan will increase the public safety by managing the risk related to the public's infrastructure. The UFMP and tree inventory will provide lists of trees requiring priority removal and pruning that staff can carry out within the limits of a budget and

time. Adoption of this UFMP is the next significant step in Morro Bay's efforts to enhance the beautification of Morro Bay.

Historical Context

"Morro Bay was always the stuff of which dreams were made. A spectacular setting, with its magnificent rock, its rolling breakers in the outer bay, its sandspit and quiet inner bay, its picturesque shoreline extending as far as the eye can see". (Gates, Morro Bay Yesterdays)

In 1542, Juan Rodrigues Cabillo, a Portuguese navigator, sailed in the bay he named "Los Esteros" to anchor near the rock he named "El Moro" to supply his ship with wood and fresh water. Cabrillo was credited as the first European to discover the land of upper California, including the area now known as Estero Bay and Morro Bay.

Morro Bay's history has provided a foundation for the manner in which this community has grown over the years. Morro Bay originally developed because it provided access to shipping, an important asset to nearby farmers and ranchers. In the late 19th century, it became apparent to City founders that this bay offered economic potential, so they began to develop the harbor. If it had not been for a slump in the national economy at this time, Morro Bay could have easily become a miniature San Francisco. Instead, Morro Bay grew to be an important fishing port and an attraction to the touring public. (Gates)

Prior to about 1850 the only known trees in the area were the California Bay, Arroyo Willow, Fremont Cottonwood, California

Sycamore, California Box Elder, Monterey Cypress, Tanbark Oak, Coat Live Oak, and Monterey Pine. After about 1875 the first home was built in Morro Bay by Franklin Riley at the intersection of Morro Bay Boulevard and Main Street. The home was made of the native willows. After the first few years, Riley realized the need for trees in the area. He made the first nursery at the intersection of Harbor Street and Morro Avenue where he grew Monterey Cypress and Blue Gum Eucalyptus. These trees were vital in stopping the sand filled wind and created a layer of topsoil as well as fire wood.



ARNOLD SCHNEIDER

First house built in Morro, it had two rooms and consisted of willow pines chinked with adobe clay. Franklin Riley, builder-owner, situated his home in what is now the locality of Main Street and Morro Bay Boulevard. He founded the town.

Image 2: Franklin Riley house, (Gates)

The City was incorporated in July of 1964 and the first tree ordinance was adopted in July of 1966. This ordinance has much of

the same language as the present day tree ordinance. Around the 1950's the Boy Scouts planted Monterey Pines throughout Morro Bay and in the early 1980's Mayor Warren Dorn had the Red Flowering Eucalyptus trees planted as street trees in the downtown area. After about 1985 the first Morro Bay Tree Committee was formed and created the first City master tree list. This list consisted of native drought tolerant and/or California native tree species. Also during this time the first Adopt A-Tree program was started. The tree committee was eventually eliminated and members of this committee were combined with the franchise committee to form the Public Works Advisory Board. In 2009, another Tree Committee was formed, a volunteer committee, which is very active in planting trees around the community. The Volunteer Tree Committee has developed a revised City master tree list, and also suggested trees for residential properties and open space.

Benefits of trees

Economic benefits - The urban forest contributes to the well-being of the residents of Morro Bay in many ways. Trees add value to adjacent homes and business. Research shows that businesses on treescaped streets show 20% higher income streams, which is often the essential competitive edge needed for "main street" store success, versus competition from plaza discount store prices. Realtor based estimates of street tree versus non street tree comparable streets relate a \$15-25,000 increase in home and business value (Burden). This in turn adds to the tax base and operations budgets of a City allowing for added street maintenance.

Environmental benefits - Trees contribute to improving our air quality, water quality, and providing wildlife habitat. Trees leaf and branch structure absorb the first 30% of most precipitation,

allowing evaporation back into the atmosphere. This moisture never hits the ground. Another 30% of precipitation is absorbed back into the ground and taken in and held onto by the root structure, then absorbed and transpired back to the air. Trees provide rain, sun and heat protection shielding wildlife, humans and structures. Tree coverage offers shade from direct sunlight, shelter from the rain and lowering the air temperatures by 5-15 degrees. Air quality is improved by trees and shrubs by absorbing carbon dioxide and other pollutants, removing dust and sand particulates, and releasing oxygen. Carbon dioxide is absorbed for the photosynthetic process, but other emissions such as nitrogen oxides, carbon monoxide, and volatile organic compounds are reduced significantly from the proximity to trees (Burden). The leaves and shrubs filter the air from moving dust and sand particles. Urban street trees provide a canopy, for birds to enjoy, a root structure and setting important for insect and bacterial life below the surface; at grade for pets and people to enjoy, all of which connects the urban human to the natural environment.

Social benefits – Trees seem to make life more pleasant in a couple of ways. They convert the streets, parking, and buildings into a more aesthetically pleasing environment. The paved roads, parking lots and structures that create cities are a grey visual and harsh environment without the trees and shrubs to soften and relieve the eye sore. Trees also improve health, emotion, and wellbeing for all ages. Studies have shown that trees can reduce stress, and that views of trees can speed the recovery of surgical patients (Burden). The advantage of trees expands past their physical benefits, by creating a more calming, visually pleasing environment for all to gain from.

Relationship to other City documents

General Plan- The UFMP is supported by elements of the City of Morro Bay's General Plan; Land Use Open Space, and Conservation Element. The City's General Plan, adopted in 1988, is a vintage document and the City will be updating this document in the coming years and incorporating new policies which also support the need for a strong urban forest program.

One of the "issues" identified in the Land Use, Conservation and Open Space element is: the maintenance of the natural image portrayed by the City and its surroundings must be guaranteed if one of the primary reasons people live in Morro Bay is to remain intact. The UFMP strives to do just this, by managing the trees and preserving the natural beauty in Morro Bay.

Morro Bay has taken steps to preserve the natural environment which could have easily been lost. As such, the City has attracted a population who has come not because it is close to where they work, but because of its qualities. Many of these qualities are environmental, but an equal amount has been created by such things as the atmosphere of the fishing port and its isolation from the faster paces of life. It is because the people of Morro Bay have more than a casual desire to live here that the need to take every measure possible to maintain this sense of identity is accentuated. Many of such measures will have to be in the area of conservation and the maintenance of the environment. It is also important to realize that the current residents were attracted, so too will the future residents be attracted. Therefore, sound guardianship of this unique and attractive community is necessary if the quality of life is

to be maintained. (Land use, conservation open space element)

Municipal Code- The City of Morro Bay's Municipal Code addresses street trees regulations (MBMC 12.08). The regulations include provisions on tree removal by City for cause, tree care, planting and replanting. The City also has a bird nesting season from February 1st through June 30th. No trees within the public right of way can be removed or trimmed during this time except in the case of an emergency as determined by the Director of Public Services. The municipal code also has a section on frontage improvements which require property owners and/or applicants for significant development permits to install frontage improvements. These frontage improvements require a street tree to be planted and the tree to be one from the City's approved street tree list. The City recently adopted a Landmark tree ordinance which provides the guidelines for residents to nominate a tree within the public right of way as a landmark tree. Currently there are several nominees but these trees have not yet been approved by City Council.

Tree City USA- The City has been recognized for over twenty years, since 1989, by Tree City USA. In order to meet the Tree City USA recognition the City must have a tree board or department, a tree care ordinance, a community forestry program with at least an annual budget of \$2 per capita and an Arbor Day observance and proclamation.



TREE CITY USA®

Environmental Setting

Morro Bay and its surrounding regions combine to form an environmental sensitive and delicate mixture of land, air, water and life. From Morro Rock, the sand spit, Black Hill, Morro, Chorro and Toro creeks down to the estuary itself, all make up the geologic region of Morro Bay. Morro Bay is part of the Franciscan Formation. It is made up of complex igneous, metamorphic and sedimentary rock layers formed in the Cretaceous period, 75 to 195 million years ago. The Morro's, or Seven Sister, including Morro Rock are volcanic plugs formed in the Pleistocene Period and are made up of serpentine and/or porphyritic dacite.

Soils

There are seven major soils groups that underline the City. These soils are Baywood Fines, Concepcion, Cropely, Diablo, Dune, Los Osos and Marimel. The most fertile areas in the Morro Bay area can be found in the valleys where most of the agriculture occurs. Streams have eroded soils upstream and have transported and deposited then along the valleys. There are two types of alluviums in Morro Bay. The older alluvium, characterized by coarse textured soils, is generally found in the Los Osos Creek Valley and coastal Plains of Morro Bay consisting of old stabilized dunes. These soils are subject to excessive drainage, rapid permeability, and wind and water erosion. The soils are generally not fertile and are used mainly for urban uses. The newer alluvium can be found in the Toro, Morro, and Chorro Valleys. These soils are characterized by level, but poorly drained clays.

The foothills of Morro Bay have been generally categorized as shallow uplands. Within this category, two soils groups can be identified. One consists of upland soils formed from firm shales, sandstones or mudslides and is highly prone to erosion. The second group is a clayey upland soil formed on shale or igneous bedrock. Situated on gently rolling terrain, erosion is moderate and the soil permeability is low.



Image 3: North Morro Bay's Soils

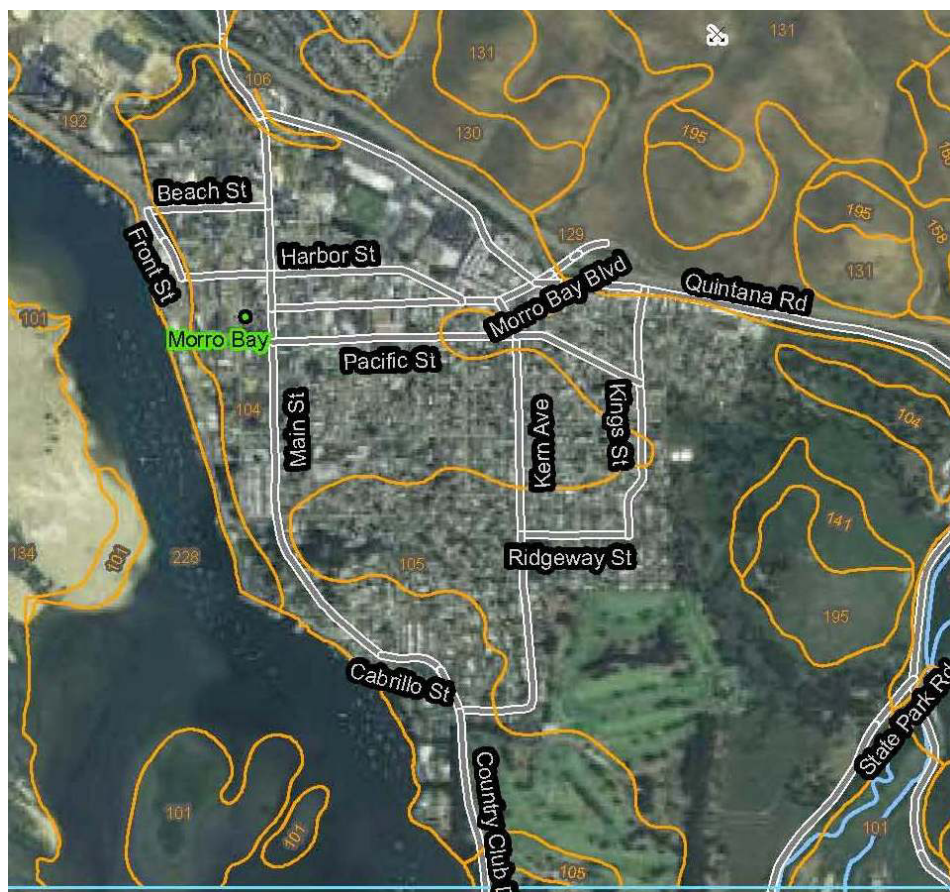


Image 4: South Morro Bay's Soils

104-106, Baywood fine sands series consist of deep, somewhat excessively drained soils in old sand dunes near the coast.

120, Conception series consists of a shallow loam layer with an abrupt textural change to a thick claypan limiting the transmittal of water.

128, Cropley series consists of moderately deep clay soils over silty clay loam soils, moderately well drained soils formed from alluvium.

128-132, Diablo series consists of moderately deep clay soils, poorly drained with weathered bedrock at around 58 inches.

134, Dune series consists of sand; these areas are the dune and beach areas.

158-161, Los Osos series consists of shallow loam soil over clay to sandy loam soils, moderately drained with weathered bedrock at about 39 inches.

*Soils information was acquired from the USDA Natural Resources Conservation Service (NRCS), see Appendix 2 for full soils description.

Climate

Morro Bay experiences a mild Mediterranean climate. Plants here seldom suffer a frost of any consequence. Morro Bay's climate is cool, wet winters, and cool summers with frequent fog or wind. The fog tends to come in high and fast, interposing a cooling and humidifying blanket between the sun and the earth, reducing the intensity of the light and sunshine.

Figure 1: Average Rainfalls in Morro Bay

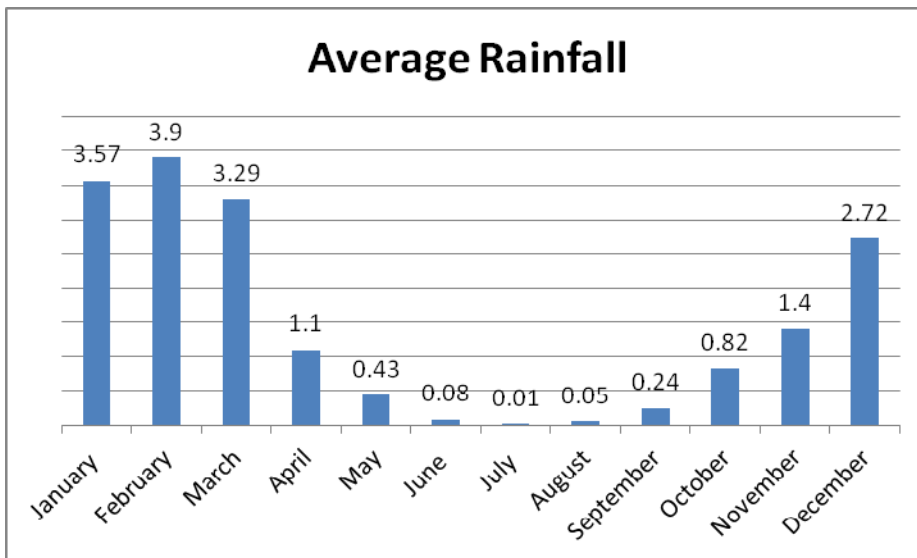
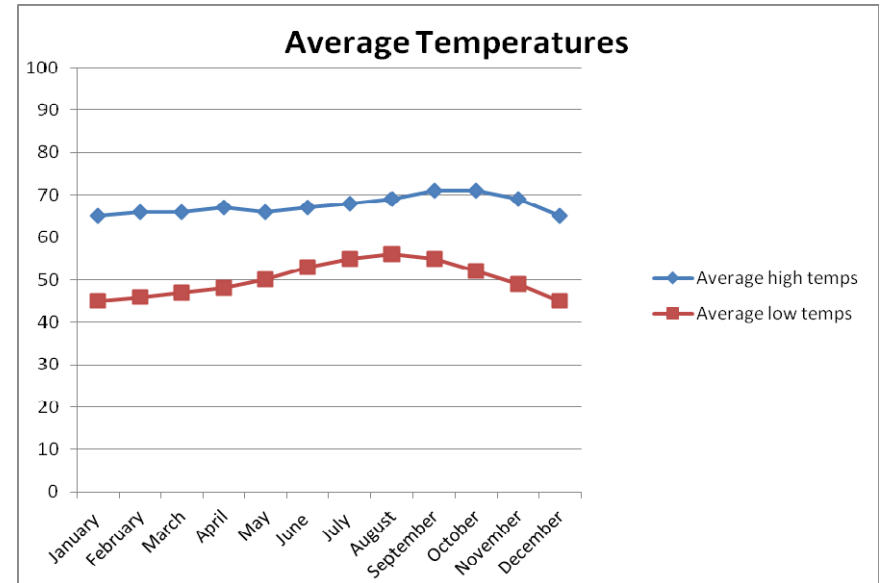


Figure 2: Average Temperatures in Morro Bay



The average temperature year round is 65 °F, typically with warmer winters and cooler foggy summers. Morro Bay does have several microclimates (see map below) which can affect the tree selection in various areas of town. For example several zones experience high winds with salt spray which can affect certain trees negatively. Therefore the tree selection in these areas should take into consideration the microclimates present here in Morro Bay.

The City has seven microclimate zones identified by the “A Yards and Neighbors Brochure for California’s Central Coastal Morro Bay Area”. These microclimates areas have distinct weather conditions. In this brochure different trees are identified as to which microclimate it best suits. This logic and information can be used to help specify specific tree lists for different areas of town according to their microclimate, soils and surrounding environment.

Image 5 shows the different microclimates for Morro Bay. Zones 1 and 2 are located on the beach and directly adjacent to the beach where there is little protection from the wind and salt spray. These two zones have the most extreme conditions for trees, and only a select variety can survive with good health and vigor. Zones 3, 4 and 5 are located in the residential and downtown areas in Morro Bay. They receive some wind and salt spray blockage from the frontage buildings and trees, which increases the number of tree species that can tolerate the conditions. Zones 6 and 7 stretch out to the city limits. Highway 41 is considered zone 6, and Little Morro Creek Road is zone 7. These zones have a higher frost potential and receive strong winds. These zones have a large list of tree species that can tolerate the conditions.

The following two tables were generated to show which tree species could tolerate the different microclimate zones for both street tree locations and open space locations. Street trees need to primarily be a single stem tree, with a canopy high enough to walk and drive under, in addition to a tree with deeper roots and doesn’t drop a lot of litter. Open space locations can include tree characteristics that are not favorable for street tree locations. All the tree species identified in the inventory along with potential trees were separated into the different zones. They were separated by current trees performances within the zones, along with tolerance ratings and suitable location information collected on each individual species.

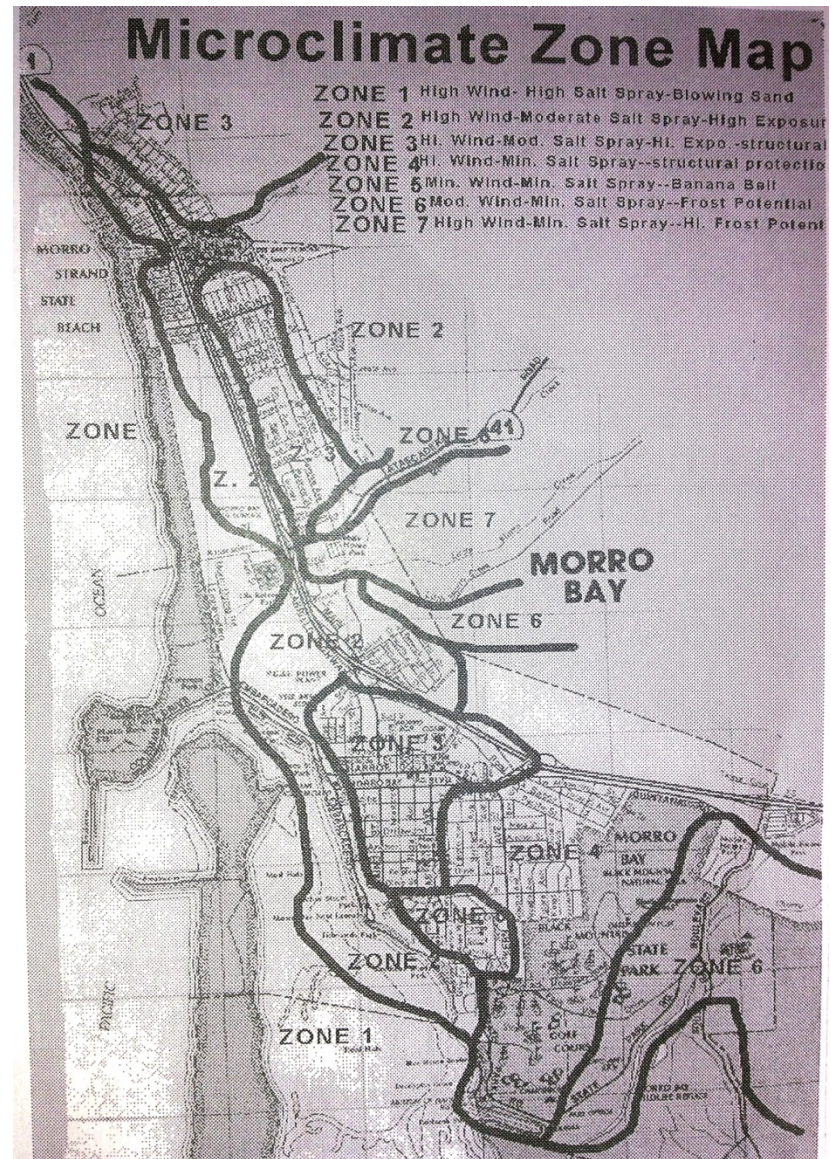


Image 5: Morro Bay Microclimate Zone Map

Table 1: Street Tree List

Zones 1-2		Zones 3-5		Zones 6-7	
Scientific name	Common name	Scientific name	Common name	Scientific name	Common name
<i>Agonis flexuosa</i>	Peppermint willow	<i>Agonis flexuosa</i>	Peppermint willow	<i>Agonis flexuosa</i>	Peppermint willow
<i>Cupressus macrocarpa</i>	Monterey cypress	<i>Arbutus marina</i>	Strawberry madrone	<i>Arbutus marina</i>	Strawberry madrone
<i>Leptospermum laevigatum</i>	Australian tea tree	<i>Callistemon citrinus</i>	Lemon Bottlebrush	<i>Callistemon citrinus</i>	Lemon Bottlebrush
<i>Mitrosideros excelsus</i>	New Zealeand Xmas tree	<i>Callistemon viminalis</i>	weeping bottlebrush	<i>Callistemon viminalis</i>	weeping bottlebrush
		<i>Ceanothus 'Ray Hartman'</i>	California Lilac	<i>Ceanothus 'Ray Hartman'</i>	California Lilac
		<i>Cupaniopsis anacardioides</i>	carrot wood	<i>Cupaniopsis anacardioides</i>	carrot wood
		<i>Cupressus macrocarpa</i>	Monterey cypress	<i>Cupressus macrocarpa</i>	Monterey cypress
		<i>Eucalyptus citriodora</i>	lemon scented gum	<i>Eucalyptus citriodora</i>	lemon scented gum
		<i>Eucalyptus gunnii</i>	cider gum	<i>Eucalyptus gunnii</i>	cider gum
		<i>Eucalyptus nicholii</i>	willow leafed peppermint	<i>Eucalyptus nicholii</i>	willow leafed peppermint
Current tree list		<i>Eucalyptus tricarpa</i>	red ironbark	<i>Eucalyptus tricarpa</i>	red ironbark
Inventoried trees		<i>Geijera parviflora</i>	Australian willow	<i>Geijera parviflora</i>	Australian willow
		<i>Ginko biloba</i>	maiden hair tree	<i>Ginko biloba</i>	maiden hair tree
		<i>Lagunaria patersonii</i>	Primrose tree	<i>Lagunaria patersonii</i>	Primrose tree
		<i>Leptospermum laevigatum</i>	Australian tea tree	<i>Leptospermum laevigatum</i>	Australian tea tree
		<i>Lyonothamnus floribundus</i>	Catalina ironwood	<i>Lyonothamnus floribundus</i>	Catalina ironwood
		<i>Melaleuca nesophila</i>	Pink Melaleuca	<i>Melaleuca nesophila</i>	Pink Melaleuca
		<i>Melaleuca quinquenervia</i>	Paper bark tea tree/Cajeput tree	<i>Melaleuca quinquenervia</i>	Paper bark tea tree/Cajeput tree
		<i>Mitrosideros excelsus</i>	New Zealeand Xmas tree	<i>Mitrosideros excelsus</i>	New Zealeand Xmas tree
		<i>Pinus canariensis</i>	Canary Island pine	<i>Persea americana</i>	Avocado
		<i>Pinus pinea</i>	Italian stone pine	<i>Phoenix canariensis</i>	Canary Island Date palm
		<i>Pittosporum undulatum</i>	victorian box	<i>Pinus canariensis</i>	Canary Island pine
		<i>Prunus cerasifera</i>	purple leafed plum	<i>Pinus pinea</i>	Italian stone pine
		<i>Pyrus calleryana</i>	ornamental pear	<i>Pinus radiata</i>	Monterey pine
		<i>Quercus agrifolia</i>	Coast live oak	<i>Pittosporum undulatum</i>	victorian box
		<i>Quercus tomentella</i>	Channel island oak	<i>Prunus cerasifera</i>	purple leafed plum
		<i>Quercus virginiana</i>	southern live oak	<i>Pyrus calleryana</i>	ornamental pear
		<i>Rhus integrifolia</i>	Lemonade sumac/Lemonade berry	<i>Quercus agrifolia</i>	Coast live oak
		<i>Rhus lancae</i>	African sumac	<i>Quercus tomentella</i>	Channel island oak
		<i>Tristania laurina</i>	Tristania	<i>Quercus virginiana</i>	southern live oak
		<i>Tristiana conferta</i>	Brush box	<i>Rhus integrifolia</i>	Lemonade sumac/Lemonade berry
		<i>Ulmus parvifolia</i>	Chinese elm	<i>Rhus lancae</i>	African sumac
				<i>Syagrus romanzoffianum</i>	Queen palm
				<i>Tristania laurina</i>	Tristania
				<i>Tristiana conferta</i>	Brush box
				<i>Ulmus parvifolia</i>	Chinese elm

