



**CITY OF CHICO
BIDWELL PARK AND PLAYGROUND COMMISSION (BPPC)**

Regular Meeting Agenda
November 25, 2019, **6:00 pm**
City Council Chambers - 421 Main Street

Materials related to an item on this Agenda are available for public inspection in the Park Division Office at 965 Fir Street, Chico during normal business hours or online at <http://www.chico.ca.us>

REQUESTS TO ADDRESS THE COMMISSION

If you would like to address the Commission at this meeting, you are requested to complete a speaker card and hand it to the Commission Clerk prior to the conclusion of the staff presentation for that item. The card assists the Clerk with minute taking and assists the Commission in conducting an orderly meeting. Providing personal information on the card is optional. A time limit of three (3) minutes per speaker on all items has been established. If more than 10 speaker cards are submitted for agenda items, the time limitation may be reduced.

1. REGULAR COMMISSION MEETING

1.1. Call to Order

1.2. Roll Call

2. CONSENT AGENDA

All matters listed under the Consent Agenda are to be considered routine and enacted by one motion.

2.1. APPROVAL OF MEETING MINUTES

Action: Approve minutes of BPPC meeting held on 10/28/19.

3. ITEMS REMOVED FROM CONSENT – IF ANY

4. PUBLIC HEARINGS

4.1. CONSIDERATION OF AN APPEAL OF A DENIED TREE REMOVAL PERMIT FOR 11 BLACKSTONE COURT.

Souhel Khalil (Applicant) requested a permit to remove one Sawtooth Oak tree located at 11 Blackstone Court. The Applicant cites fallen debris on the sidewalk and his yard as the reasons for removal. Staff denied the permit as the trees are not dead, dying, or pose a dangerous or defective condition. Per the Chico Municipal Code and at the request of the Applicant, the BPPC is considering an appeal of the denied permit. **(Report – Richie Bamlet, Urban Forest Manager)**

Urban Forest Manager requests BPPC commission to consider and chose one of two presented options.

Option 1. Repeal denial of the tree removal permit. Approve removal of one Sawtooth oak at 11 Blackstone Ct

Option 2: Uphold denial of the tree removal permit.

4.2. CONSIDERATION OF AN APPEAL OF A DENIED TREE REMOVAL PERMIT FOR 2206 ROBAILEY DRIVE.

Leslie Vermillion (Applicant) requested a permit to remove two Tallow trees located at 2206 Robailey Dr. The Applicant cites water line and driveway damage as well as public safety concerns due to lifting sidewalks as the principal reasons for removal. Staff denied the permit as the trees are not dead, dying, or pose a dangerous or defective condition. Per the Chico Municipal Code and at the request of the Applicant, the BPPC is considering an appeal of the denied permit. **(Report – Richie Bamlet, Urban Forest Manager)**

Urban Forest Manager requests BPPC commission to consider and chose one of two presented options.
Option 1. Repeal in full or in part the denial of the tree removal permit. Approve removal of one or two Tallow trees at 2206 Robailey Dr.
Option 2: Uphold denial of the tree removal permit.

5. REGULAR AGENDA

5.1. CONSIDERATION OF A SPECIAL USE PERMIT TO CONDUCT BICYCLE TROLLEY TOURS IN BIDWELL PARK

Regi Huber (Applicant) requests a Special Use Permit to conduct educational and historical bicycle trolley tours in Bidwell Park. The Applicant's proposal is to provide approximately 1-hour tours using a 14-passenger pedal driven trolley Wednesdays through Sundays from 11 am to 3 or 4 p.m. The tours will be open to ages from 10 years old to adults and will be conducted from One-Mile to Five Mile Recreation Areas. **(Report – Linda Herman, Park & Natural Resources Manager)**

Recommendation: If approved by the BPPC, Staff recommends the Applicant adhere to the additional conditions listed in the Staff Report.

5.2. CONSIDERATION OF PACIFIC GAS & ELECTRIC'S (PG&E) USE OF CAMBISTAT GROWTH INHIBITOR ON CITY STREET TREES

At its 7/30/18 meeting, staff reported to BPPC on a small-scale trial of the use of Cambistat, a Plant Growth Regulator (PGR) to assist in the management of tree growth in electrical utility right-of-way easements. PG&E and Tree Division are now considering the future use of PGR's as a tool in the management of electric utility easements within the City of Chico. **(Report – Richie Bamlet, Urban Forest Manager)**

Recommendation: The Commission is requested to provide direction regarding this item.

5.3. CONSIDERATION OF PROVIDING ADDITIONAL RESTROOMS IN CITY PARKS AND GREENWAYS.

At its 10/28/19 meeting, the BPPC discussed the feasibility and costs to provide eight additional portable restrooms in City Parks and greenways. The BPPC requested that Staff recommend locations to place 4, 6, and 8 portable restrooms on Lindo Channel, Big Chico Creek, and Little Chico Creek. **(Report - Linda Herman, Park & Natural Resources Manager)**

Recommendation: The Commission is requested to provide direction regarding this item.

5.4. CONSIDERATION OF THE REPORT FROM THE 11/20/19 BPPC NATURAL RESOURCE COMMITTEE MEETING.

The Natural Resource Committee will provide a report on the following agenda items that were discussed at its 11/20/19 meeting **(Report – Scott Grist, Committee Chair):**

5.4.1 CONSIDERATION OF A DRAFT RESTORATION PLAN FOR THE NATURE CENTER AREA

The Committee reviewed a draft plan to restore the tree-clearing area near the Nature Center area in Lower Bidwell Park as a Valley Oak Woodland demonstration site.