Table 2: Open Space Tree List

Zones 1-2		Zones 3-5		Zones 6-7	
Scientific name	Common name	Scientific name	Common name	Scientific name	Common name
<i>Cupressus macrocarpa</i>	Monterey cypress	<i>cupressocyparis leylandii</i>	leyland cypress	<i>cupressocyparis leylandii</i>	leyland cypress
<i>Eucalyptus globulus</i>	Blue Gum	<i>Cupressus macrocarpa</i>	Monterey cypress	<i>Eucalyptus erythrocorys</i>	red cap gum
<i>Juniperus chinensis</i> 'Torulosa'	Hollywood juniper	<i>Eucalyptus cornuta</i>	Yate tree	<i>Eucalyptus ficifolia</i>	Red flowering eucalyptus
<i>Pinus pinea</i>	Italian stone pine	<i>Eucalyptus erythrocorys</i>	red cap gum	<i>Eucalyptus globulus</i>	blue gum
<i>Phoenix canariensis</i>	Canary Island Date palm	<i>Eucalyptus globulus</i>	blue gum	<i>Eucalyptus lehmannii</i>	Bushy yate
<i>Syagrus romanzoffianum</i>	Queen palm	<i>Eucalyptus gunnii</i>	cider gum	<i>Eucalyptus rudis</i>	desert gum
<i>Yucca aloifolia</i>	Spanish bayonet	<i>Eucalyptus rudis</i>	desert gum	<i>Heteromeles arbutifolia</i>	Toyon/Holly
		<i>Heteromeles arbutifolia</i>	Toyon/Holly	<i>Juniperus chinensis</i> 'Torulosa'	Hollywood juniper
		<i>Juniperus chinensis</i> 'Torulosa'	Hollywood juniper	<i>Yucca aloifolia</i>	Spanish bayonet
		<i>Persea americana</i>	Avocado		
		<i>Phoenix canariensis</i>	Canary Island Date palm		
		<i>Pinus pinea</i>	Italian stone pine		
		<i>Pinus radiata</i>	Monterey pine		
Current tree list		<i>Prunus lyonii</i>	Catalina cherry		
Inventoried trees		<i>Quercus agrifolia</i>	Coast live oak		
		<i>Quercus tomentella</i>	Channel island oak		
		<i>quercus virginiana</i>	southern live oak		
		<i>Rhus lancea</i>	African sumac		
		<i>Syagrus romanzoffianum</i>	Queen palm		
		<i>Yucca aloifolia</i>	Spanish bayonet		

Inventory

In the early planning of the Urban Forest Management Plan, it was decided that a complete inventory of all city owned trees in the commercial zones was needed. Data from prior sample inventories and tree maintenance records were useful, but in order to get a more accurate and updated impression of the urban forest, a complete inventory was completed with specific criteria surveyed for the data analysis process. The objective of the inventory was to collect information describing the characteristics and condition of the trees that later could be imported and analyzed in ArcMap and i-Tree Streets to create graphs, maps, and tables for forest management decisions. Environmental Systems Research Institute (Esri) is a supplier of GIS software applications. ArcMap is component of Esri's geospatial processing programs, which allows users to view, edit, create, and analyze geospatial data. ArcMap allows users to symbolize features and create maps. I-Tree is software developed by the USDA Forest Service that provides urban forestry analysis and benefits assessment.

Data Collection

The inventory was completed with a Topcon data collector, which has Global Positioning System (GPS) for identifying the location of the trees and ArcPad software for data collection. ArcPad is a mobile field mapping and data collections software developed by ESRI. The zones where trees were surveyed consisted of commercial areas including C-1, C-2, C-VS, G-O, MCR, and R-4. The inventory consisted of 672 trees in the public right of way, and at

each tree, information on 25 different fields was gathered. The 25 fields included: Tree ID number, Street name, building address, Species common name, Species scientific name, Diameter at breast height (DBH), Height, Live crown ratio, Canopy spread, number of trunks, Hazard rating, Health, Age class, Site type, Crown class, Open tree well, Use under tree, Occupancy, Defect, Defect present, Pruning required, Conflicts, Photo, Date collected, and Comments.

The tree ID number is a very important field, because it gives each tree a unique identification. Each tree received a tag with a number punched into it starting at 1001. The tags were either, nailed into the base of the trunk of the tree, nailed into the post holding up a young tree, or hammered into the curb directly in front of the tree. Unique tree identification numbers and tags allows for easy explanation of which tree is being discussed or need maintenance.



Image 6: Tree Identification Tag

Street name and building address are two fields that identify what street the tree is on and what building it is in front of. These fields allow for locating the tree and explaining what side of a building it is on.

Species common/scientific name are two fields that are very useful and important for making forest management decisions. Identifying each tree species permits combing data to find the overall health of a species, what species grows best in specific locations, or even what species is causing the most sidewalk pavement damage.

The tree height and tree diameter fields were collected using tools. The diameter field was completed with a D-tape, and measured at DBH which is 4.5 feet above the base of the tree on the uphill side. Direct readings were used and measured in inches. Tree height was measure at each tree using a clinometer. Surveying tree heights allows for finding growth rates of trees, proximity to power lines, and other important issues.

Live crown ratio, canopy spread, and number of trunks were fields that were collected at each tree through pacing and observing. Live crown ratio is found by observing the lowest alive branch on the tree and comparing that height to the height of the entire tree. Canopy spread was found by pacing from the trunk of the tree to the furthest out reaching branch multiple. Finding the canopy spread allows for finding the amount of storm water retention, and amount of shade produced. The number of trunks was recorded based on the number of trunks each tree had that split below DBH.

The hazard rating and health fields were identified by observing the tree from all sides and from different distances. The hazard rating field gives each tree a risk rating ranging from low to extreme risk. The risk rating is a number from 3-12 and each number has an interpretation and implication. The health field is also indentified by observing the tree. Depending on the foliage, tree height, bark and more factors each tree is given a health rating of one of the following: excellent, average, fair, or poor.

Age class, site type, crown class, open tree well, use under tree, and occupancy are all fields that are quick to identify. The age class field is used in replace of an increment borer. Each tree was examined and grouped in one of the following age classes: Over-mature,

mature, semi-mature, and young. The site type field explains what each tree is planted in. The majority of the trees surveyed in this inventory were planted in sidewalk tree wells, but the other options to choose from were open areas (lawn), raised bed, or a container. The crown class field identifies the height of each individual tree compared to the trees/buildings surrounding it. This field determines the amount of sunlight each tree receives. The options to choose from in the field were; dominate, co-dominate, intermediate, and suppressed. The open tree well field was created as a yes/no field to be able to locate all the open sidewalk tree wells that can be replanted. The use under tree field identifies what lies directly underneath that tree canopy. The options to choose from included: pedestrian, parking, recreation, traffic, utility lines, building, and landscape. In many cases there was more than one of the options underneath the tree canopy, and in those circumstances that most frequency use was selected. The occupancy field was created to identify how frequently human activity occurred under the tree canopy. The options to choose from in the field were; frequent use, occasional use, constant use, or intermittence use.

The defect, defect present, pruning required, and conflicts fields were all important for the data analysis process. The defect field gives each tree a rating based on the amount of defect evident on the tree. The defect present field has a long list of defects that are common and can be selected if the tree has evidence of the particular defect. The pruning field both identifies if the tree need pruning, and states what type of pruning needs to be performed. The conflicts field has a list of common conflicts that occur in unban forests. The most frequent conflict was sidewalk pavement damage.

Finally, the photo, date collected, and comments fields were all created for easier organization and identifying what time of the year

Inventory Results

A tree inventory establishes baseline data for a complete analysis of its street tree population by using ArcMap and software developed by the US Forest Service called i-Tree streets. ArcMap allows for detailed information to be combined and searched, to find specific criteria. By combining the data collected in the inventory along with city GIS information many important tree management queries can be answered including: where each tree species is growing best, which tree species is creating the least sidewalk damage, location of open tree wells along with what tree species will thrive in that location, and even what tree species is the least hazardous. In addition, the programs used in the data collector are only

the trees were surveyed, and in order to identify if a particular tree had anything out of the ordinary.

compatible with ArcMap for data extraction. The ArcMap software is also capable of creating maps with multiple layers showing the GPS location of every tree inventoried. The i-Tree streets analysis provides a dollar value indication of the environmental benefits provided by each tree. While i-Tree streets analysis provides information on the environmental performance of the entire forest, analyzing individual species provides detailed information on the performance of individual species. The i-tree streets software takes the information from the inventory and calculates the pounds of carbon absorbed, gallons of stormwater retained, and the amount of energy in kilowatt hours saved.



STREETS: Running a STRATUM Analysis



Species and Population Distribution

Data from the inventory indicates that the commercial zones in Morro Bay are comprised of over 40 different species of trees. The large majority of the urban forest is consisting of the Red Flowering Eucalyptus (*Eucalyptus ficifolia*). Of the 673 trees collected in the inventory, 259 of them were *Eucalyptus ficifolia*, which can be seen in Figure 4 and is over 38% of the tree population. Fifty Cajeput (*Melaleuca quinquenervia*) trees and thirty-two Blue gum eucalyptus (*Eucalyptus globulus*) trees were surveyed. The most frequently inventoried trees are shown in the figure 3 and figure 4, which comprise of 71.4% of the entire survey. The rest of species surveyed had populations of 13 or fewer and together comprised of 28.6% of the trees

Figure 3: Populations of the 10 Most Common Tree Species

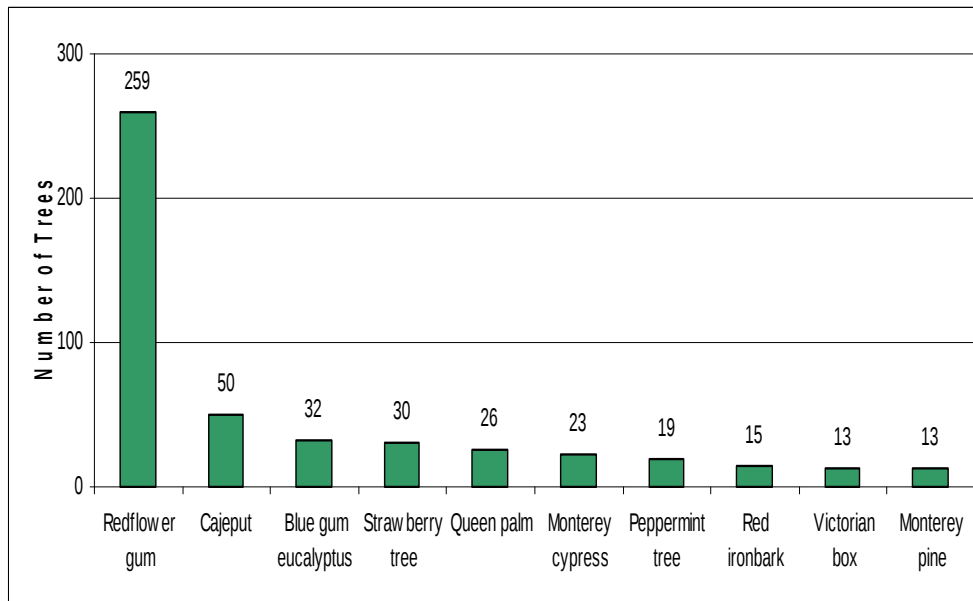
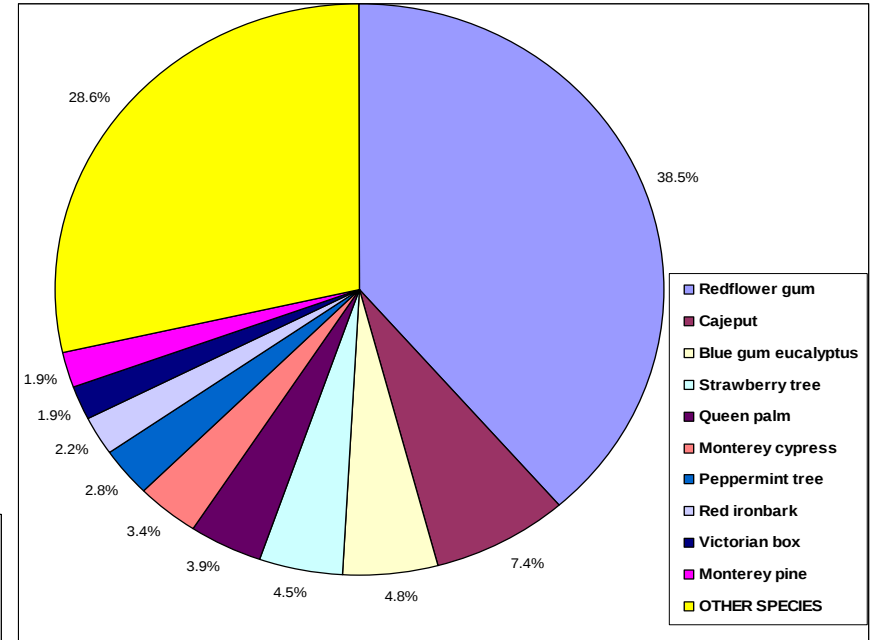


Figure 4: Species Distribution of Public Trees



surveyed. The distribution of tree species throughout the commercial zones is uniform for some species and isolated for others. The Red flowering eucalyptus tree is highly concentrated in the downtown area of Main Street, Morro Bay Boulevard, and Harbor Street, as well as scattered throughout the rest of the commercial zones on south Quintana, and north Main. The large Blue gum eucalyptus trees are distributed either on the Embarcadero, directly above the Embarcadero, or along the bike path at the Main street/Quintana road intersection. The following four maps show the location and distribution of individual trees by species for the entire inventory.

Figure 5: Tree Map of Upper North Main Area

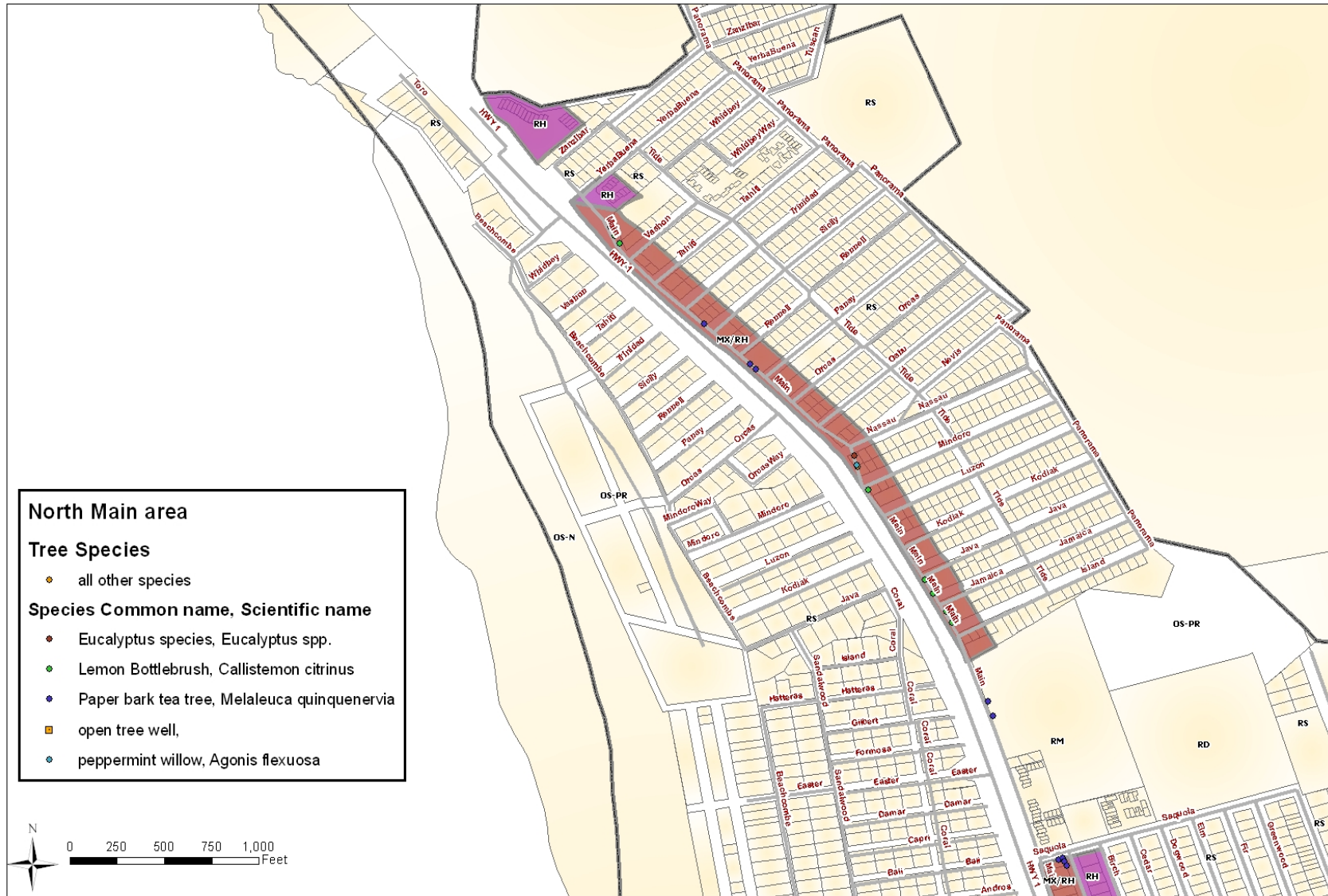
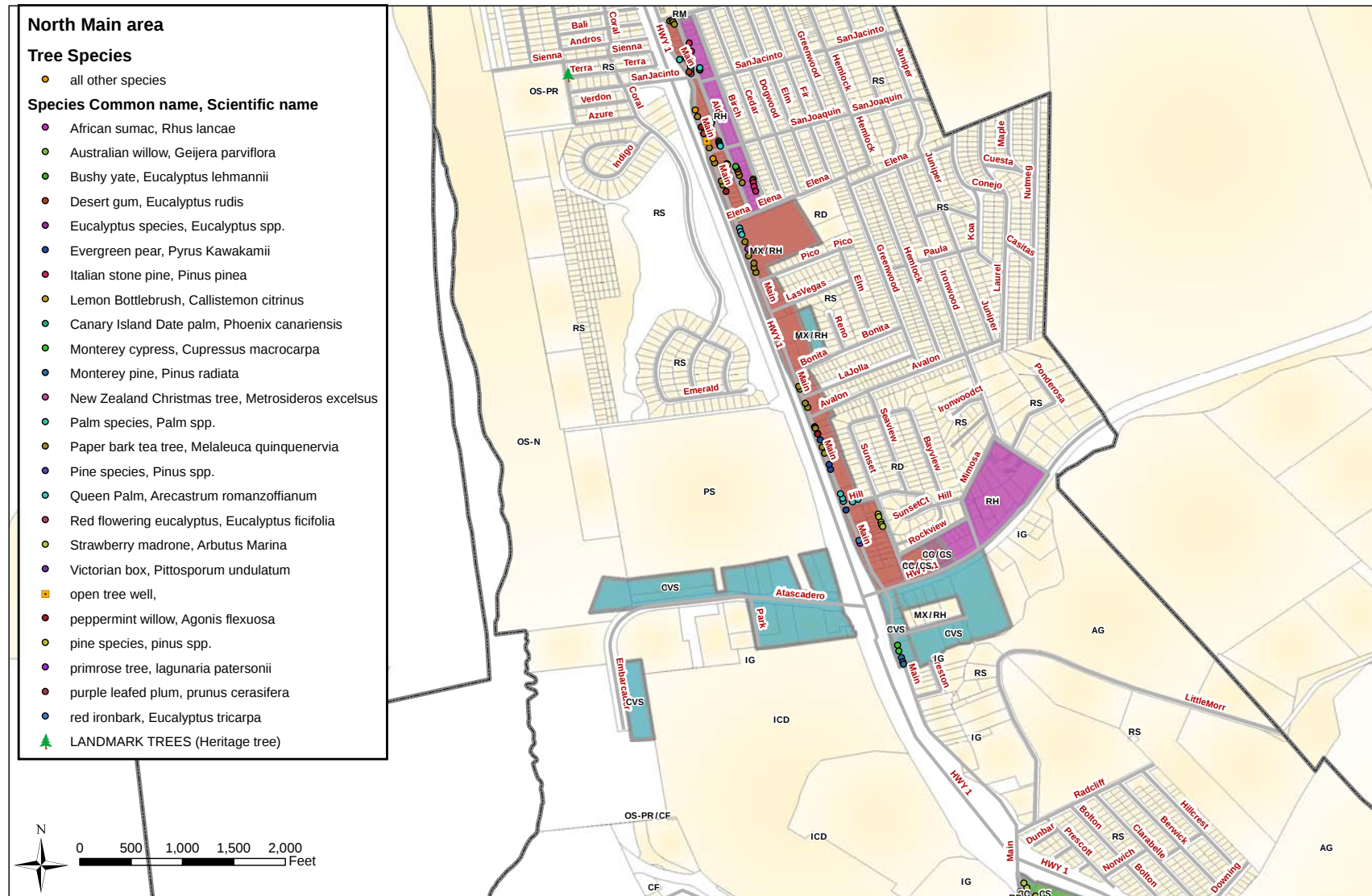


Figure 6: Tree Map of Lower North Main Area



Downtown/Embarcadero area

15 Most Common Species

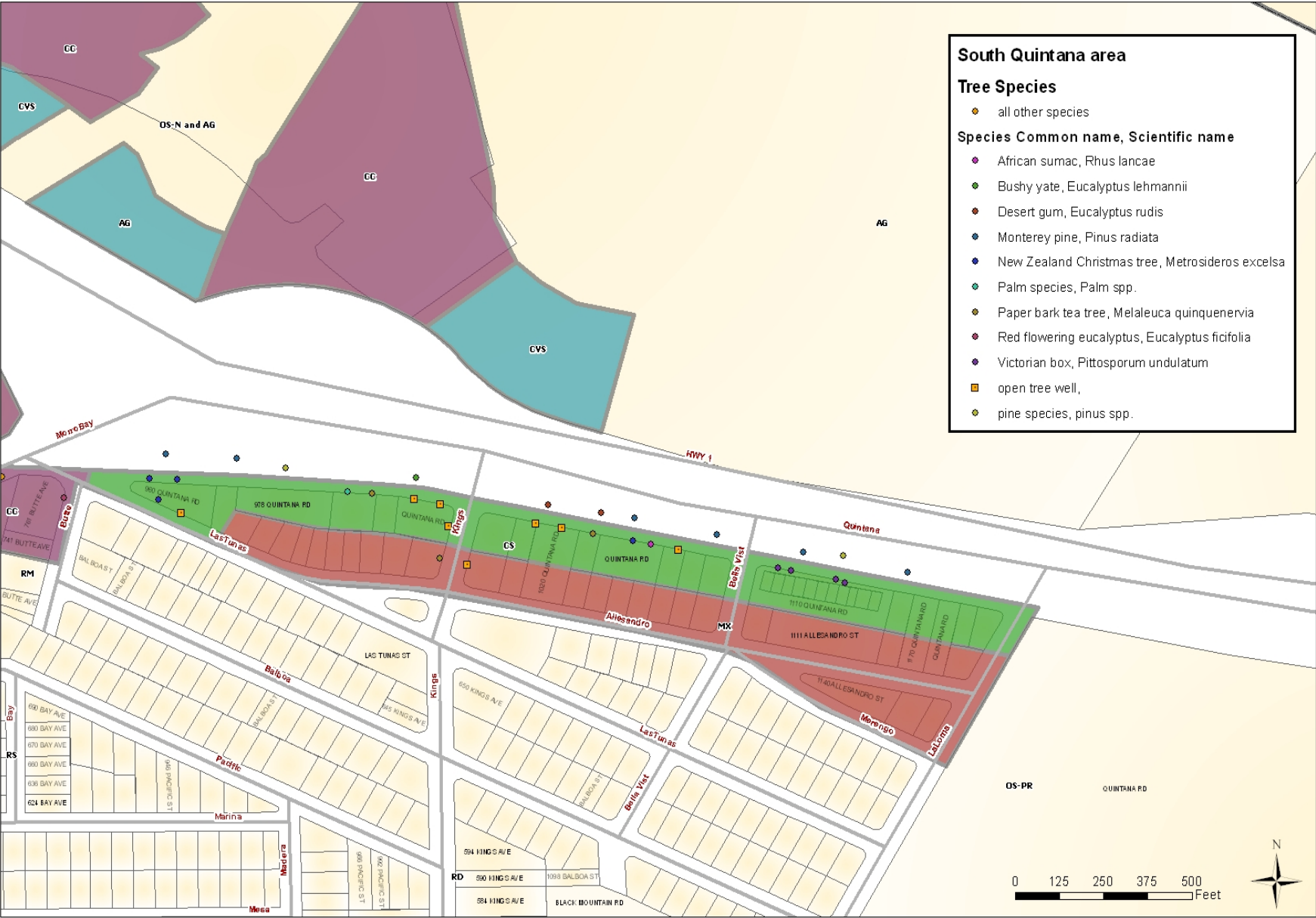
- all other species

Species Common Name, Scientific Name

- Blue gum, *Eucalyptus globulus*
- Channel island oak, *Quercus tomentella*
- Desert gum, *Eucalyptus rudis*
- Lemon Bottlebrush, *Callistemon citrinus*
- Canary Island Date palm, *Phoenix canariensis*
- Monterey cypress, *Cupressus macrocarpa*
- New Zealand Christmas tree, *Metrosideros excelsa*
- Paper bark tea tree, *Melaleuca quinquenervia*
- Queen Palm, *Arecastrum romanzoffianum*
- Red flowering eucalyptus, *Eucalyptus ficifolia*
- Strawberry madrone, *Arbutus Marina*
- Victorian box, *Pittosporum undulatum*
- open tree well,
- peppermint willow, *Agonis flexuosa*
- red ironbark, *Eucalyptus tricarpa*
- red-cap gum, *Eucalyptus erythrocorys*
- willow leafed peppermint, *Eucalyptus nicholii*
- LANDMARK TREES (Heritage tree)

Map showing the distribution of the 15 most common species in the Downtown/Embarcadero area. The map includes a legend, a scale bar, and a north arrow. The legend lists 15 species with their common and scientific names, and a symbol for landmark trees. The map shows the distribution of these species across the area, with color-coded zones and street names.

Figure 8: Tree Map of South Quintana Area



Tree Characteristics

The data collected on tree characteristics from the inventory, was analyzed and put into tables that present the numbers clearly. The following four tables are express information on tree diameter, tree height, and canopy spread. More tables on tree characteristics can be found in the appendix.

Tree diameters were collected at every tree inventoried. Later the diameters were grouped into diameter classes in order to find the distribution of diameters citywide. In the diameter class distribution table on the right it shows that the 58.55% of the commercial zone trees have a diameter between 6 inches and 24 inches. The table also shows that less than 6% of the inventoried trees have diameters greater than 36 inches

Tree height is another important tree characteristic that was measured at every tree inventoried. Each tree heights was measured down to the foot, during the survey, and afterwards placed into height classes with 15 foot intervals. The tree height table on the right shows that 297 trees had a between 15 feet and 30 feet.

Canopy spread data was measured at each tree, and then later placed into canopy spread classes with 10 foot intervals. This table can be found in the appendix labeled "Canopy spread". The canopy cover table on the right was produced from the canopy spread data and city street information. The table shows that 4.42% of the .45sq mi area surveyed is covered with tree canopy. The table also illustrates that 11.54% of the 13 linear miles sidewalk is shaded by tree canopy as well.

The condition of each tree was recorded during the survey, and later placed in a table showing the number of excellent, average, fair or poor condition trees each species has. This table can be found in the appendix labeled "condition of trees". With this information we are able to identify if particular tree species grow better or can withstand the different microclimates. For example, the Cajeput tree (*Melaleuca quinquenervia*) has 19 trees that are either labeled fair or poor, 12 of which are located on the North main street pas HWY 41.

Table 3: Diameter Class Distribution

diameter class distribution	
Diameter class	Citywide total
0-3	9.06%
3-6	9.21%
6-12	19.02%
12-18	20.51%
18-24	19.02%
24-30	12.92%
30-36	4.46%
36-42	3.42%
>42	2.38%

Table 4: Tree Height

Tree Height		
Tree height classes	Tree count	% of public trees
0'-15'	134	19%
15'-30'	297	44%
30'-45'	177	26%
45'-60'	19	3%
60'+	35	5%
N/A	11	2%

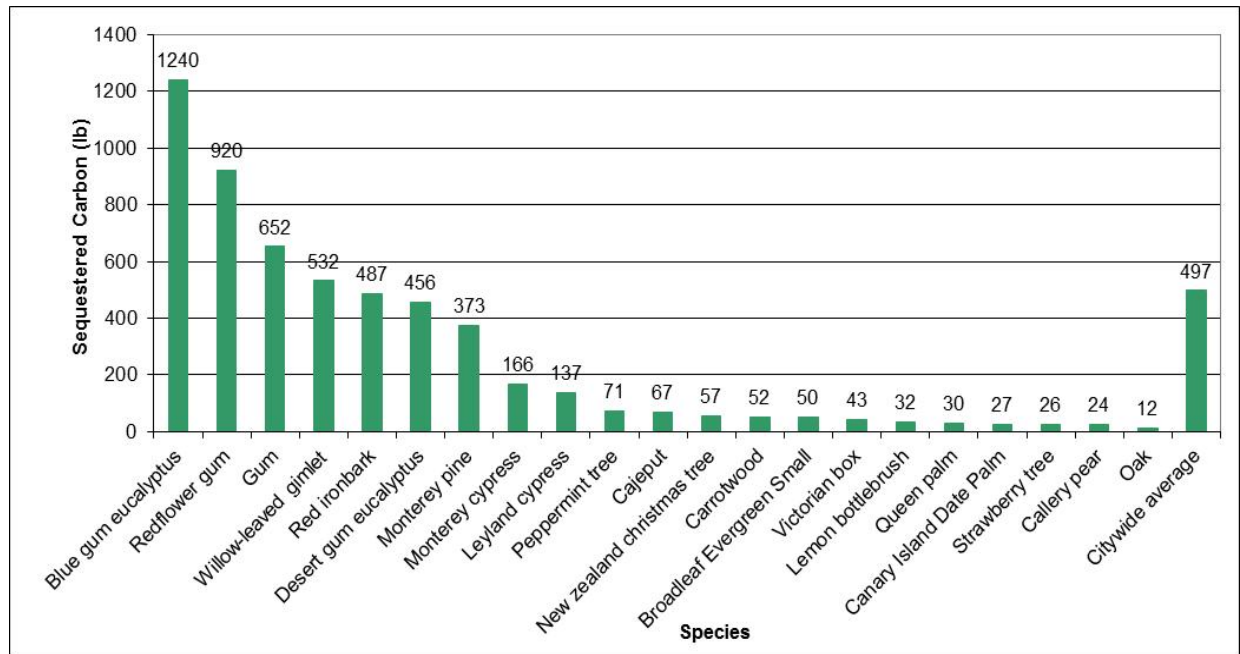
Table 5: Canopy Cover

Canopy cover	canopy cover as % of total land area	Canopy Cover as % of Total streets and sidewalks
	4.42	11.54

Environmental Benefits Results

Trees make our cities more attractive and provide many ecosystem services, including atmospheric carbon dioxide reduction, energy conservation, and stormwater interception. The information from the inventory was ran through software (i-tree streets) which calculated the pounds of carbon absorbed, amount of energy in kilowatt hours saved, and the gallons of stormwater retained annually by the urban forest. The size of the trees are included in the calculations to give an accurate representation of the current urban forest.

Figure 9: Pounds of Atmospheric Carbon Removed Annually by Individual Species



Carbon Sequestration Analysis

Carbon sequestration is the process by which carbon dioxide (CO₂) is absorbed out of the atmosphere through trees trunks, branches, leaves, and roots as they grow. Urban forests can act as a carbon sink when there are enough trees to store more carbon than is released over time (McPherson). The figure above shows the pounds of carbon each individual species tree is absorbing annually. The trees in the commercial zone areas together are absorbing 334,655 pounds of carbon each year. The graph illustrates that one Blue gum eucalyptus is annually absorbing 1240 lbs. of carbon each year. The Blue gum is the largest tree species in the urban forest, increasing its productivity. A Red flowering eucalyptus absorbs 920 lbs. of carbon annually making it the second most efficient species. In general the Eucalyptus species is a great carbon sequester. From the large Blue gum eucalyptus to the shorter willow leafed gimlet, red ironbark, Desert gum eucalyptus, and red flowering eucalyptus, they all are on the top for the amount of carbon absorbed each year making them important contributors to the environment and reduction of emissions. The citywide average for one individual tree is 497 lbs. sequestered each year.



Image 7: Large Blue Gum Eucalyptus (*Eucalyptus globulus*) sequester more carbon than the other species

Energy Savings Analysis

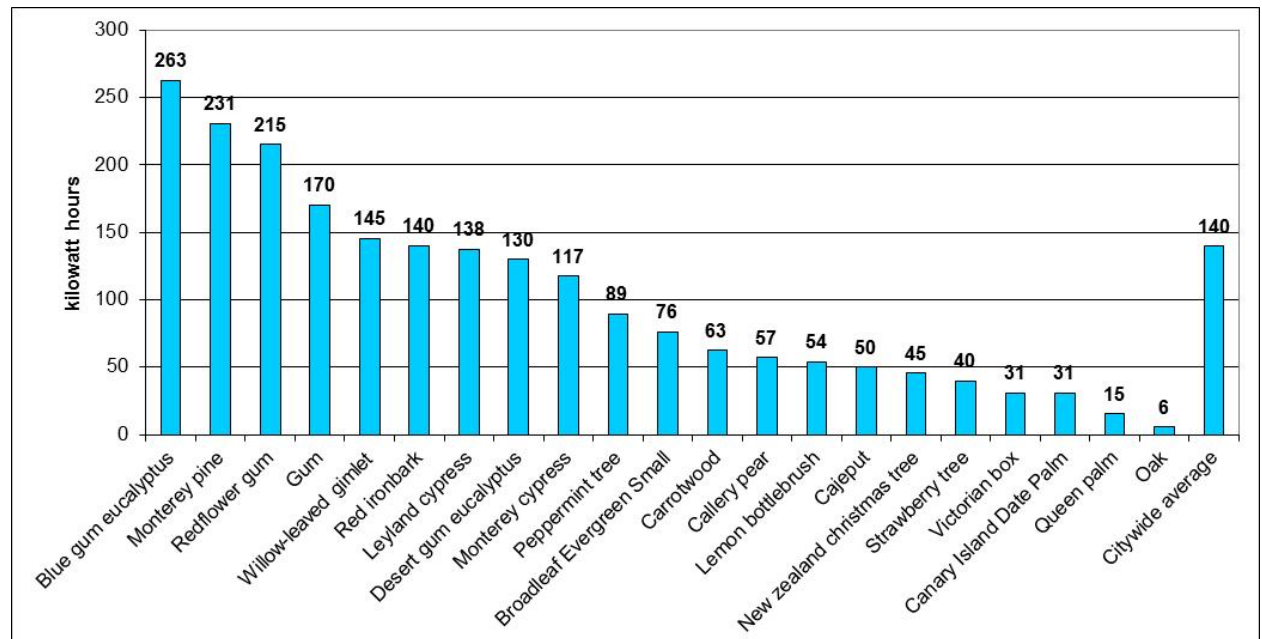
Trees modify temperatures and conserve building energy use in three principal ways: shading, evapotranspiration, and wind speed reduction. The shade from tree canopies cools an area and reduces the amount of heat absorbed and stored by buildings. Evapotranspiration converts liquid water to water vapor which cools air that would otherwise result in heated air from the sun. Furthermore, a trees canopy slows cold winter winds thereby reducing the amount of heat loss from a home, especially where conductivity is high such as windows or skylights.

The shade and protection provided by the urban trees in the commercial areas save 93,900 kilowatt hours per year. The Monterey pine (*Pinus radiata*) is the second highest ranked species to reduce annual energy consumption saving 231 KWh each year by a single tree. The Monterey pine trees in Morro Bay have large dense canopies that create shade in addition to overlapping branches that form a wind break. Figure 4 below shows the number of kilowatt hours a single tree saves annually by species. The Blue gum eucalyptus saves 263 kilowatt hours annually, and the citywide average is 140 kilowatt hours.



Image 8: The Monterey Pine (*Pinus radiata*) shown above produces shading and protection for the building behind

Figure 10: Annual Savings of Kilowatt Hours of Electricity by Individual Species



Stormwater Interception Analysis

Urban stormwater runoff flows directly into the bay and ocean. The urban forest plays an important role in reducing the amount of pollutants entering the bay and ocean each year. Trees reduce runoff in several ways including: intercepting and storing rainfall on their leaves and branches, roots increase the rate at which rainfall infiltrates soil, tree canopies reduce soil erosion, and transpiration through tree leaves reduce soil moisture. The commercial zone trees alone intercept 1,375,118 gallons annually from entering the bay. Mature Monterey pine and Red Flowering Eucalyptus trees both can retain over 3,000 gallons of stormwater in a year compared to the palms downtown that retain less than 300 gallons. Figure 5 below shows the citywide average for stormwater retained annually to be 2043 gallons. Considering Morro Bay's 18" of rain per year average generates over 140,000,000 gallons of stormwater on the commercial areas alone, the stormwater interception and retention benefit from urban trees is the most effective solution in reducing the amount of stormwater entering the bay and ocean.

Figure 11: Average Gallons of Stormwater Retained Annually by Individual Species

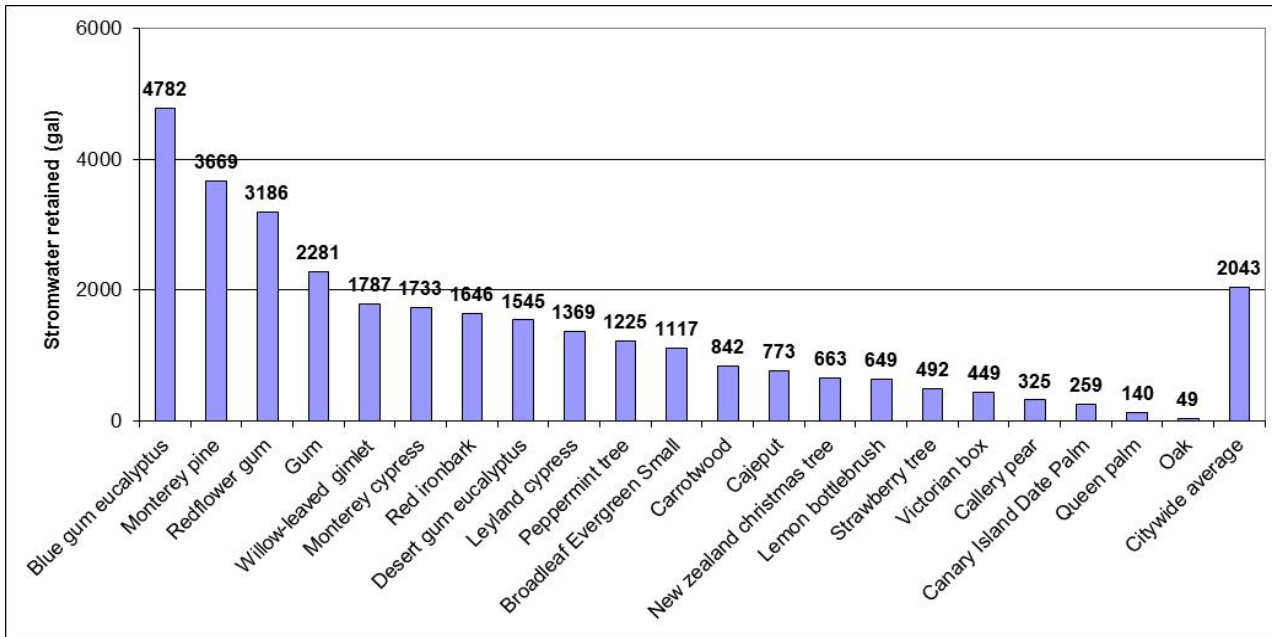
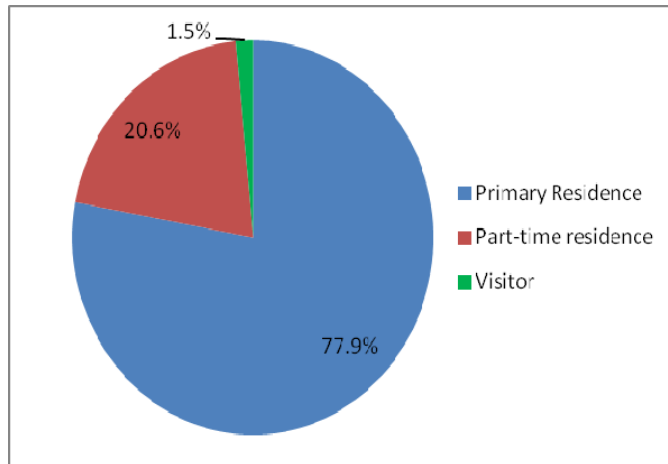


Image 9: The Red Flowering Eucalyptus shown above retains 3186 gallons of stormwater annually.

Stakeholders' Attitudes – Community Views of the Urban Forest

The wishes, attitudes and views of the community, have a large impact on our Urban Forest Management Plan. The City chose to conduct a survey to gather the community's input towards the UFMP and help develop various goals. The surveys were mailed with the water bills; therefore we reached a mix of residents, non residents, part-time residents and business owners.

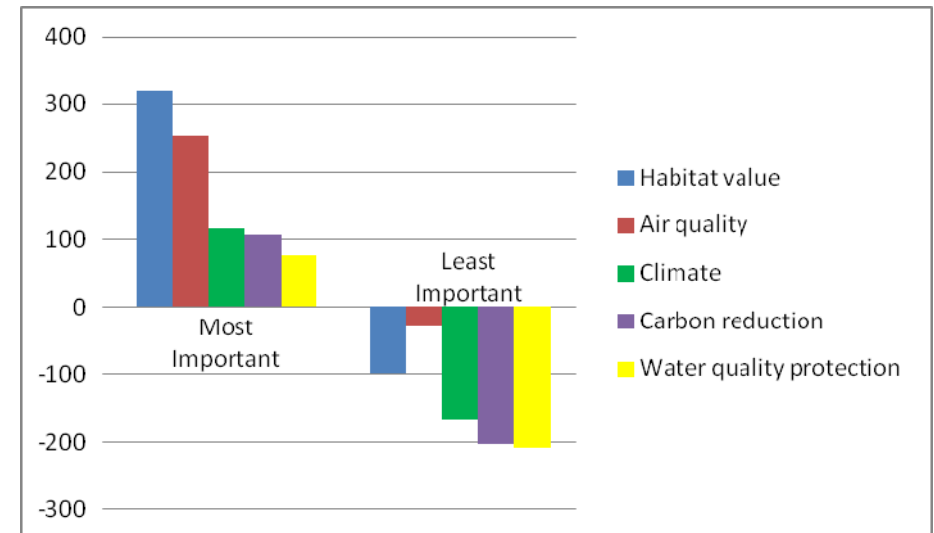
Figure 12: Survey Question 1



Survey Question 1 showed most of the respondents live in Morro Bay, but a portion, 21%, are part-time residents.

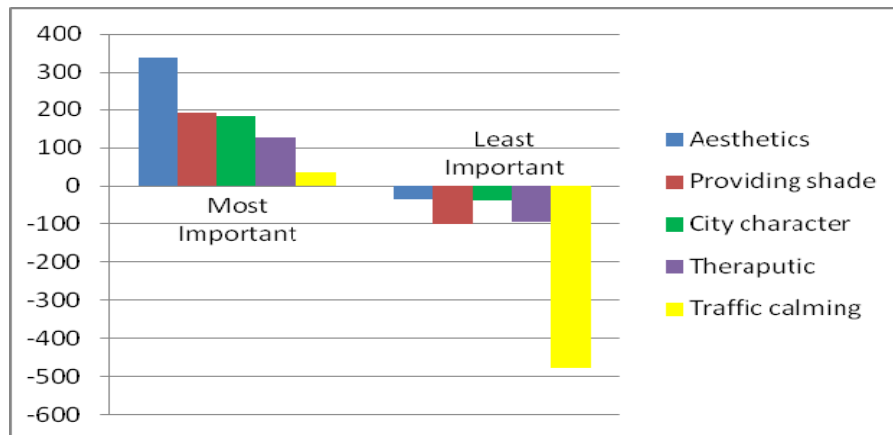
Typically with mailed surveys the response rate is low, less than 10%. The response rate of these surveys was very good, approximately 30% of surveys were returned. The survey results identified environmental benefits, social and economic qualities.

Figure 13: Survey Question 2



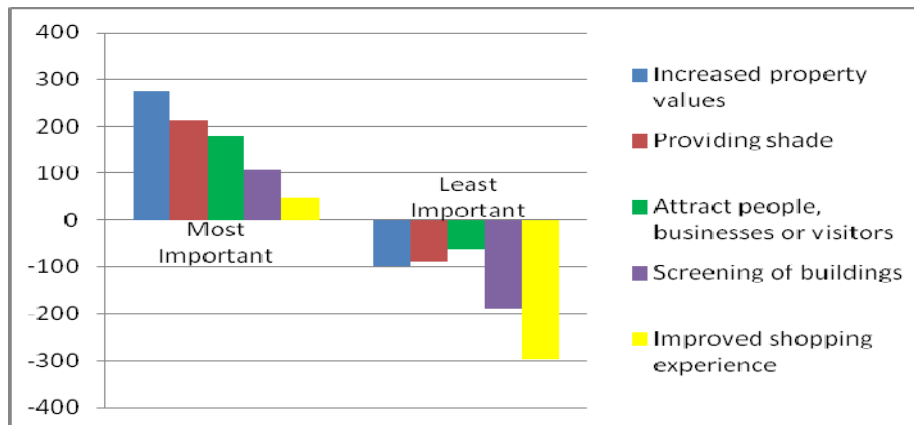
Survey respondents were asked in Question 2 what the most important environmental benefits are provided by public trees. Air quality and Habitat Value were viewed as the most important Environmental benefits provided by public trees.

Figure 14: Survey Question 3



Survey respondents were asked in Question 3 what the most important social benefit provided by public trees. The aesthetics and beauty of the City was viewed as the top social benefit given off by public trees.

Figure 15: Survey Question 4



Survey respondents were asked in Question 4 what is the most important economic benefit provided by public trees. Increased property value was viewed as the most important.

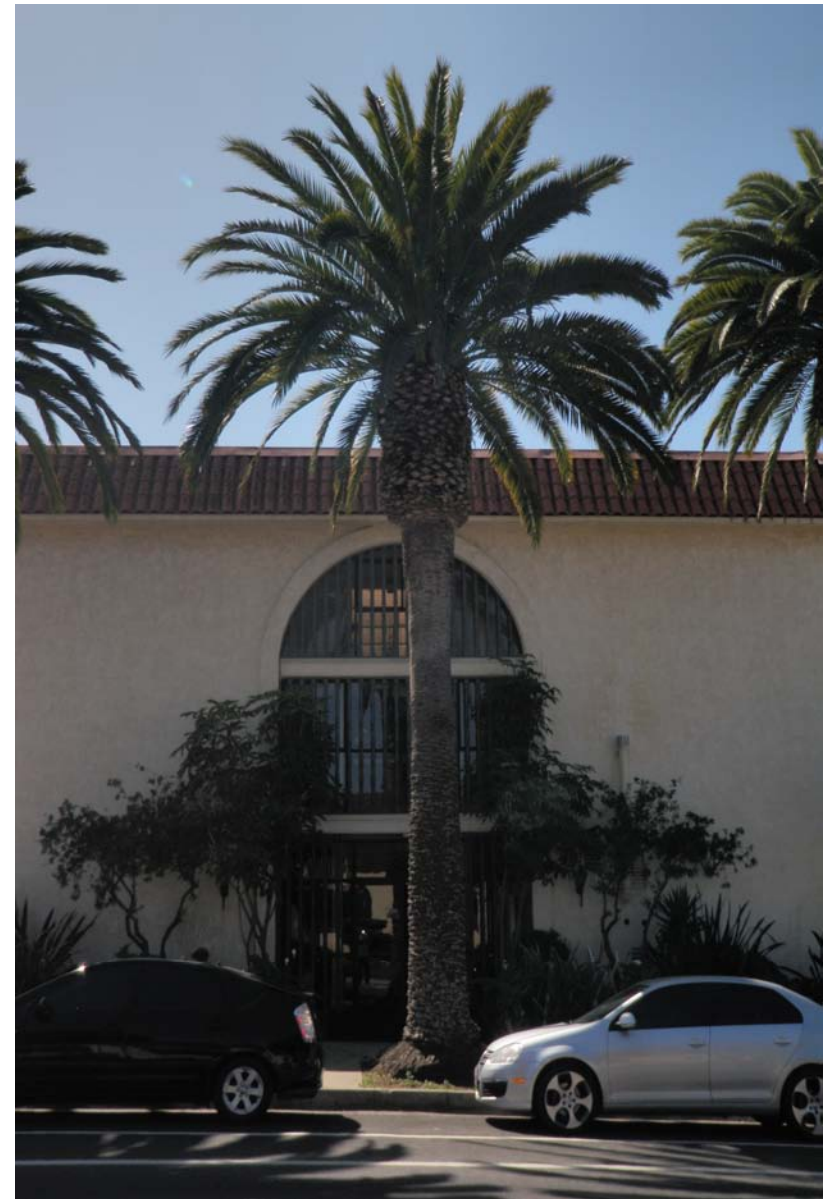
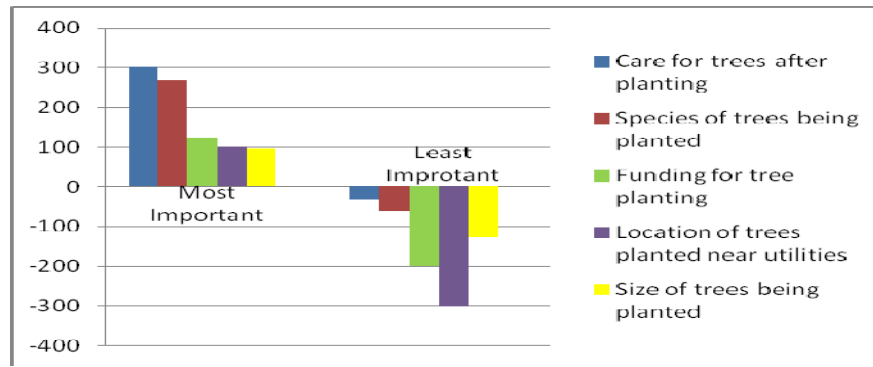


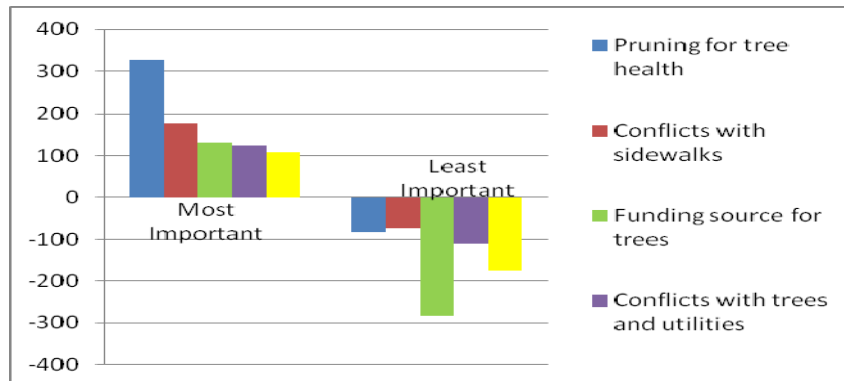
Image 10: Canary Island Date Palm

Figure 16: Survey Question 5



Survey participants were asked in Question 5 what the most important concern related to public tree planting. Both care of trees after planting and choosing the species of tree being planted were very important. Location of trees planted near utilities was viewed as the least important.

Figure 17: Survey Question 6



Survey participants were asked in Question 6; what are the most important considerations to you related to public tree maintenance and removal. Pruning for good shape and vigor as well as to stimulate new growth of the tree was viewed as the most important consideration.

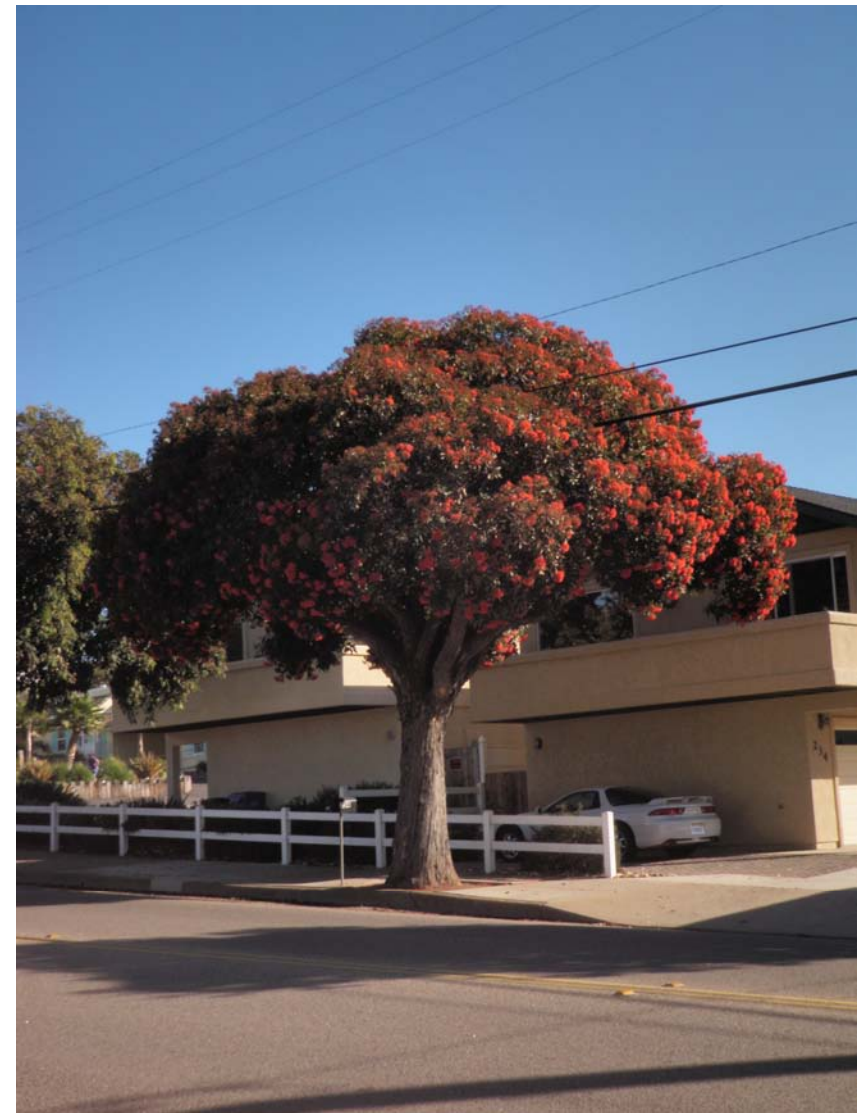


Image 11: Pruning for Good Shape

Survey participants were asked in Question 9, in their neighborhood do they feel there are too many or too few public trees. Most thought there were not enough trees in their neighborhoods, compared to very few participants felt that there were too many trees.

Figure 18: Survey Question 9

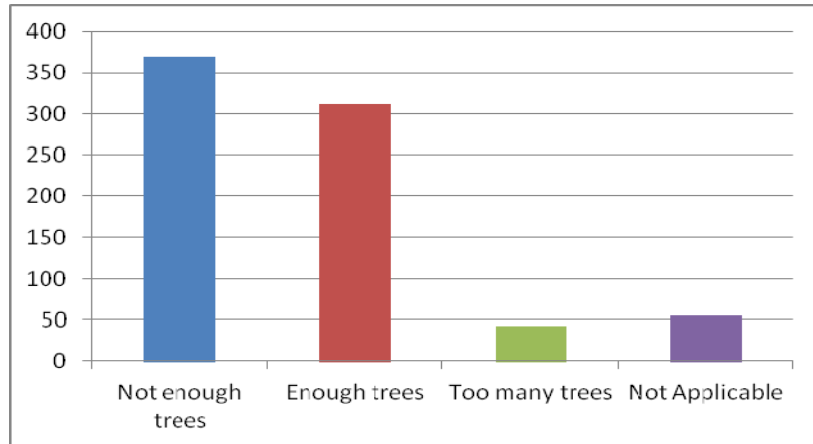


Image 12: Street View of Trees

The participants were also asked in Question 8; across the City are there too many or too few trees. Again most participants said there are not enough trees in the City.

Figure 19: Survey Question 8

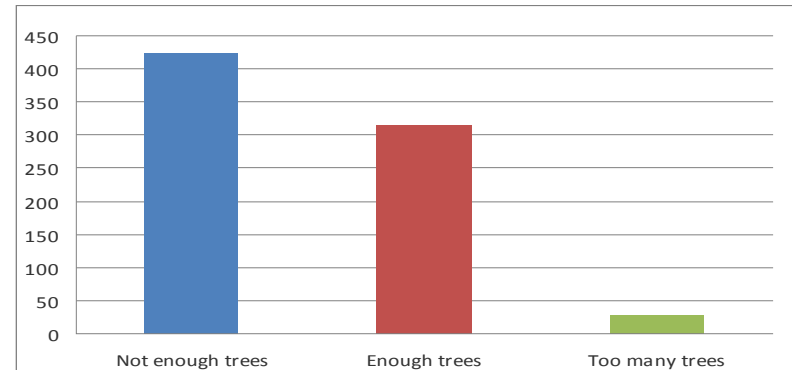


Image 13: Aerial View of Trees

Survey participants were asked in Question 10, how they perceive the condition or health of public trees in the City. Over six hundred of the respondents believed that the public tree conditions are either moderate health or average health.

Figure 20: Survey Question 10

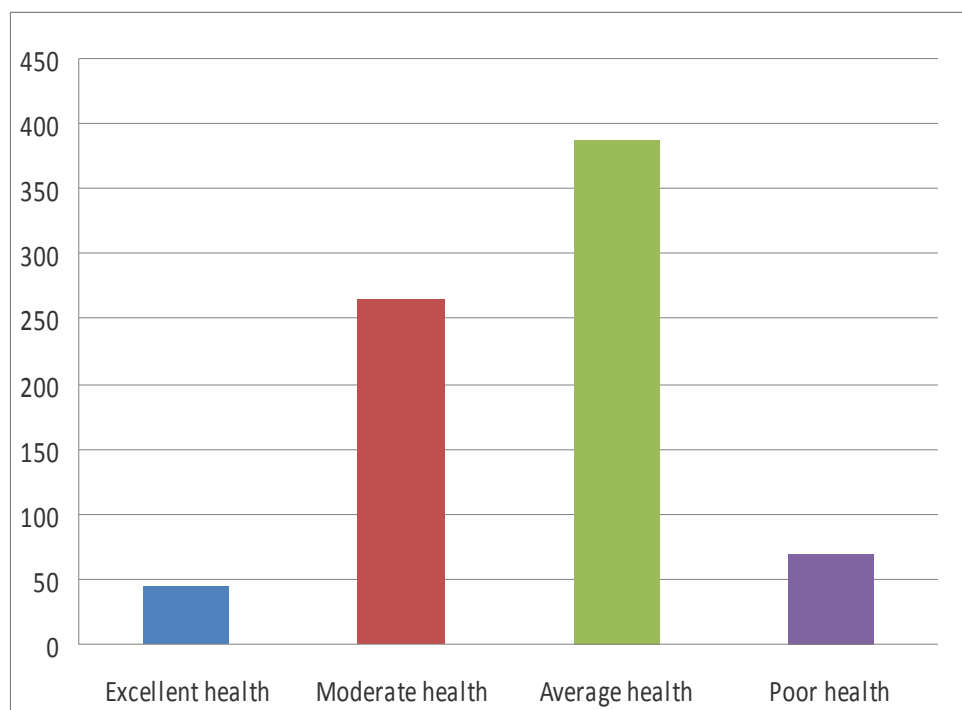
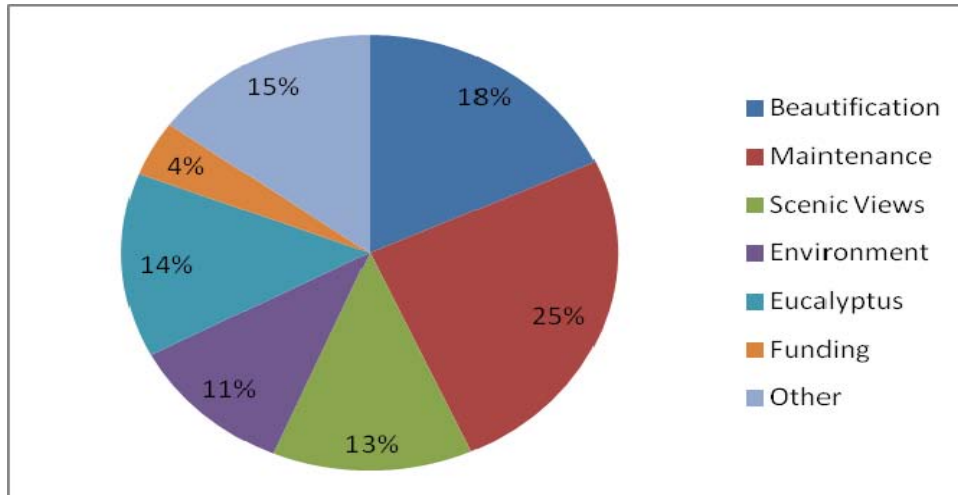


Image 14: Young Oak Tree

Figure 21: Common Resident Concerns



The community was asked what the number one goal of the Urban Forest Management Plan should be. The input ranged from broad ideas to specific policy changes. The topics that survey participants brought up the most are shown in Figure 14.

Maintenance was the number one topic expressed as a goal for the UFMP. Ideas within the maintenance topic included: adding more trees, sidewalk damage, root damage, trimming/pruning, removal of trees, keeping branches away from power lines, and care of trees after planting.

Beautification was the second highest topic expressed as a goal for the UFMP. The beautification ideas incorporated: tree shape, colorful flowers, aesthetics, aiding the beautification of the city, nice landscaping, planting beautiful looking trees, replacing ugly trees with nice ones, and improving the appearances of the entryways to the city.

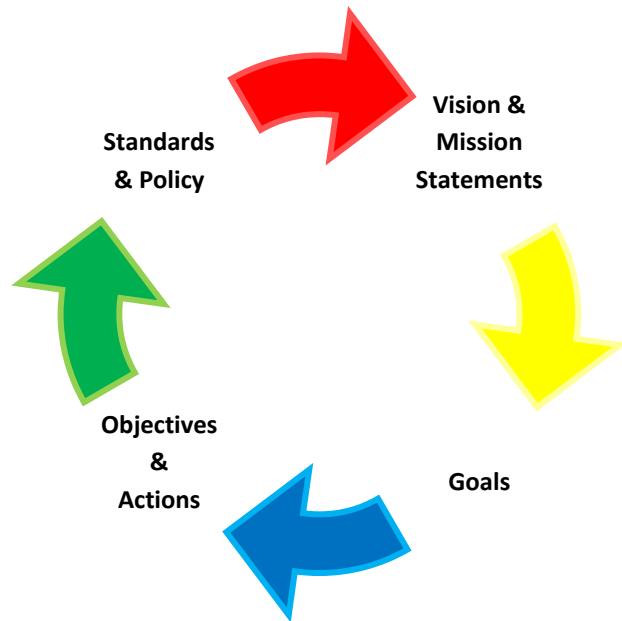
Scenic views were another topic commonly expressed for a goal of the UFMP. Responses for this topic included: removing tree for views, stop blocking ocean views, screening fence along Highway 1, planting trees on the barren hills, planting more short trees, blocking the wind, blocking views of mobile home parks, and decreasing property value.

Another topic that was expressed by citizens as a goal for the UFMP fell under the Eucalyptus topic. This topic was mainly referring to the hazards Blue gum and Red flowering eucalyptus, but also included: getting rid of the downtown trees, removing red sappy trees, plant more variety than eucalyptus, remove smelly eucalyptus, plant native trees instead of eucalyptus, plant trees that don't make you trip, leaving the eucalyptus tree along.

The environment was a topic that 11% of the respondents thought should be the number one goal for the UFMP. Ideas within the topic included: reducing carbon, providing habitat for birds, less pollen, native wildlife habitats, trees that resist pests, providing shade, drought tolerant trees, improve air quality, and Stormwater treatment.

The other topic expressed as a goal was funding for the UFMP. Combined they consisted of 19% of the responses, but only a handful were about the same specific idea or problem. Many of the responses were either off topic or about a problem relating to a specific tree on their property.

Strategic Plan



Developing Policy and Standards through the Urban Forest Goals

The goals were developed through the Stakeholders survey results and further refined through the Vision and Mission statements. The goals define the objectives and actions which give the road map on implementing this UFMP. These goals provide opportunities for continuous improvement and flexibility in the future. As the urban forest continues to grow and evolve, new strategies that develop

will be incorporated as part of this living document.

The City of Morro Bay's public trees are an important part of the City's infrastructure. Public trees located along the City streets offset the impacts of the urban environment and provide residents and tourist a healthy, sustainable, peaceful place for recreation or social interaction while providing habitat for urban wildlife. Trees are an important part of the City's infrastructure by treating stormwater runoff, shading streets and buildings to reduce the urban heat island effect, reduces air pollution, controls erosion, stores and sequesters carbon, and provides human and wildlife habitat.

The Citizens who participated in the survey expressed tree maintenance as the number one goal for the Urban Forest Management Plan. The City agrees maintenance of the trees is vital for the long term sustainability of the urban forest. Due to the limited funding available to maintain the City's street trees one solution could be to limit the areas where the City is responsible to maintain trees, therefore Goal #1, defining public trees was developed. The survey participants expressed beautification as the second goal for the urban forest management plan. In order for the City to achieve this goal the City developed goal #2, enhancing the Urban Forest. The other goals expressed by the survey participants are integrated into all the goals of the UFMP, e.g. scenic view, goal #1, Eucalyptus goal #2 and the environment in goal #2 and goal #3.

Goal 1: Defining Public trees

The City has wide Rights of Way and therefore much of the public treats sections of unpaved Rights of Way as an extension of their property. For the most part the trees planted in the residential Rights of Way were planted by the residents for their personal pleasure/benefit. Due to the vast number of trees planted in these wide Rights of Way in the residential areas, it is a large financial and liability burden to the City. The City spends the majority of the annual tree budget on these trees. The City would like to encourage residents to continue to plant and maintain these trees. In order to enhance and maintain the urban forest to the desired level, the City will need to limit the scope of trees to one that the City can manage. With the cost savings of not maintaining public trees in the residential areas, more money could be spent on replanting and maintaining public trees in the commercial/downtown districts. Currently the City has guidelines for private trees, but in order to protect private trees the city would need to adopt a tree ordinance.

Objective 1.1

Define the Downtown and Commercial Right of Way areas where the City will maintain the trees. Propose an ordinance revision which requires the City to maintain those trees in the Right of Ways of the Downtown and commercial sections of town. The trees in the residential areas will be maintained by the adjoining property owners.

Action 1.1

The Public Services Department will define these trees areas and develop the ordinance within two years of plan adoption.

Objective 1.2

Maintain tree inventory in Downtown and commercially zoned areas.

Action 1.2

The Public Services Department will complete the inventory within one year of plan adoption and maintain the inventory on an ongoing basis.

Objective 1.3

Develop regulations for the private trees that will protect and enhance the urban forest over time. Define the public trees that the City will maintain.

Action 1.3

Adopt a private tree ordinance within three years of plan adoption that will accomplish the goals of the urban forest for the private trees in Morro Bay. Include in this ordinance the defined public trees that will be the City's responsibility to maintain.

Goal 2: Enhancing the Urban Forest

The enhancement of the Urban Forest considers the life cycle of the urban forest and recognizes that it is a dynamic, natural system. Establish and maintain an optimal level of age and species diversity and increased levels of trees to maximize ecosystem benefits provided by the urban forest, (maintain air quality, reduce energy use, moderate stormwater runoff, and provide a favorable environment for city residents).

Objective 2.1

Plant the appropriate species of tree in vacant or replacement locations with diligent consideration of age diversity, climate, soil

type, wind, salt spray, utilities, and public safety. Utilizing the existing street tree list, add additional species, if needed, of trees to provide more diversity, focusing in the seven microclimates.

Action 2.1

The Public Services and Recreation and Parks Departments will develop and define a list of trees suitable for the appropriate location. These departments will work with the Tree Committee to determine a list of tree species for each different zone in Morro Bay. This will begin within year one of the plan adoption.

Objective 2.2

Develop a master tree planting scheme for the commercial areas within the City focusing on species diversity, and microclimates.

Action 2.2

The Public Services and Recreation and Parks Departments will work with the Tree Committee to develop the tree planting scheme plan, to be completed within three years of plan adoption.

Objective 2.3

In order to diversify the tree species, new trees should always be planted as trees are removed. Identify vacant tree wells in downtown areas, and work with the Tree Committee to find volunteer residents who are willing to care for the tree for the first 2 years. Develop a subcommittee of the Volunteer Tree Committee and a staff member to determine which tree species to plant for a given tree well and define the watering for the trees survival.

Action 2.3

The Public Services Department will work with the Recreation and Parks Department and the Tree Committee to define this

subcommittee and implement a tree watering program. This will be completed within two years of the plan adoption.

Objective 2.4

Monitor canopy cover every five years. Compare with previous data.

Action 2.4

The Public Services Department will check will Cal Fire in March 2015 to see if State-provided information is available on canopy cover and when it is available, compare coverage every 5 years.

Objective 2.5

Assess the progress regarding environmental benefits gained from the urban forest. Prepare a report on these environmental benefits and provide it on the City's website.

Action 2.5

The baseline has been established in the inventory section, and the Public Services Department will update the information every 5 years on the website.

Goal 3: Protecting Wildlife

Morro Bay is a bird sanctuary and therefore protecting the nesting birds is essential. Further define the nesting season and explore Best Management Practices for the nesting birds and tree trimming.

Objective 3.1

Research and determine the appropriate time frame for nesting birds throughout the Central Coast.

Action 3.1

The Public Services Department will research the appropriate nesting season for Morro Bay within two years of the plan adoption.

Objective 3.2

Identify pruning needs of various tree species and the appropriate time of year trimming. Investigate Best Management Practices (BMP) for trimming and or removals during nesting season. Develop a policy and protocol that integrates the bird nesting patterns and the appropriate timing for trimming the trees.

Action 3.2

The Public Services Department will research the appropriate time of year for trimming trees, BMPs for trimming and removals during these times and correlate this with the nesting season, within three years of plan adoption.

Goal 4: Educate the Public on the Benefits of Trees

Provide the public with a general understanding of the value and benefits that the Urban Forest provides. Educate residents, business owners, and the development community with Best Management Practices, including planting and care of trees.

Objective 4.1

Provide information on the City's website regarding the City's tree care program, benefits of trees, landmark trees, and proper tree care.

Action 4.1

The Public Services Department will make available this information on the City website within year one of the plan adoption.

Objective 4.2

Continue the partnership with the Volunteer Tree Committee.

Action 4.2

The Public Services and the Recreation and Parks Departments will

continue this partnership with the UFMP adoption and throughout the entire life of the UFMP.

Objective 4.3

Enhance the City's Arbor Day program and its Tree City USA status.

Action 4.3

The Recreation and Parks Department will ensure the City keep the Tree City USA status and continue with the Arbor Day program from the UFMP adoption and throughout the entire life of the UFMP.

Goal 5: Tree Conservation

Conservation of the Urban Forest is important to preserve the forest for future generations. The conservation efforts include maintenance standards for ongoing management of trees. The City's urban forest should be maintained with standards that are consistent with good cultural best management practices.

Objective 5.1

Maintain trees using tree care guidelines provided in Appendix 3, in order to get the maximum benefits possible from the urban forest. City crews are to be trained in these maintenance practices.

Action 5.1

Recreation and Parks Department will train staff on these standards in Appendix 3 within three years of plan adoption.

Objective 5.2

Maintain the comprehensive GIS data base of all public trees in the City. Routine data will be entered into the database as trees are pruned, removed or planted.

Action 5.2

A comprehensive update will be performed by the Public Services Department every 10 years.

Objective 5.3

Develop a tree care program that includes appropriate trimming schedules, integrated pest management policy.

Action 5.3

The Recreation and Parks Department will develop this program within three years of the plan adoption.

References

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APPENDIX 1

Tree Inventory

Morro Bay

Annual Energy Benefits of Public Trees By Species

2/4/2013

Species	Total Electricity (MWh)	Electricity (\$)	Total Natural Gas (Therms)	Natural Gas (\$)	Total (\$)	Standard Error	% of Total Trees	% of Total \$	Avg. \$/tree
Redflower gum	55.7	7,375	1,310.5	1,710	9,085	(N/A)	38.5	59.8	35.08
Cajeput	2.5	333	35.7	47	380	(N/A)	7.4	2.5	7.60
Blue gum eucalyptus	8.4	1,110	158.1	206	1,316	(N/A)	4.8	8.7	41.12
Strawberry tree	1.2	157	26.1	34	191	(N/A)	4.5	1.3	6.36
Queen palm	0.4	53	12.1	16	69	(N/A)	3.9	0.5	2.66
Monterey cypress	2.7	361	56.2	73	434	(N/A)	3.4	2.9	18.88
Broadleaf Evergreen	1.6	214	32.2	42	256	(N/A)	3.1	1.7	12.19
Gum	3.4	443	82.7	108	551	(N/A)	3.0	3.6	27.56
Peppermint tree	1.7	221	32.2	42	263	(N/A)	2.8	1.7	13.82
Oak	0.1	10	2.7	4	14	(N/A)	2.7	0.1	0.77
Red ironbark	2.1	279	57.7	75	354	(N/A)	2.2	2.3	23.62
Lemon bottlebrush	0.7	90	14.7	19	110	(N/A)	1.9	0.7	8.43
Monterey pine	3.0	394	58.0	76	470	(N/A)	1.9	3.1	36.14
Victorian box	0.4	58	6.8	9	67	(N/A)	1.9	0.4	5.15
Mexican fan palm	0.4	48	10.9	14	62	(N/A)	1.9	0.4	4.76
Willow-leaved gimlet	1.6	217	43.8	57	274	(N/A)	1.6	1.8	24.89
New zealand christmas	0.5	63	6.4	8	72	(N/A)	1.6	0.5	6.50
Desert gum eucalyptus	1.3	173	35.4	46	219	(N/A)	1.5	1.5	21.95
Carrotwood	0.5	64	9.7	13	77	(N/A)	1.2	0.5	9.62
Leyland cypress	1.1	147	26.1	34	182	(N/A)	1.2	1.2	22.69
Callery pear	0.4	48	8.8	12	60	(N/A)	1.0	0.4	8.50
OTHER STREET TREES	4.3	562	88.6	116	678	(N/A)	7.9	4.5	12.79
Citywide total	93.9	12,422	2,115.6	2,760	15,182	(N/A)	100.0	100.0	22.56

Canopy Spread for Public Trees by Zone

2/4/2013

Zone	Canopy Spread	Tree Count	Standard Error	% of Zone	% of Public Trees
1	0'-10'	174	(N/A)	25.85	25.85
	10'-20'	182	(N/A)	27.04	27.04
	20'-30'	198	(N/A)	29.42	29.42
	30'-40'	70	(N/A)	10.40	10.40
	40'-50'	35	(N/A)	5.20	5.20
	50'+	12	(N/A)	1.78	1.78
	N/A	2	(N/A)	0.30	0.30
	Total	673	(N/A)	100.00	100.00
Citywide	0'-10'	174	(N/A)	25.85	25.85
	10'-20'	182	(N/A)	27.04	27.04
	20'-30'	198	(N/A)	29.42	29.42
	30'-40'	70	(N/A)	10.40	10.40
	40'-50'	35	(N/A)	5.20	5.20
	50'+	12	(N/A)	1.78	1.78
	N/A	2	(N/A)	0.30	0.30
	Total	673	(N/A)	100.00	100.00

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
African sumac	excellent	0 (N/A)		0.00	0.00
	average	2 (N/A)		100.00	0.30
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Aloe yucca	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		100.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Araucaria	excellent	1 (N/A)		50.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	1 (N/A)		50.00	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Avocado	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		50.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	1 (N/A)		50.00	0.15
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Bailey acacia	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		100.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Blue gum eucalyptus	excellent	19 (N/A)		59.38	2.82
	average	13 (N/A)		40.63	1.93
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	32 (N/A)		100.00	4.75
Brisbane box	excellent	4 (N/A)		100.00	0.59
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	4 (N/A)		100.00	0.59
Broadleaf Evergreen Small	excellent	9 (N/A)		42.86	1.34
	average	9 (N/A)		42.86	1.34
	fair	3 (N/A)		14.29	0.45
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	21 (N/A)		100.00	3.12
Bushy yate	excellent	1 (N/A)		100.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Cajeput	excellent	10 (N/A)		20.00	1.49
	average	21 (N/A)		42.00	3.12
	fair	12 (N/A)		24.00	1.78
	poor	7 (N/A)		14.00	1.04
	N/A	0 (N/A)		0.00	0.00
	Total	50 (N/A)		100.00	7.43
Callery pear	excellent	0 (N/A)		0.00	0.00
	average	6 (N/A)		85.71	0.89
	fair	1 (N/A)		14.29	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	7 (N/A)		100.00	1.04
Carrotwood	excellent	1 (N/A)		12.50	0.15
	average	4 (N/A)		50.00	0.59
	fair	1 (N/A)		12.50	0.15
	poor	2 (N/A)		25.00	0.30
	N/A	0 (N/A)		0.00	0.00
	Total	8 (N/A)		100.00	1.19
Cherry plum	excellent	1 (N/A)		25.00	0.15
	average	2 (N/A)		50.00	0.30
	fair	1 (N/A)		25.00	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	4 (N/A)		100.00	0.59
Cicer gum eucalyptus	excellent	1 (N/A)		100.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Coast redwood	excellent	1 (N/A)		100.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Conifer Evergreen Medium	excellent	2 (N/A)		40.00	0.30
	average	2 (N/A)		40.00	0.30
	fair	0 (N/A)		0.00	0.00
	poor	1 (N/A)		20.00	0.15
	N/A	0 (N/A)		0.00	0.00
	Total	5 (N/A)		100.00	0.74
Conifer Evergreen Small	excellent	2 (N/A)		50.00	0.30
	average	1 (N/A)		25.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	1 (N/A)		25.00	0.15
	N/A	0 (N/A)		0.00	0.00
	Total	4 (N/A)		100.00	0.59
Deodar cedar	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		50.00	0.15
	fair	1 (N/A)		50.00	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Desert gum eucalyptus	excellent	1 (N/A)		10.00	0.15
	average	7 (N/A)		70.00	1.04
	fair	2 (N/A)		20.00	0.30
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	10 (N/A)		100.00	1.49
Evergreen pear	excellent	0 (N/A)		0.00	0.00
	average	4 (N/A)		100.00	0.59
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	4 (N/A)		100.00	0.59
Ginkgo	excellent	2 (N/A)		100.00	0.30
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Gum	excellent	5 (N/A)		25.00	0.74
	average	9 (N/A)		45.00	1.34
	fair	6 (N/A)		30.00	0.89
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	20 (N/A)		100.00	2.97
Hawthorn	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		100.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Italian stone pine	excellent	4 (N/A)		66.67	0.59
	average	1 (N/A)		16.67	0.15
	fair	1 (N/A)		16.67	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	6 (N/A)		100.00	0.89
Lemon bottlebrush	excellent	3 (N/A)		23.08	0.45
	average	6 (N/A)		46.15	0.89
	fair	4 (N/A)		30.77	0.59
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	13 (N/A)		100.00	1.93
Lemonscented gum	excellent	1 (N/A)		100.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Leyland cypress	excellent	0 (N/A)		0.00	0.00
	average	5 (N/A)		62.50	0.74
	fair	1 (N/A)		12.50	0.15
	poor	2 (N/A)		25.00	0.30
	N/A	0 (N/A)		0.00	0.00
	Total	8 (N/A)		100.00	1.19

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Live oak	excellent	0 (N/A)		0.00	0.00
	average	2 (N/A)		100.00	0.30
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Lyontree	excellent	0 (N/A)		0.00	0.00
	average	0 (N/A)		0.00	0.00
	fair	2 (N/A)		100.00	0.30
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	2 (N/A)		100.00	0.30
Mexican fan palm	excellent	11 (N/A)		84.62	1.63
	average	2 (N/A)		15.38	0.30
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	13 (N/A)		100.00	1.93
Monterey cypress	excellent	16 (N/A)		69.57	2.38
	average	6 (N/A)		26.09	0.89
	fair	1 (N/A)		4.35	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	23 (N/A)		100.00	3.42
Monterey pine	excellent	2 (N/A)		15.38	0.30
	average	8 (N/A)		61.54	1.19
	fair	3 (N/A)		23.08	0.45
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	13 (N/A)		100.00	1.93
New zealand christmas tree	excellent	6 (N/A)		54.55	0.89
	average	5 (N/A)		45.45	0.74
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	11 (N/A)		100.00	1.63
Oak	excellent	1 (N/A)		5.56	0.15
	average	14 (N/A)		77.78	2.08
	fair	2 (N/A)		11.11	0.30
	poor	1 (N/A)		5.56	0.15
	N/A	0 (N/A)		0.00	0.00
	Total	18 (N/A)		100.00	2.67
Palm Evergreen Medium	excellent	0 (N/A)		0.00	0.00
	average	1 (N/A)		100.00	0.15
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Peppermint tree	excellent	9 (N/A)		47.37	1.34
	average	8 (N/A)		42.11	1.19
	fair	2 (N/A)		10.53	0.30
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	19 (N/A)		100.00	2.82

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Primrose tree; cow itch tree	excellent	1 (N/A)		100.00	0.15
	average	0 (N/A)		0.00	0.00
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	1 (N/A)		100.00	0.15
Queen palm	excellent	10 (N/A)		38.46	1.49
	average	13 (N/A)		50.00	1.93
	fair	2 (N/A)		7.69	0.30
	poor	0 (N/A)		0.00	0.00
	N/A	1 (N/A)		3.85	0.15
	Total	26 (N/A)		100.00	3.86
Red ironbark	excellent	2 (N/A)		13.33	0.30
	average	12 (N/A)		80.00	1.78
	fair	1 (N/A)		6.67	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	15 (N/A)		100.00	2.23
Redflower gum	excellent	59 (N/A)		22.78	8.77
	average	164 (N/A)		63.32	24.37
	fair	25 (N/A)		9.65	3.71
	poor	9 (N/A)		3.47	1.34
	N/A	2 (N/A)		0.77	0.30
	Total	259 (N/A)		100.00	38.48
Strawberry tree	excellent	24 (N/A)		80.00	3.57
	average	5 (N/A)		16.67	0.74
	fair	1 (N/A)		3.33	0.15
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	30 (N/A)		100.00	4.46
Victorian box	excellent	0 (N/A)		0.00	0.00
	average	10 (N/A)		76.92	1.49
	fair	1 (N/A)		7.69	0.15
	poor	2 (N/A)		15.38	0.30
	N/A	0 (N/A)		0.00	0.00
	Total	13 (N/A)		100.00	1.93
Wilga; australian willow	excellent	1 (N/A)		33.33	0.15
	average	2 (N/A)		66.67	0.30
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	3 (N/A)		100.00	0.45
Willow-leaved gimlet	excellent	1 (N/A)		9.09	0.15
	average	10 (N/A)		90.91	1.49
	fair	0 (N/A)		0.00	0.00
	poor	0 (N/A)		0.00	0.00
	N/A	0 (N/A)		0.00	0.00
	Total	11 (N/A)		100.00	1.63

Population Summary of Public Trees

2/4/2013

Species	DBH Class (in)									Total Standard Error
	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42	
Broadleaf Deciduous Large (BDL)										
Oak	18	0	0	0	0	0	0	0	0	18
BDL OTHER	0	0	0	0	0	0	0	0	0	0
Total	18	0	0	0	0	0	0	0	0	18 (±NaN)
Broadleaf Deciduous Medium (BDM)										
Callery pear	0	6	1	0	0	0	0	0	0	7
BDM OTHER	0	2	0	0	0	0	0	0	0	2
Total	0	8	1	0	0	0	0	0	0	9 (±NaN)
Broadleaf Deciduous Small (BDS)										
BDS OTHER	1	3	1	0	0	0	0	0	0	5
Total	1	3	1	0	0	0	0	0	0	5 (±NaN)
Broadleaf Evergreen Large (BEL)										
Blue gum eucalyptus	1	1	0	5	5	3	2	5	10	32
Gum	0	0	6	7	3	2	1	1	0	20
Red ironbark	0	0	4	9	2	0	0	0	0	15
Desert gum eucalyptus	0	1	3	4	2	0	0	0	0	10
BEL OTHER	1	3	2	1	1	0	0	0	0	8
Total	2	5	15	26	13	5	3	6	10	85 (±NaN)
Broadleaf Evergreen Medium (BEM)										
Redflower gum	7	1	4	51	96	66	19	13	2	259
Cajeput	1	7	23	18	1	0	0	0	0	50
Victorian box	0	8	3	2	0	0	0	0	0	13
Willow-leaved gimlet	0	0	3	5	3	0	0	0	0	11
New zealand christmas	1	1	6	3	0	0	0	0	0	11
BEM OTHER	0	0	7	2	0	0	0	0	0	9
Total	9	17	46	81	100	66	19	13	2	353 (±NaN)
Broadleaf Evergreen Small (BES)										
Strawberry tree	14	7	7	1	1	0	0	0	0	30
Broadleaf Evergreen	4	3	8	3	0	1	1	0	1	21
Peppermint tree	0	4	6	8	1	0	0	0	0	19
Lemon bottlebrush	1	5	7	0	0	0	0	0	0	13
Carrotwood	3	1	2	1	1	0	0	0	0	8
BES OTHER	0	0	6	1	0	0	0	0	0	7
Total	22	20	36	14	3	1	1	0	1	98 (±NaN)
Conifer Evergreen Large (CEL)										
Monterey cypress	6	3	3	2	2	5	0	1	1	23
Monterey pine	0	0	0	1	4	2	3	1	2	13
CEL OTHER	1	0	4	0	2	2	1	1	0	11
Total	7	3	7	3	8	9	4	3	3	47 (±NaN)
Conifer Evergreen Medium (CEM)										
Leyland cypress	0	1	1	3	3	0	0	0	0	8
CEM OTHER	0	1	2	1	1	0	0	0	0	5
Total	0	2	3	4	4	0	0	0	0	13 (±NaN)
Conifer Evergreen Small (CES)										
CES OTHER	1	1	1	0	0	0	0	1	0	4
Total	1	1	1	0	0	0	0	1	0	4 (±NaN)
Palm Evergreen Large (PEL)										
PEL OTHER	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0 (±NaN)
Palm Evergreen Medium (PEM)										
PEM OTHER	0	0	1	0	0	0	0	0	0	1

Population Summary of Public Trees

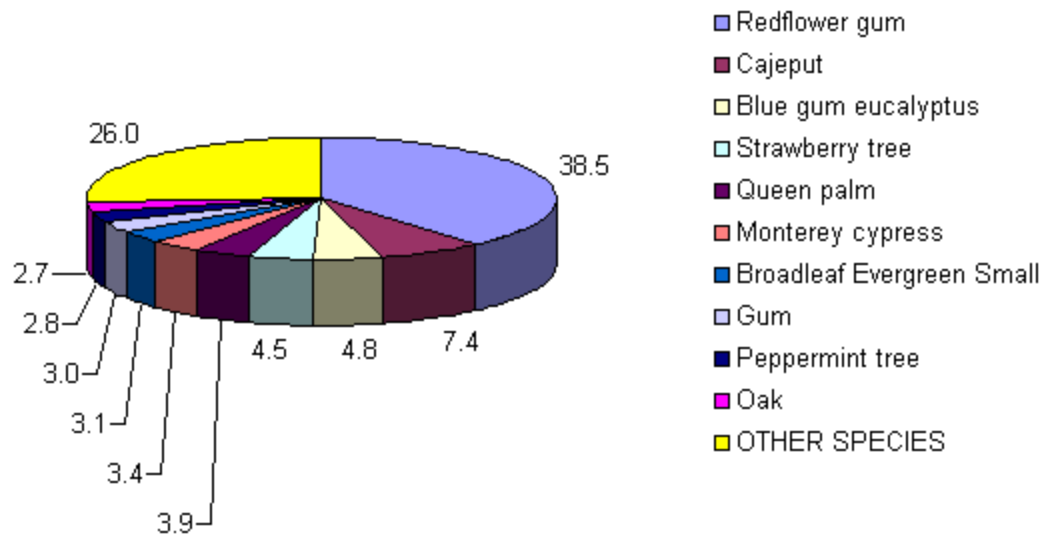
2/4/2013

Species	DBH Class (in)									Total Standard Error
	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42	
Total	0	0	1	0	0	0	0	0	0	1 (±NaN)
Palm Evergreen Small (PES)										
Queen palm	1	2	12	10	0	1	0	0	0	26
Mexican fan palm	0	0	5	0	0	5	3	0	0	13
PES OTHER	0	1	0	0	0	0	0	0	0	1
Total	1	3	17	10	0	6	3	0	0	40 (±NaN)
Grand Total	61	62	128	138	128	87	30	23	16	673 (±0)

Morro Bay

Species Distribution of All Trees (%)

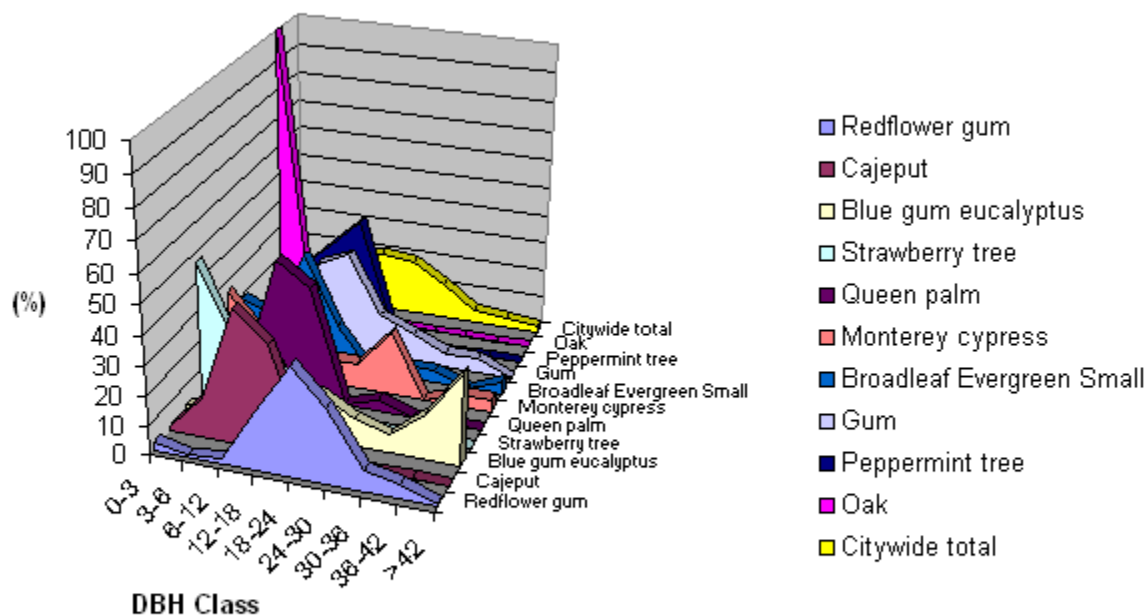
2/4/2013



Species	Percent
Redflower gum	38.5
Cajeput	7.4
Blue gum eucalyptus	4.8
Strawberry tree	4.5
Queen palm	3.9
Monterey cypress	3.4
Broadleaf Evergreen	3.1
Gum	3.0
Peppermint tree	2.8
Oak	2.7
OTHER SPECIES	26.0
Total	100.0

Relative Age Distribution of Top 10 Public Tree Species (%)

2/4/2013



Species	DBH class (in)								
	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42
Redflower gum	2.70	0.39	1.54	19.69	37.07	25.48	7.34	5.02	0.77
Cajeput	2.00	14.00	46.00	36.00	2.00	0.00	0.00	0.00	0.00
Blue gum eucalyptus	3.13	3.13	0.00	15.63	15.63	9.38	6.25	15.63	31.25
Strawberry tree	46.67	23.33	23.33	3.33	3.33	0.00	0.00	0.00	0.00
Queen palm	3.85	7.69	46.15	38.46	0.00	3.85	0.00	0.00	0.00
Monterey cypress	26.09	13.04	13.04	8.70	8.70	21.74	0.00	4.35	4.35
Broadleaf Evergreen	19.05	14.29	38.10	14.29	0.00	4.76	4.76	0.00	4.76
Gum	0.00	0.00	30.00	35.00	15.00	10.00	5.00	5.00	0.00
Peppermint tree	0.00	21.05	31.58	42.11	5.26	0.00	0.00	0.00	0.00
Oak	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Citywide total	9.06	9.21	19.02	20.51	19.02	12.93	4.46	3.42	2.38

Morro Bay

Annual CO₂ Benefits of Public Trees by Species

2/4/2013

Species	Sequestered (lb)	Sequestered (\$)	Decomposition Release (lb)	Maintenance Release (lb)	Total Released (\$)	Avoided (lb)	Avoided (\$)	Net Total (lb)	Total Standard (\$ Error)	% of Total Trees	% of Total \$	Avg. \$/tree
Redflower gum	238,345	1,788	-31,993	-30	-240	46,860	351	253,182	1,899 (N/A)	38.5	69.1	7.33
Cajeput	3,355	25	-512	-6	-4	2,118	16	4,954	37 (N/A)	7.4	1.4	0.74
Blue gum eucalyptus	39,688	298	-8,588	-4	-64	7,049	53	38,146	286 (N/A)	4.8	10.4	8.94
Strawberry tree	780	6	-66	-4	-1	995	7	1,705	13 (N/A)	4.5	0.5	0.43
Queen palm	777	6	-172	-3	-1	339	3	941	7 (N/A)	3.9	0.3	0.27
Monterey cypress	3,815	29	-624	-3	-5	2,293	17	5,481	41 (N/A)	3.4	1.5	1.79
Broadleaf Evergreen	1,059	8	-207	-2	-2	1,359	10	2,209	17 (N/A)	3.1	0.6	0.79
Gum	13,047	98	-1,558	-2	-12	2,816	21	14,303	107 (N/A)	3.0	3.9	5.36
Peppermint tree	1,357	10	-143	-2	-1	1,401	11	2,613	20 (N/A)	2.8	0.7	1.03
Oak	207	2	-2	-2	0	66	0	268	2 (N/A)	2.7	0.1	0.11
Red ironbark	7,307	55	-533	-2	-4	1,773	13	8,546	64 (N/A)	2.2	2.3	4.27
Lemon bottlebrush	418	3	-27	-2	0	575	4	964	7 (N/A)	1.9	0.3	0.56
Monterey pine	4,846	36	-919	-2	-7	2,505	19	6,430	48 (N/A)	1.9	1.8	3.71
Victorian box	565	4	-66	-2	-1	369	3	865	6 (N/A)	1.9	0.2	0.50
Mexican fan palm	348	3	-120	-2	-1	303	2	529	4 (N/A)	1.9	0.1	0.31
Willow-leaved gimlet	5,848	44	-464	-1	-3	1,376	10	6,758	51 (N/A)	1.6	1.9	4.61
New zealand christmas	622	5	-89	-1	-1	401	3	932	7 (N/A)	1.6	0.3	0.64
Desert gum eucalyptus	4,558	34	-345	-1	-3	1,101	8	5,313	40 (N/A)	1.5	1.5	3.98
Carrotwood	412	3	-45	-1	0	409	3	774	6 (N/A)	1.2	0.2	0.73
Leyland cypress	1,097	8	-110	-1	-1	937	7	1,923	14 (N/A)	1.2	0.5	1.80
Callery pear	169	1	-8	-1	0	305	2	465	3 (N/A)	1.0	0.1	0.50
OTHER STREET	6,035	45	-704	-6	-5	3,573	27	8,897	67 (N/A)	7.9	2.4	1.26
Citywide total	334,655	2,510	-47,298	-79	-355	78,922	592	366,199	2,747 (N/A)	100.0	100.0	4.08

Morro Bay

Stored CO2 Benefits of Public Trees by Species

2/4/2013

Species	Total Stored CO2 (lbs)	Total (\$)	Standard Error	% of Total Trees	% of Total \$	Avg. \$/tree
Redflower gum	3,332,603	24,995	(N/A)	38.5	67.6	96.50
Cajeput	53,318	400	(N/A)	7.4	1.1	8.00
Blue gum	894,538	6,709	(N/A)	4.8	18.2	209.66
Strawberry tree	6,919	52	(N/A)	4.5	0.1	1.73
Queen palm	17,922	134	(N/A)	3.9	0.4	5.17
Monterey cypress	65,048	488	(N/A)	3.4	1.3	21.21
Broadleaf	21,580	162	(N/A)	3.1	0.4	7.71
Gum	162,315	1,217	(N/A)	3.0	3.3	60.87
Peppermint tree	14,879	112	(N/A)	2.8	0.3	5.87
Oak	250	2	(N/A)	2.7	0.0	0.10
Red ironbark	55,514	416	(N/A)	2.2	1.1	27.76
Lemon bottlebrush	2,792	21	(N/A)	1.9	0.1	1.61
Monterey pine	95,718	718	(N/A)	1.9	1.9	55.22
Victorian box	6,922	52	(N/A)	1.9	0.1	3.99
Mexican fan palm	12,551	94	(N/A)	1.9	0.3	7.24
Willow-leaved	48,379	363	(N/A)	1.6	1.0	32.99
New zealand	9,315	70	(N/A)	1.6	0.2	6.35
Desert gum	35,905	269	(N/A)	1.5	0.7	26.93
Carrotwood	4,735	36	(N/A)	1.2	0.1	4.44
Leyland cypress	11,479	86	(N/A)	1.2	0.2	10.76
Callery pear	818	6	(N/A)	1.0	0.0	0.88
OTHER STREET	33,287	550	(N/A)	7.9	1.5	10.38
Citywide total	4,926,885	36,952	(N/A)	100.0	100.0	54.91

The value of stored carbon dioxide is calculated as the total amount of carbon dioxide sequestered annually over the life of each tree, summed for the population. This value should not be added to the Replacement Value or double-counting of the carbon dioxide storage benefit will occur.

Morro Bay

Annual Stormwater Benefits of Public Trees by Species

2/4/2013

Species	Total rainfall interception (Gal)	Total (\$)	Standard Error	% of Total Trees	% of Total \$	Avg. \$/tree
Redflower gum	825,234	3,301	(N/A)	38.5	60.0	12.75
Cajeput	38,642	155	(N/A)	7.4	2.8	3.09
Blue gum eucalyptus	153,032	612	(N/A)	4.8	11.1	19.13
Strawberry tree	14,747	59	(N/A)	4.5	1.1	1.97
Queen palm	3,628	15	(N/A)	3.9	0.3	0.56
Monterey cypress	39,870	159	(N/A)	3.4	2.9	6.93
Broadleaf Evergreen Small Gum	23,459	94	(N/A)	3.1	1.7	4.47
Peppermint tree	45,611	182	(N/A)	3.0	3.3	9.12
Oak	23,273	93	(N/A)	2.8	1.7	4.90
Red ironbark	880	4	(N/A)	2.7	0.1	0.20
Lemon bottlebrush	24,683	99	(N/A)	2.2	1.8	6.58
Monterey pine	8,443	34	(N/A)	1.9	0.6	2.60
Victorian box	47,697	191	(N/A)	1.9	3.5	14.68
Mexican fan palm	5,838	23	(N/A)	1.9	0.4	1.80
Willow-leaved gimlet	3,373	13	(N/A)	1.9	0.3	1.04
New zealand christmas tree	19,654	79	(N/A)	1.6	1.4	7.15
Desert gum eucalyptus	7,288	29	(N/A)	1.6	0.5	2.65
Carrotwood	15,446	62	(N/A)	1.5	1.1	6.18
Leyland cypress	6,738	27	(N/A)	1.2	0.5	3.37
Callery pear	10,949	44	(N/A)	1.2	0.8	5.47
OTHER STREET TREES	2,272	9	(N/A)	1.0	0.2	1.30
Citywide total	54,360	217	(N/A)	7.9	4.0	4.10
Citywide total	1,375,118	5,501	(N/A)	100.0	100.0	8.17

Tree Height for Public Trees by Zone

2/4/2013

Zone	Tree Height	Tree Count	Standard Error	% of Zone	% of Public Trees
1	0'-15'	134	(N/A)	19.91	19.91
	15'-30'	297	(N/A)	44.13	44.13
	30'-45'	177	(N/A)	26.30	26.30
	45'-60'	19	(N/A)	2.82	2.82
	60'+	35	(N/A)	5.20	5.20
	N/A	11	(N/A)	1.63	1.63
	Total	673	(N/A)	100.00	100.00
Citywide	0'-15'	134	(N/A)	19.91	19.91
	15'-30'	297	(N/A)	44.13	44.13
	30'-45'	177	(N/A)	26.30	26.30
	45'-60'	19	(N/A)	2.82	2.82
	60'+	35	(N/A)	5.20	5.20
	N/A	11	(N/A)	1.63	1.63
	Total	673	(N/A)	100.00	100.00

APPENDIX 2

Soils

(North Morro Bay)



Soil Map—San Luis Obispo County, California, Coastal Part
(North Morro Bay)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot



Very Stony Spot



Wet Spot



Other

Special Line Features



Gully



Short Steep Slope



Other

Political Features



Cities

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads

MAP INFORMATION

Map Scale: 1:24,900 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

Date(s) aerial images were photographed: 6/6/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

San Luis Obispo County, California, Coastal Part (CA664)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
107	Beaches	71.7	2.6%
110	Briones-Tierra complex, 15 to 50 percent slopes	34.2	1.3%
120	Concepcion loam, 2 to 5 percent slopes	199.6	7.3%
127	Cropley clay, 0 to 2 percent slopes	6.2	0.2%
128	Cropley clay, 2 to 9 percent slopes	227.3	8.3%
129	Diablo clay, 5 to 9 percent slopes	5.8	0.2%
130	Diablo and Cibo clays, 9 to 15 percent slopes	83.7	3.1%
131	Diablo and Cibo clays, 15 to 30 percent slopes	81.2	3.0%
132	Diablo and Cibo clays, 30 to 50 percent slopes	148.7	5.5%
133	Diablo-Lodo complex, 15 to 50 percent slopes	64.8	2.4%
134	Dune land	176.4	6.5%
142	Gaviota fine sandy loam, 15 to 50 percent slopes	69.6	2.6%
148	Lodo clay loam, 15 to 30 percent slopes	53.2	2.0%
149	Lodo clay loam, 30 to 50 percent slopes	100.1	3.7%
150	Lodo clay loam, 50 to 75 percent slopes	7.6	0.3%
156	Lopez very shaly clay loam, 30 to 75 percent slopes	33.3	1.2%
160	Los Osos loam, 15 to 30 percent slopes	39.8	1.5%
161	Los Osos loam, 30 to 50 percent slopes	98.5	3.6%
164	Los Osos-Diablo complex, 15 to 30 percent slopes	6.6	0.2%
165	Los Osos-Diablo complex, 30 to 50 percent slopes	72.8	2.7%
170	Marimel silty clay loam, drained	49.3	1.8%
178	Nacimiento silty clay loam, 30 to 50 percent slopes	10.5	0.4%
183	Obispo-Rock outcrop complex, 15 to 75 percent slopes	115.4	4.2%
192	Psamments and Fluvents, occasionally flooded	156.9	5.8%
198	Salinas silty clay loam, 2 to 9 percent slopes	112.6	4.1%
223	Xerorthents, escarpment	2.8	0.1%
Subtotals for Soil Survey Area		2,028.9	74.5%
Totals for Area of Interest		2,723.5	100.0%

(South Morro Bay)



Map Scale: 1:25,200 if printed on A size (8.5" x 11") sheet.



Soil Map—San Luis Obispo County, California, Coastal Part
(South Morro Bay)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot



Very Stony Spot



Wet Spot



Other

Special Line Features



Gully



Short Steep Slope



Other

Political Features



Cities

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads

MAP INFORMATION

Map Scale: 1:25,200 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

Date(s) aerial images were photographed: 6/6/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

San Luis Obispo County, California, Coastal Part (CA664)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101	Aquolls, saline	105.3	3.2%
104	Baywood fine sand, 2 to 9 percent slopes	493.6	15.1%
105	Baywood fine sand, 9 to 15 percent slopes	462.7	14.2%
106	Baywood fine sand, 15 to 30 percent slopes	11.8	0.4%
107	Beaches	40.6	1.2%
109	Briones-Pismo loamy sands, 9 to 30 percent slopes	7.7	0.2%
110	Briones-Tierra complex, 15 to 50 percent slopes	41.1	1.3%
128	Cropley clay, 2 to 9 percent slopes	56.7	1.7%
129	Diablo clay, 5 to 9 percent slopes	177.6	5.4%
130	Diablo and Cibo clays, 9 to 15 percent slopes	54.2	1.7%
131	Diablo and Cibo clays, 15 to 30 percent slopes	276.3	8.5%
132	Diablo and Cibo clays, 30 to 50 percent slopes	45.2	1.4%
134	Dune land	231.7	7.1%
141	Gaviota sandy loam, 50 to 75 percent slopes	74.1	2.3%
148	Lodo clay loam, 15 to 30 percent slopes	8.7	0.3%
149	Lodo clay loam, 30 to 50 percent slopes	2.5	0.1%
158	Los Osos loam, 5 to 9 percent slopes	19.7	0.6%
160	Los Osos loam, 15 to 30 percent slopes	44.4	1.4%
161	Los Osos loam, 30 to 50 percent slopes	16.7	0.5%
183	Obispo-Rock outcrop complex, 15 to 75 percent slopes	13.9	0.4%
192	Psamments and Fluvents, occasionally flooded	180.0	5.5%
195	Rock outcrop-Lithic Haploxerolls complex, 30 to 75 percent slopes	139.0	4.3%
197	Salinas silty clay loam, 0 to 2 percent slopes	61.1	1.9%
223	Xerorthents, escarpment	0.3	0.0%
226	Zaca clay, 30 to 50 percent slopes	18.0	0.6%
228	Water	361.8	11.1%
Subtotals for Soil Survey Area		2,944.5	90.3%
Totals for Area of Interest		3,259.6	100.0%

San Luis Obispo County, California, Coastal Part

104—Baywood fine sand, 2 to 9 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet

Mean annual precipitation: 15 to 20 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent

Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Eolian sands

Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability (nonirrigated): 6e

Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand

36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Baywood/concepcion

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

105—Baywood fine sand, 9 to 15 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet

Mean annual precipitation: 15 to 20 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent

Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Eolian sands

Properties and qualities

Slope: 9 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability (nonirrigated): 6e

Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand

36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Capistrano sandy loam

Percent of map unit: 3 percent

Fine sand over loam soil

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

106—Baywood fine sand, 15 to 30 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet

Mean annual precipitation: 15 to 20 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent

Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Eolian sands

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability (nonirrigated): 6e

Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand

36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Capistano sandy loam

Percent of map unit: 3 percent

Garcy

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

120—Concepcion loam, 2 to 5 percent slopes

Map Unit Setting

Elevation: 10 to 800 feet

Mean annual precipitation: 17 to 24 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 300 to 330 days

Map Unit Composition

Concepcion and similar soils: 85 percent

Minor components: 12 percent

Description of Concepcion

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: 10 to 21 inches to abrupt textural change

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 3e

Ecological site: LOAMY CLAYPAN (R014XD105CA)

Typical profile

0 to 19 inches: Loam

19 to 47 inches: Clay

47 to 63 inches: Sandy clay loam

Minor Components

Cropley clay

Percent of map unit: 3 percent

Los osos loam

Percent of map unit: 3 percent

Tierra loam

Percent of map unit: 3 percent

San simeon sandy loam

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

128—Cropley clay, 2 to 9 percent slopes

Map Unit Setting

Elevation: 100 to 700 feet

Mean annual precipitation: 14 to 20 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 250 to 330 days

Map Unit Composition

Cropley and similar soils: 85 percent

Minor components: 6 percent

Description of Cropley

Setting

Landform: Alluvial flats, alluvial fans

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s

Land capability (nonirrigated): 3s

Ecological site: CLAYEY (R014XD001CA)

Typical profile

0 to 36 inches: Clay

36 to 60 inches: Silty clay loam

Minor Components

Los osos loam

Percent of map unit: 3 percent

Salinas silty clay loam

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

129—Diablo clay, 5 to 9 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet

Mean annual precipitation: 14 to 25 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Diablo and similar soils: 85 percent

Minor components: 6 percent

Description of Diablo

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone, sandstone
and/or shale

Properties and qualities

Slope: 5 to 9 percent

Depth to restrictive feature: 45 to 58 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability (nonirrigated): 3e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay

38 to 58 inches: Clay

58 to 62 inches: Weathered bedrock

Minor Components

Cropley clay

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

129—Diablo clay, 5 to 9 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet

Mean annual precipitation: 14 to 25 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Diablo and similar soils: 85 percent

Minor components: 6 percent

Description of Diablo

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone, sandstone
and/or shale

Properties and qualities

Slope: 5 to 9 percent

Depth to restrictive feature: 45 to 58 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability (nonirrigated): 3e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay

38 to 58 inches: Clay

58 to 62 inches: Weathered bedrock

Minor Components

Cropley clay

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

130—Diablo and Cibo clays, 9 to 15 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet

Mean annual precipitation: 14 to 25 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent

Diablo and similar soils: 45 percent

Minor components: 3 percent

Description of Diablo

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone, sandstone
and/or shale

Properties and qualities

Slope: 9 to 15 percent

Depth to restrictive feature: 45 to 58 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 3e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay

38 to 58 inches: Clay

58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 9 to 15 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 3e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay

31 to 39 inches: Clay

39 to 43 inches: Unweathered bedrock

Minor Components

Zaca soils

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

131—Diablo and Cibo clays, 15 to 30 percent slopes

Map Unit Setting

Elevation: 200 to 3,000 feet

Mean annual precipitation: 14 to 28 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent

Diablo and similar soils: 45 percent

Minor components: 8 percent

Description of Diablo

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountainflank, side slope, crest

Down-slope shape: Convex, linear

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 45 to 58 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 4e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay

38 to 58 inches: Clay

58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountainflank, side slope, crest

Down-slope shape: Linear, convex

Across-slope shape: Convex

Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 4e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay

31 to 39 inches: Clay

39 to 43 inches: Unweathered bedrock

Minor Components

Lodo clay loam

Percent of map unit: 2 percent

Los osos loam

Percent of map unit: 2 percent

Zaca clay

Percent of map unit: 2 percent

Rock outcrop

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

132—Diablo and Cibo clays, 30 to 50 percent slopes

Map Unit Setting

Elevation: 200 to 3,000 feet

Mean annual precipitation: 14 to 28 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent

Diablo and similar soils: 45 percent

Minor components: 9 percent

Description of Diablo

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountainflank, crest, side slope

Down-slope shape: Convex, linear

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: 45 to 58 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability (nonirrigated): 6e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay

38 to 58 inches: Clay

58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountainflank, crest, side
slope

Down-slope shape: Convex, linear

Across-slope shape: Convex

Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability (nonirrigated): 6e

Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay

31 to 39 inches: Clay

39 to 43 inches: Unweathered bedrock

Minor Components

Lodo clay loam

Percent of map unit: 3 percent

Los osos loam

Percent of map unit: 3 percent

Rock outcrop

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

134—Dune land

Map Unit Composition

Dune land: 90 percent

Minor components: 9 percent

Description of Dune Land

Setting

Landform: Dunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Interpretive groups

Land capability classification (irrigated): 8e

Land capability (nonirrigated): 8e

Typical profile

0 to 6 inches: Fine sand

6 to 60 inches: Fine sand

Minor Components

Baywood

Percent of map unit: 3 percent

Capistrano soils

Percent of map unit: 3 percent

Beaches

Percent of map unit: 3 percent

Landform: Beaches

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

158—Los Osos loam, 5 to 9 percent slopes

Map Unit Setting

Elevation: 100 to 2,000 feet

Mean annual precipitation: 15 to 25 inches

Mean annual air temperature: 55 to 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent

Minor components: 14 percent

Description of Los Osos

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountaintop, crest, side slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 5 to 9 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 3e

Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam

14 to 32 inches: Clay

32 to 39 inches: Sandy loam, loam, clay loam

39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam

Percent of map unit: 2 percent

Lodo clay loam

Percent of map unit: 2 percent

Millsap loam

Percent of map unit: 2 percent

Rock outcrop

Percent of map unit: 2 percent

Unnamed

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

160—Los Osos loam, 15 to 30 percent slopes

Map Unit Setting

Elevation: 100 to 3,000 feet

Mean annual precipitation: 15 to 35 inches

Mean annual air temperature: 55 to 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent

Minor components: 15 percent

Description of Los Osos

Setting

Landform: Hills, ridges

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountaintop, crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex, linear

Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability (nonirrigated): 6e

Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam

14 to 32 inches: Clay

32 to 39 inches: Sandy loam

39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam

Percent of map unit: 2 percent

Lodo clay loam

Percent of map unit: 2 percent

Millsap loam

Percent of map unit: 2 percent

Lompico

Percent of map unit: 2 percent

Mcmullin

Percent of map unit: 2 percent

Rock outcrop

Percent of map unit: 1 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

161—Los Osos loam, 30 to 50 percent slopes

Map Unit Setting

Elevation: 100 to 3,000 feet

Mean annual precipitation: 15 to 35 inches

Mean annual air temperature: 55 to 59 degrees F

Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent

Minor components: 14 percent

Description of Los Osos

Setting

Landform: Hills, ridges

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Mountaintop, crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex, linear

Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 30 to 50 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e

Land capability (nonirrigated): 7e

Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam

14 to 32 inches: Clay

32 to 39 inches: Sandy loam

39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam

Percent of map unit: 2 percent

Lodo clay loam

Percent of map unit: 2 percent

Rock outcrop

Percent of map unit: 2 percent

Lompico

Percent of map unit: 2 percent

Mcmullin

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

183—Obispo-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

Elevation: 200 to 4,000 feet

Mean annual precipitation: 8 to 35 inches

Mean annual air temperature: 45 to 57 degrees F

Frost-free period: 110 to 350 days

Map Unit Composition

Obispo and similar soils: 50 percent

Rock outcrop: 30 percent

Minor components: 20 percent

Description of Obispo

Setting

Landform: Mountain slopes, ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, mountaintop

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Residuum weathered from serpentinite

Properties and qualities

Slope: 15 to 75 percent

Depth to restrictive feature: 8 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): 7e

Land capability (nonirrigated): 7e

Ecological site: SHALLOW CLAYEY SERPENTINE
(R015XD146CA)

Typical profile

0 to 11 inches: Clay

11 to 18 inches: Weathered bedrock

18 to 22 inches: Unweathered bedrock

Description of Rock Outcrop

Setting

Landform: Hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Properties and qualities

Slope: 15 to 75 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Land capability classification (irrigated): 8

Land capability (nonirrigated): 8

Typical profile

0 to 60 inches: Unweathered bedrock

Minor Components

Diablo clay

Percent of map unit: 7 percent

Henneke clay loam

Percent of map unit: 7 percent

Unnamed

Percent of map unit: 6 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part

Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

192—Psamments and Fluvents, occasionally flooded

Map Unit Setting

Elevation: 10 to 1,500 feet

Mean annual precipitation: 14 to 25 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 275 to 325 days

Map Unit Composition

Fluvents and similar soils: 45 percent

Psamments and similar soils: 45 percent

Minor components: 10 percent

Description of Psamments

Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w

Land capability (nonirrigated): 6w

Typical profile

0 to 12 inches: Sand

12 to 48 inches: Sand

48 to 60 inches: Stratified gravelly sand to gravelly loamy sand

Description of Fluvents

Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability (nonirrigated): 6w

Typical profile

0 to 12 inches: Loamy sand
12 to 48 inches: Loamy sand
48 to 60 inches: Stratified gravelly sand to gravelly loamy sand

Minor Components

Riverwash

Percent of map unit: 2 percent
Landform: Drainageways

Unnamed

Percent of map unit: 2 percent
Landform: Depressions

Unnamed

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Corralitos

Percent of map unit: 2 percent

Tujunga

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

APPENDIX 3

Tree Care Guidelines

Irrigation Guidelines for Establishing Young Trees

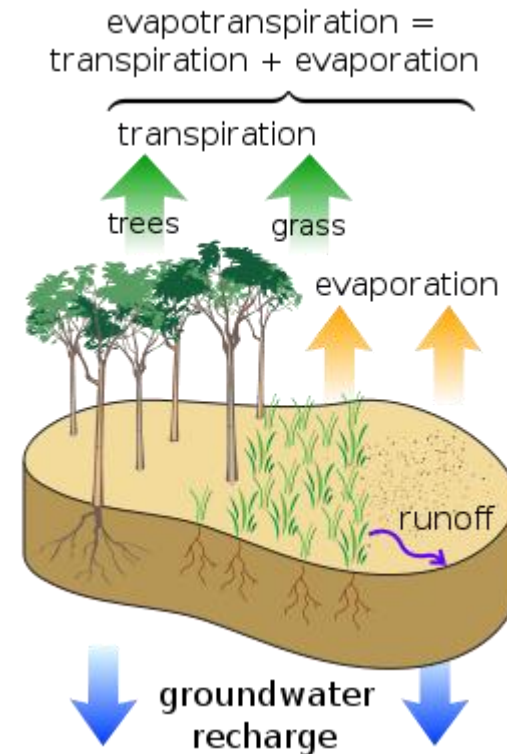
Plant health and vigorous growth are important for young trees to quickly fulfill their landscape purposes. The amount of water that might be saved by being frugal is not worth the possible result of reduced growth or even death. New plantings require more frequent watering (especially at the rootball) until they develop established root systems. Be cautious when transitioning to minimum irrigation because plants must adapt to lower soil moisture conditions.

Shallow watering encourages surface rooting, which makes the tree more vulnerable to drying out during periods of drought. Infrequent, deep soakings encourage the production of a deeper root system and more drought-tolerant trees. If the soil is allowed to dry between irrigations, natural shrinking and swelling improves soil structure. Conversely, frequent, shallow irrigation tends to compact the soil surface and reduce the rate of water infiltration.

Water should be distributed evenly to as much of the root system as possible. Watering the lower trunk (root collar) should be avoided because it can lead to increased fungal decay problems for the tree. Topography affects water distribution. Soil tends to dry faster on hills, while water may accumulate in valleys and low areas. The water application rate should not exceed the soil infiltration rate. If water is applied too quickly, runoff can cause erosion problems and reduced infiltration. Ponding or runoff that results from high application rates wastes water and can be detrimental to root growth and function.

Understanding Soil/Plant/Water Relationships

Plant and soil water loss (evapotranspiration, or ET) are commonly used to schedule irrigations and to indicate how much water to apply. ET rates are dependent on environmental conditions, including light, temperature, wind, and humidity. The California Irrigation Management Information System (CIMIS) supplies this information (<http://www.cimis.water.ca.gov/cimis/welcome.jsp>), and your organization may already subscribe to it.



Irrigation Guidelines for Establishing Young Trees

Variations in the weather and length of day, adequacy of previous irrigation or rainfall, depth and spread of roots, and size of the tree top affect the moisture requirements. Besides measuring ET, you can employ some hands-on techniques.

Observe the trees. Most plants wilt noticeably when too little water is available. Leaves that were once shiny become dull, and bright green leaves turn gray-green. You do not want your trees to reach this level of stress.

Feel the soil. With experience, the moisture content can be estimated by the feel of the soil provided it is representative of the site. Collect a sample with a soil probe or shovel. To estimate moisture adequacy, roll or squeeze small sample of soil into a ball. If the soil will not mold into a ball, it is too dry to supply adequate water to plants. If the ball formed will not crumble when rubbed, the soil is too wet. If it can be molded into a ball that will crumble when rubbed, the moisture is probably about right. Sandy soils, however, will crumble even when wet.

Soil moisture sensors, such as tensiometers, can also be used to determine irrigation needs.

By the end of the first year, if the trees are growing vigorously, you may be able to reduce the amount of water applied by 15 to 20 percent, but some trees still may require irrigation on this same schedule.

Container material is the most common type of nursery stock in California, however bare root tree stock in the winter is a good alternative when appropriate.

Selecting Quality Container Nursery Stock

Trees should meet the following minimum standards. Trees that do not meet these requirements should be rejected. Tree planting specifications for selection of quality tree stock should be as follows:

- All trees should be true to type or botanical name as ordered or shown on planting plans or contract orders.
- All trees should have a single, relatively straight trunk with a good taper and branch distribution vertically, laterally and radially with a live crown ratio (distance from bottom of canopy to tree top/tree height) of at least sixty percent (60%). All branches in the canopy should be less than two-third (2/3) the trunk diameter and free of included bark. The trunk and main branches should be free of wounds except for properly made pruning cuts, damaged areas, conks, bleeding and signs of insects or disease.
- All trees should be healthy, have a form typical for the species or cultivar, and be well-rooted and pruned as appropriate for the species.
- All trees should have sufficient trunk diameter and taper so that it can remain vertical without the support of a nursery stake within six months.
- The root ball of all trees should be moist throughout and the crown should show no sign of moisture stress.

Individual tree specifications are as follows:

- The tree should be well rooted in the soil mix. The point where the topmost root in the root ball emerges from the trunk should be visible at the soil surface of the root ball. When the container is removed, the root ball should remain intact. When the tree is lifted, the trunk and root system should move as one.
- All trees should comply with federal and state laws requiring inspection for plant diseases and pest infestations.
- No tree should be accepted that has been severely topped, headed back or lion-tailed.
- No tree should be accepted with co-dominant stems or excessive weak branch attachments that cannot be correctively pruned without jeopardizing the natural form of the species.
- No tree should be accepted that is root bound, shows evidence of girdling or kinking roots, or has roots protruding above the soil (a.k.a. “knees”).
- No tree should be accepted that has roots greater than one-fifth (1/5) the size of the trunk diameter growing out of the bottom of the container.

Planting Specifications

General

The City of Morro Bay shall be the responsible authority for determining the appropriate species or variety of trees planted within the public rights-of-way or easements.

Specific Planting Policies

- a. Trees shall be planted in conformance with the approved master plan and in accordance with Public Services Engineering Standard Specifications.
- b. A minimum of one street tree shall be planted per lot. Property with frontage of 65 feet or more shall have trees planted at an average maximum spacing of 35 feet (tree to tree) on center. The actual number of trees and spacing for planting will be based on the established canopy width of the designated species as approved by the (department name). To preserve the integrity of the street pattern, where site constraints preclude planting of a street tree within the right-of-way trees may be planted on private property in those instances where an easement for that purpose has been provided.
- c. Property owners may plant trees at the owner's expense in accordance with Department

standards and subject to prior written approval of the Department.

- d. Planting of street trees shall be required at the time the property abutting the right-of-way is developed. The owner of the abutting property shall be responsible for the costs of furnishing, installing and providing a minimum of the first two years of maintenance for all street tree plantings.
- e. To maximize the square footage of tree canopy and its benefit to the City, all new and redeveloped properties both residential and commercial shall be required to provide funding for public trees. Fees are established by the City Council. The City through its (contractor or in house staff) will schedule planting of the street trees on or before the time occupancy permits are issued.
- f. The Department within 120 days of removal shall replace trees removed by the Department. If possible, no trees will be planted by the City between June 1st and September 30th.
- g. Tree removal through a permit by other agencies shall be subject to both a mitigation and replacement fee and shall be replaced by the City's (dept. responsible) within 120 days. If possible no trees will be planted by the city between June 1st and September 30th.

Planting Specifications

- h.** Watering of all street trees within the City shall be the responsibility of the abutting property owner, except in reverse frontage and median strips that are maintained by the city. The Department is responsible for all other maintenance after completion of the maintenance period and the written acceptance by the Department.
 - i.** Trees shall not be required to be planted in street right-of-way abutting undeveloped property. If the property owner desires to plant the street right-of-way abutting the owner's undeveloped property, the owner must provide an automatic irrigation system and shall be responsible for the cost of installation and maintenance. The Director may require the posting of a bond of a sufficient amount to guarantee the installation and care of the appropriate improvements.
 - j.** When the sidewalk is located next to the curb, the trees shall be planted a minimum of one foot from the right-of-way line within the public street right-of-way line or easement. Where right-of-way is not available adjacent to the sidewalk, the trees should be planted in easements behind the sidewalk whenever possible. When a tree well in the sidewalk is the only possible solution, a tree will be selected that will not cause or result in long-range curb and or sidewalk damage.
- B.** In the interest of public safety and maintenance trees shall be planted:
 - a.** A minimum distance from the intersection to provide adequate sight distance. Minimum distance shall be 30 feet from beginning of curve at the curb return, except at secondary and arterial streets; the minimum shall be 50 feet.
 - b.** Five (5) feet minimum from fire hydrants, service walks and driveways.
 - c.** Ten (10) feet minimum from sewer laterals, other utility services laterals and water meters.
 - d.** Fifteen (15) feet minimum from lamp standards.
 - e.** With consideration given to those varieties of trees that will not create a conflict with existing overhead electric utility lines.
 - f.** All trees, other than palm trees, shall be planted a minimum 15-gallon size in residential areas and 24" box size in commercial areas. A 15-gallon or 24" box is defined/determined by the American Association of Nurserymen. Smaller/larger sizes may be permitted/required by the City if warranted.

Planting Specifications

- g.** All newly planted trees shall have the nursery stakes removed and replaced with others per Department standards.
- h.** All staked trees shall be inspected twice a year and the stakes are to be adjusted or removed as necessary.
- i.** All trees planted in tree wells shall be installed and irrigated in a manner to promote deep rooting per Department standards. All trees in wells shall be installed with an automatic irrigation system.

Tree Planting Procedures

Percolation and Soil Fertility

Prior to planting the following procedure should be followed:

- Check the soil type and structure. If the soil is compacted, then it should be physically cultivated and have organic material added. Tree should be selected to match the soil type.

Sites for New Street Trees

Typically street trees will be planted where there is an existing vacancy that is unoccupied, as a replacement tree, or if there is a break in the established street tree pattern that should be filled.

Street trees will not be approved for planting under the following conditions:

- The tree would interfere with the growth of other trees in the area.
- The vacant tree well site is overshadowed by other trees nearby creating an unsuitable growing condition for the proposed new tree.
- Utility meters are in the way.
- The tree could block scenic views or views of oncoming traffic.

Street Tree Spacing

The following guidelines shall be followed when planting new street trees. The standard street tree spacing is as follows:

- 30-35 feet on center
- 30 feet from the corner property line

- 20-25 feet on center for smaller statured trees
- 10 feet from driveway approaches
- 10 feet from light poles
- 5 feet from utility meter boxes
- 1 tree per 50feet of property frontage

Planting Procedures

- All planting locations shall be checked for underground conflicts. It is mandatory that Dig Alert is notified to detect all underground utilities prior to any digging.
- Dig planting holes 2-3 times as wide as the container. The depth of the planting pit shall be equal to the size of the rootball. Place the tree in the planting pit so the trunk flare or the top of the rootball is at least one-half inch to 1 inch (1/2" to 1") above finish grade. In grass covered parkways the top of the rootball shall be higher than the surrounding soil by one-half inch to one inch (1/2" to 1"). In a concrete tree well, the rootball shall be one inch (1") above the level of the finished surface of the surrounding concrete.
- When obtaining a tree from a nursery, always carry the tree by its container or rootball, never by the trunk.
- After removing the tree from the container, cut circling roots and matted roots off the bottom. Check for any circling roots missed during initial inspection. Any roots less than one-third (1/3) the size of the trunk shall be removed with a sharp pruning tool.
- Before placing the tree in the planting pit, examine the root ball for injured roots and the canopy for broken branches. Damaged roots shall be cleanly cut off at a point

Tree Planting Procedures

just in front of the break. Broken branches shall be cut out of the canopy making sure that the branch collar is not damaged.

- Backfill with soil removed from the planting hole. Only add fertilizer or compost if soil analysis indicates it is required. Build a temporary four to six inches (4" to 6") water retention berm around the root ball to allow for establishment watering. Immediately after planting the tree, water it thoroughly by filling the water retention basin twice.
- Eliminate all air pockets while backfilling the planting pit by watering the soil as it is put into the hole. Do not compact the backfill by tamping it down.
- All trees shall be staked with two wooden lodge poles and two ties per pole. The minimum diameter of a lodge pole is two inches (2"), but may be larger for 36" and 48" box trees. Place the tree ties at one-third (1/3) and two-third (2/3) of the trunk height. Drive the stake into the ground approximately twenty-four to thirty inches (24" to 30") below grade making sure not to penetrate the root ball.
- Mulch with a two to four inch (2" to 4") layer of mulch where appropriate to conserve soil moisture, provide protection from extreme temperatures and prevent damage from weed eaters. Mulch shall be kept three to four inches (3" to 4") away from the tree trunk and shall extend at minimum to the boundary of the water retention basin. It may extend further if desired.
- The soil around the new tree shall be kept moist, but not saturated, by watering at least once a week during the cooler winter months and twice a week during the hot summer months.

Tree Planting by Residents

Residents are allowed to plant the approved designated street tree in a parkway or tree well. Residents may plant any size tree they choose however the minimum size acceptable to the City will be in a 15-gallon container. Tree planting may only be done after obtaining a permit issued by the Public Services Department. The City will request that the resident water the tree for the first year to ensure the will survive. The tree will then be incorporated into the City's tree inventory and become the City's responsibility to maintain.

Tree Preservation Guidelines

Trees are an essential element of Morro Bay's image and quality of life. Hardscape elements, such as sidewalks, curbs, gutters, and driveways are also indicative of the City of Morro Bay's commitment to maintain its infrastructure. Over the years, broken and damaged sidewalks, curbs, and gutters and driveways will have to be replaced throughout the City as a result, many trees will be involved. Whenever possible, curbs, gutters, and sidewalks should be meandered away from the tree thereby providing more growing space for roots. Trees will probably also be impacted during new construction and need to be protected. To manage this process and protect existing trees, the following guidelines have been established:

1. Root Pruning

- a.** Whenever sidewalk, curb gutter or driveway replacements occurs within four feet of a tree, the site will be inspected by an Arborist for tree impact assessment. Root pruning may be performed on any tree that a certified arborist in coordination with the Recreation and Parks Department determines can be safely performed without jeopardizing the life of the tree.
- b.** All roots greater than two (2) two inches in diameter must be cleanly cut to encourage good callus tissue. It is recommended that roots be pruned back to the next root node.

2. Sidewalk Renovation

Trees that would be seriously impacted by root pruning during sidewalk replacements will be inspected by a certified arborist in coordination with the Recreation and Parks Department to determine whether:

- a.** The repair work can be deferred and a temporary asphalt patch used to eliminate any hazard until other steps can be reviewed and implemented.
- b.** The tree can be saved by narrowing the sidewalk near the tree, while still leaving sufficient sidewalk width for disabled access. Standard disability access width is four (4) feet with variances given to 38 inches where absolutely necessary.
- c.** Relocating the sidewalk onto private property and negotiating the appropriate easement with the adjacent property owner can save the tree.
- d.** The tree can be saved by replacing the sidewalk with minimal disruption of the roots (alternatives: a temporary asphalt sidewalk; rubberized sidewalk; use of root barrier fabric; raising the grade over the roots; and immoral walkway; or other options).

Tree Preservation Guidelines

- e. To remove the tree and replace it with a minimum 24" boxed replacement tree.

3. Curb and Gutter Replacement

Trees that would be seriously impacted by root pruning during curb/gutter replacement will be inspected by a certified arborist in coordination with the Recreation and Parks Department to determine whether:

- a. The repair work can be deferred if it does not create drainage problems or otherwise increase street maintenance unnecessarily and is not a hazard.
- b. The tree can be saved by relocating the curb and gutter into the street at least one foot (ideally two (2) to six (6) feet), thereby narrowing the street width, which in effect may cause the elimination of some street parking.
- c. Where six or more trees along one side of a block are severely affected, consideration is to be given to relocating the curb and gutter into the street along the entire block.
- d. The tree can be saved by replacing the curb and gutter with minimal disruption of the roots (alternatives: temporary asphalt curb and

gutter, use of root barrier fabric: or other similar options).

4. Recovery Period

When significant root pruning on two sides of a tree is required, there will be a 24-month separation between sidewalk and curb/gutter repair to allow time for the tree roots to recover. An exception to this policy may be made if the curb/gutter or sidewalk is relocated away from the tree or other measures are employed that reduce or eliminate root involvement or it is otherwise determined by the (responsible party, department etc.) that the root involvement is minimal.

5. Construction Projects

The following guidelines have been developed to protect trees on City property during construction projects:

- a. A root protection zone shall be defined by a minimum 42" high barrier constructed around any potentially impacted tree. This barrier shall be at the drip line or at a distance from the trunk equal to 6 inches for each inch of trunk diameter 4.5 feet above the ground if this method defines a larger area.

Tree Preservation Guidelines

- b. Should it be necessary to install irrigation lines within this area, the line shall be located by boring, or an alternate location for the trench is to be established.

The minimum clearance between an open trench and a street tree shall be one (1) foot or six inches for each inch of trunk diameter measured at 4.5 feet above existing grade if this method defines a larger distance. The maximum clearance shall be ten (10) feet.

- c. At no time shall any equipment, materials, supplies or fill be allowed within the prescribed root protection zone unless otherwise directed by the agency.

It is recognized that failure to abide by these provisions will result in substantial root damage to trees that may not be immediately apparent. The City can therefore assess damages according to the International Society of Arboriculture standards and bill the responsible party.

Tree Pruning Guidelines

Need for Pruning

Trees are pruned principally to preserve their health and appearance and to prevent damage to human life and to property. Broken, dead, or diseased branches are pruned to prevent decay from spreading. Live branches are removed to permit penetration of sunlight and air circulation which helps maintain a strong and healthy tree.

All of Morro Bay's street trees should be completely pruned on a periodic basis based on species needs. Frequency also depends on funding levels.

Additional tree pruning is done on an "as needed" basis. Specific examples of where "as needed" work is authorized are:

- Pruning tree limbs that interfere with utility lines.
- Pruning tree limbs that interfere with street, parking lot or security light illumination.
- Pruning tree limbs that interfere with buildings or other private or public facilities.
- Pruning hazardous limbs, such as large dead limbs greater than two (2) inches in diameter, hangers, and structurally unsound limbs.
- Pruning tree limbs that interfere with safe vehicular or pedestrian traffic.
- Sucker pruning.

Property Owners Ability to Prune Trees

The public may apply for a permit (a no fee encroachment permit) and hire their own contractor who is licensed and insured to trim the tree(s) according to these standards contained here in.

Tree Pruning Specifications

Any tree work performed on a City tree should be done according to the specifications outlined here in. There are different criteria for pruning depending on the purpose for the pruning.

- Complete Pruning Specifications are used when the entire tree needs to be fully pruned.
- Safety Pruning Specifications require less pruning and are used when specific, possibly hazardous (dead/dying) limbs need removal to eliminate all safety concerns. Safety pruning may be recommended in some circumstances instead of complete pruning. Safety pruning specifications are used for "as needed" pruning and address only safety concerns. Safety pruning includes only the basic requirements to address the problem.

Tree Pruning Guidelines

Tree Pruning and Removal near overhead power lines

Where overhead wires pass through trees, safety and reliability of service demand that tree trimming be done in order that the wires may clear branches and foliage by a reasonable distance. The City allows PG&E to maintain their power lines on a yearly basis. PG&E is required by rules and regulations adopted by the California Public Utilities Commission (CPUC) to maintain certain clearances between vegetation and power lines and otherwise maintain its facilities to ensure the safe and reliable provision of electric power to the state. Local jurisdictions do not have the discretion to change or veto these rules and regulations or to second guess the utility's vegetation management program. Thus, they lack the authority to require PG&E to obtain discretionary tree trimming and removal permits because the operation and maintenance (including vegetation management and removal activities) of electric power lines fall within the jurisdiction of the California Public Utilities Commission (CPUC) and is preempted.

Method of Operation

The following trimming specifications are for the use of any pruning of City trees.

- a. Lightly trim all trees to lighten and balance the trees, removing no more than 15 to 20% of the tree.
- b. Remove dead wood and cross branches.
- c. Remove all suckers.
- d. Remove all diseased branches.
- e. Encourage radial distribution of all branches to provide sufficient number of scaffold branches to fill the circular spaces as concentrically as possible around the trunk.
- f. Final trimming cuts shall be made without leaving a stub. Cuts shall be made just outside the shoulder ring area. Extremely flush cuts, which produce large wounds and weaken the tree at the cut, shall not be made.
- g. All trimming shall provide adequate clearance for any obstructed (street, directional etc.) sign, streetlight, safety light or other approved standard.
- h. Over sidewalks, limbs shall be raised a minimum of seven and a maximum of eight feet from grade to wood. Where sidewalks do not occur or are located on the street side of a parkway, limbs may be retained below the minimum elevation as long as they conform to the natural shape of the species.
- i. Over residential streets, limbs shall be raised gradually from ten (10) feet to fourteen (14) feet over traffic lanes from grade to wood giving the appearance of an arch rather than an angle. Near driveways where automated refuse containers are placed, it is imperative to have fifteen (15) feet of clearance. (Insert all, some or none if appropriate)
- j. Over arterial streets, limbs should be raised a minimum of twelve (12) and a maximum of fourteen (14) feet from grade to wood. A major arterial street

Tree Pruning Guidelines

may require a higher maximum over central traffic lanes for existing, mature canopy-forming limbs. (Use if appropriate)

- k. Whether over sidewalk or street, where the lowest limb is attached to a trunk above the desired elevation but extends below that elevation, if possible, rather than removed all together, in order to avoid giving the trunk a skinned appearance.
- l. Trimming shall not exceed the amount necessary to achieve the specified elevation at the time of raising. NO attempt to trim to a higher elevation to allow for future growth shall be permitted.
- m. No limb over three inches in diameter will be removed without prior (agency name) approval.
- n. No lion-tailing. An effect known as “lion-tailing” results from pruning out the inside lateral branches. Lion-tailing, by removing all the inner foliage, displaces the weight to the ends of the branches and may result in sunburned branches, water sprouts, weaken branch structure and limb breakage.
- o. Topping, stump cutting, hat raking pollarding, etc. is not acceptable.

Trees with known pathogens

Trees with known pathogens that can be spread with pruning tools shall be pruned using additional caution.

Avoid pruning on windy days in order to reduce the transmission of spores - Sterilize tools in between cuts on

diseased trees that can be transmitted on pruning tools.

Acceptable sterilization methods include fifty percent (50%) bleach solution for ten (10) minutes or handheld butane torch heating for fifteen (15) seconds per side.

Wood with known wood boring insect infestations shall be chipped into pieces smaller than four inches (4”) and spread. - Wood that is infected with disease shall be handled and disposed of in a manner that minimizes the possibility of transmission of disease. This may include:

- a. Not working on windy days to reduce transmission of spores.
- b. Transporting greenwaste in covered containers.

General Staff Requirements

- a. **City Tree Workers** – All persons performing tree work on City trees should be trained according to tree care standards accepted by the International Society of Arboriculture.
- b. **Certified Arborists** – Any contracted tree company shall employ a full-time, permanent Certified Arborist, as accredited by the International Society of Arboriculture. This person is responsible for ensuring that the contractor’s crews are performing work according these specifications. This individual must be present along with the crew at all times.

Tree Pruning Guidelines

- c. **Contractor Qualifications** – All contractors are required to have a state contractor’s license for tree work (C-61) and that the contractor adheres to the specifications provide in the bid documents.

General Work Site Requirements

- a. Proper disposal of all tree green products generated is required mindful of recycling.
- b. Assure good traffic control and minimum disruptions to the public.
- c. Assure adequate safety of employees and the public.

Wildlife Avoidance/Migratory Bird Treaty Compliance

The Migratory Bird Treaty Act, the Endangered Species Act and local laws protect birds and wildlife located in trees. An arborist that is also a Certified Wildlife Protector can inspect trees. To minimize conflicts with nests, trees should be inspected carefully for nests and cavities using binoculars prior to pruning. The recommended criteria shall apply to tree pruning or removal activities to protect wildlife:

- As feasible, trees should be scheduled for removal during non-breeding/non-nesting season.
- Trees scheduled for pruning or removal during the breeding/nesting seasons shall be visually inspected at ground-level.

- If wildlife is located in the tree, the tree shall not be pruned and the Public Services Department notified.

Safety Tree Pruning Specifications

Safety tree pruning shall consist of the total removal of those dead or living branches as may menace the future health, strength and attractiveness of trees. Specifically, trees shall be pruned according to the Tree Pruning Specifications as outlined previously in this section.

February 13, 2014

MEMORANDUM

TO: PLANNING COMMISSION

FROM: ANNE M. RUSSELL, INTERIM CITY ATTORNEY

RE: TREE #1824 AT 310 KERN AVENUE

RECOMMENDATION

Determine if the tree constitutes a hazard to persons or to property outside the drip line. If yes, authorize issuance of a tree removal permit under the City's Tree Regulation. If no, deny the permit.

Consider agendaizing in the future, review and possible recommendation to the Council to amend the tree ordinance to: (1) clarify/state that property owners, not the City, are owners of the trees and landscaping on their property in the right of way; (2) clarify/state property owners are responsible for maintenance, including pruning and trimming, for street trees and landscaping on their property in the public right of way and responsible for damage or injury caused by street trees or landscaping on their property; (3) shift the costs of removal of any tree in the right of way to the property owner to save street funds for repair and improvement of streets not maintenance of private landscaping; (4) clarify that removal of a tree can be for damage inside the drip line of the tree if it affects a structure; (5) other items the Commission feels should be addressed.

DISCUSSION

Public Services staff requested this memorandum regarding the above tree.

The City has received a claim for \$27,000 for damage allegedly caused by the tree tagged as #1824 to the property owner's garage and retaining walls. The property owner also claims it is a hazard to persons, that his mother slipped and fell on the pine needles a while back, and when the tree was pruned, constituted a safety hazard while sap was dripping. There is a difference of opinion as to what caused the damage, the tree roots or soil expansion and contraction together with downward gravitational pull due to ground water travelling through the hill.

The City's Tree Regulations, found in Municipal Code Section 12.08.010 and following, vest the City's Director of Public Works with the responsibility for enforcing the chapter (12.08.030) and with jurisdiction and control of the location and placement of all trees in the public rights of way, together

with supervision, direction and control for the care, trimming, removal, relocation and replacement thereof. (12.08.050). No person other than the Director of Public Works, or his designee, shall prune, plant, remove or replace a tree in the public right of way without a permit.(12.08.060)

No tree can be removed from the public right of way unless it meets one of the criteria of Section 12.08.070, ie., interferes with the necessary improvement of the public right of way, the installation of public utilities or is a hazard to person or property outside the drip line of the tree at maturity, or creates such a condition as to constitute a hazard or an impediment to the progress or vision of anyone traveling on or within the public right of way. The only applicable bases for removal would be a hazard to person or **property outside the drip line of the tree at maturity**. The City has the responsibility to pay for the removal and replacement of such a tree.

The language of Section 12.08.070 is not entirely clear. Nor is the question of liability for the damage caused by the tree. The property owner owns the underlying property; the City merely has an easement for right of way purposes. The City has control over the trees. The easement is larger than the actual street. Some cities have sidewalks in this area. Morro Bay does not at this location.



AGENDA NO: D-2

MEETING DATE: 03/25/14

Staff Report

TO: Mayor and City Council DATE: March 16, 2014

FROM: Susan Slayton, Administrative Services Director

SUBJECT: Consideration of Establishing an Aid to Agencies Process

RECOMMENDATION

Based on the City Council's request, staff is presenting this item for Council consideration and recommending the City Council discuss this issue and direct staff accordingly.

ALTERNATIVES

This is a discussion item that was requested by Council; therefore, alternatives are unknown.

FISCAL IMPACT

Any action the City Council chooses to take will require the designation of a funding source.

SUMMARY:

The City Council has asked for this item to be presented tonight to allow the City Council to discuss the establishment of an Aid to Agencies Process. The City Council will discuss this item and direct staff accordingly.

BACKGROUND

From FY 1996/97 through FY 2007/08, the City of Morro Bay funded an Aid to Agencies program. Below are the historical funding amounts:

1996/97	\$	9,000		2005/06	\$	21,123
1997/98		8,975		2006/07		19,047
1998/99		8,975		2007/08		22,138
1999/00		15,000		2008/09		0
2000/01		13,343		2009/10		0
2001/02		25,000		2010/11		0
2002/03		29,997		2011/12		0
2003/04		23,472		2012/13		0
2004/05		23,472				
				TOTAL	\$	219,542

With the 2008/09 budget, the City Council chose to discontinue that funding due to financial constraints. At the June 25, 2013, meeting, Council requested this item be returned for discussion of a process and potential funding sources prior to the start of the next budget cycle.

Prepared by: SS Dept Review: _____

City Manager Review: _____

City Attorney Review: _____

DISCUSSION

When able, the City has provided funding assistance to non-profit groups through an application process. The process is listed below:

1. The City Council announces its intention to fund Aid to Agencies
 - a. Application submittal deadline = April 30
 - b. Registered non-profits only (501(c))
 - c. Establish a maximum funding award
 - d. Contact information for application (sslayton@morro-bay.ca.us or 772-6217)
2. Applications are received, reviewed and listed on the budget page for Aid to Agencies
3. At the budget workshop, Council establishes the budget, and grants funding as deemed appropriate

Below is a list of agencies that received funding in past years:

American Red Cross S.L.O. Chapter
Caring Callers
Central Coast Natural History Association
Court-Appointed Special Advocates (CASA)
EOC - Homeless Services
EOC - Senior Health Screening
Food Bank Coalition of S.L.O. County
Hospice of S.L.O. County
Hotline of S.L.O. County
Literacy Council for S.L.O. County
Morro Bay Neighborhood Watch Association
Salvation Army
Senior Legal Services Project
Senior Nutrition Program of S.L.O. County
Special Olympics of S.L.O. County
Women's Shelter Program of S.L.O. County

There has never been a formal policy, merely a process, and staff does not believe a formal policy is necessary. The funding process, as amended by Council, can be written into the budget on the Aid to Agencies page.



AGENDA NO: D-3

MEETING DATE: 03/25/14

Staff Report

TO: Mayor Irons and City Council **DATE:** March 14, 2014

FROM: Edward Kreins, Interim City Manager

SUBJECT: Discussion of Funding the Request from the Morro Bay 4th, Inc.

RECOMMENDATION

Staff recommends that the City Council review the e-mail request from Morro Bay 4th, Inc., discuss the request for funding, and advise staff accordingly.

ALTERNATIVES

Council may elect to fund all, some or none of the request.

FISCAL IMPACT

Potential cost to the City: \$0 to \$25,000; the amount and source of funding will be determined by City Council.

SUMMARY

The attached e-mail was received from Dan Podesto, President of Morro Bay 4th, Inc. Mr. Podesto is requesting funding in the amount of \$25,000 for the July 4, 2014 event.

Prepared By: _____

Dept Review: _____

City Manager Review: _____

City Attorney Review: _____

Susan Slayton - Morro Bay Fourth of July

From: "Dan Podesto" <dan@centralcoastlending.com>
To: <jirons@morro-bay.ca.us>, "Christine Johnson" <cjohnson@morro-bay.ca.us>...
Date: 3/11/2014 3:06 PM
Subject: Morro Bay Fourth of July
CC: "Jamie Boucher" <JBOUCHER@morro-bay.ca.us>, <ekreins@morro-bay.ca.us>

Mayor and Council Members,

I am writing to inform you of the challenges facing the 2014 Fourth of July event and to request financial assistance to support the most significant tourist event of the summer season in Morro Bay.

The Central Coast continues to draw thousands of tourists to beach towns for the Fourth of July, both locally as well as from around the State. A significant challenge for Morro Bay is to hold and grow our market share of coastal-bound tourists for this long holiday weekend. Morro Bay competes with other popular coastal destinations for the Fourth, most notably Cayucos and Pismo Beach which both host fireworks displays and some daytime activities. Our grassroots organization, Morro Bay 4th, Inc., formed and took over the event in 2010 from the Chamber of Commerce (who previously took over the event from the City of Morro Bay). For the past four years, Morro Bay 4th positioned the event in Morro Bay as the FREE, FAMILY-FRIENDLY destination which distinguishes us from other Central Coast venues.

This year, Morro Bay 4th is suffering from all-time low volunteer participation and enthusiasm. Participation peaked in 2011 with over 25 volunteer members, but the year-round meetings, planning and fundraising have resulted in substantial volunteer attrition with only six members returning this year. The remaining active members of our organization are unable to carry out all of the fundraising efforts that we have historically performed while also planning and administering the Fourth of July event. We need your help!

The Fourth of July event costs approximately \$35,000 to put on each year, with fireworks accounting for over half of that cost. Morro Bay 4th is equipped to raise \$4,000 with a restaurant fundraiser. Also, with Council approval, we will be able to raise another \$6,000 through donation request forms inserted in the May and June water bills. We also request Council approval for waiver of the City Service fees. However, this still leaves us \$25,000 short of the required amount. And to make matters worse, the company that provides fireworks for this event requires a commitment and deposit by April 1st. We are desperate and coming to you for this funds request because we believe this event is vitally important to the tourism economy of Morro Bay.

Although we cannot make any direct correlations between the Fourth of July event and the increased tax revenues realized by the City of Morro Bay, we are able to draw some very strong conclusions about the fiscal impact of the event. Since Morro Bay 4th took over the holiday festivities from the Chamber of Commerce in 2010, the occupancy rate in July has increased 12% (from 68% in 2009 to 80% in 2013). During this period, the increased July occupancy rates yielded an additional \$160,000 in total Transient Occupancy Tax and an additional \$50,000 in total TBID tax (based on 3% figure).

In addition to the quantifiable benefits, the City of Morro Bay receives numerous intangible benefits from Morro Bay 4th's involvement in the event. By leveraging our organization's non-profit status, we are able to partner with several media outlets to receive free promotion each year valued at over \$60,000! Here's what we were able to secure in 2013:

- El Dorado Broadcasters, who operates four SLO County radio stations including KVEC, ran nearly 1000 radio ads for three months promoting various fundraiser events and the Fourth of July event. This advertising package was valued at \$30,000.
- Clear Channel Radio in Bakersfield ran ads for one month promoting the Fourth of July event. This advertising package was valued at \$26,200.
- KSBY ran approximately 60 television ads for one month during the evening local news and in general rotation. This advertising package was valued at \$5,000.
- Promotion was also done through the Morro Bay 4th website, Morro Bay 4th Facebook page, City of Morro Bay Facebook page (shared partnership), Twitter, Instagram, Google+, and other social media outlets.

In summary, Morro Bay 4th is requesting financial assistance from the City in the form of approval of water bill inserts in the May and June mailings, waiver of City Services fees, and monetary contribution of \$25,000. With approval of these requests, our all-volunteer organization will host a restaurant fundraiser to meet the event's financial requirements, and continue to plan and administer the Fourth of July event in Morro Bay.

I look forward to your response, and hope to work collaboratively with you to keep fireworks in Morro Bay!

Respectfully,
Dan Podesto
President, Morro Bay 4th, Inc.