Recommendation: The Committee directed Staff to consult with the Mechoopda Tribe regarding the plan, to begin CEQA review for the project, and report back to the Committee at the next NRC meeting

5.4.2 UPDATE ON DEVELOPMENT OF A VEGETATIVE FUELS MANAGEMENT PLAN

The Committee received an update on the status of the Vegetative Fuels Management Plan for Bidwell Park and City parks and greenways which is funded by a Cal Fire Community Wildfire Prevention grant.

Recommendation: None, this was an information item only.

5.4.3 CONSIDERATION OF CHANGES TO THE ANNIE BIDWELL TRAIL IN UPPER BIDWELL PARK.

The Committee considered Staff's proposal to make some changes to the western portion of the Annie Bidwell Trail on the south side of Upper Bidwell Park.

Recommendation: The Committee concurred with the proposal to identify this section as part of the Annie Bidwell Trail and to postpone discussion of the South Rim Trail.

5.4.4 UPDATE ON THE CALIFORNIA CONSERVATION CORPS FUEL REDUCTION GRANT

The Committee received a report regarding the Shasta Cascade California Conservation Corps (CCCs) grant to provide 8,000 hours of labor to reduce vegetation fuel loads and fire risks in Bidwell Park.

Recommendation: The Committee requested Staff provide a copy of the CEQA review for this grant project, which is included in the Committee's Report.

6 BUSINESS FROM THE FLOOR

Members from the public may address the Commission at this time on any matter not already listed on the agenda; comments are limited to three minutes. The Commission is prohibited from taking action, except for a brief response from the Commission or to staff, on any comments or requests made under this section of the agenda.

7 REPORTS AND COMMUNICATIONS

These items are provided for the Commission's information. Although the Commission may discuss the items, no action can be taken at this meeting. Should the Commission determine that action is required, the item or items may be included for action on a subsequent posted agenda.

7.1 Parks Division Report – Linda Herman, Park and Natural Resources Manager.

7.2 Street Tree Division Report – Richie Bamlet, Urban Forest Manager.

8 ADJOURNMENT

Adjourn to the next regular meeting on **12/16/19 at 6:00 p.m.** in the Council Chamber of the Chico Municipal Center building located at 421 Main Street, Chico, California. ***(Please note that this meeting is earlier in the month due to the holidays)***



Please contact the Park Division Office at (530) 896-7800 if you require an agenda in an alternative format or if you need to request a disability-related modification or accommodation. This request should be received at least 3 working days prior to the meeting.

CITY OF CHICO
BIDWELL PARK AND PLAYGROUND COMMISSION (BPPC)
Minutes of October 28, 2019 Meeting

1. REGULAR COMMISSION MEETING CALL TO ORDER

1.1 Call to Order

Called to order by Chair McReynolds at 6:00 p.m.

1.2 Roll Call

Commissioners present:

Anna Moore
Scott Grist
Jeff Glatz
Aaron Haar
Elaina McReynolds
Garrett Liles

Commissioners absent:

Lise Smith-Peters

Staff Present: Linda Herman (Park and Natural Resource Manager), Erik Gustafson (Public Works Director O&M) Richie Bamlet (Urban Forest Manager), Angie Irmer (Administrative Assistant)

2. CONSENT AGENDA

All matters listed under the Consent Agenda are to be considered routine and enacted by one motion.

2.1 APPROVAL OF MEETING MINUTES

Action: Approve minutes of BPPC meeting held on 10/28/19

2.2 SPECIAL USE PERMIT FOR SCAVENGER HUNT/HIKE ON TRAILS IN MIDDLE AND UPPER PARK ON 12/07/19.

Rex Winterbottom from Terraloco (Applicant) requested a Special Use Permit to host a scavenger hunt and map orientation event for hikers on trails in Middle and Upper Park on Saturday, December 7, 2019 between 1:00 p.m. and 5:00 p.m. This new event will start at Hooker Oak Park and extend into Middle and Upper Park.

John Merz addressed the Commission on behalf of the Friends of Bidwell Park. Richard Muenzer withdrew his request to address the Commission.

Motion was made by Commissioner Moore to approve the Consent Agenda. Seconded by Commissioner Haar.

Motion carried as follows:

AYES: Commissioner Moore, Commissioner Liles, Commissioner Grist, Commissioner Haar, Commissioner Glatz, Chair McReynolds

NOES: None

ABSENT: Commissioner Smith Peters

3. ITEMS REMOVED FROM CONSENT - None

4. NOTICED PUBLIC HEARINGS - None

5. REGULAR AGENDA

5.1 **CONSIDERATION OF PROVIDING ADDITIONAL RESTROOMS IN CITY PARKS.**

At its 9/30/19 meeting, the BPPC discussed Commissioner Grist's requested to agendize discussion regarding providing additional restrooms in City Parks and greenways. The BPPC requested that Staff provide information on the costs to place 2 to 8 portable restrooms at various locations on Lindo Channel, Big Chico Creek, and Little Chico Creek. **(Report - Linda Herman, Park & Natural Resources Manager).**

Lisa Currier, Sisarie Sherry, Nancy Wirtz, Rose Thoulin, Tami Donnelson, Charles Withuhn, George Deeds, Jessica Giannola, Bryce Goldstein, Richard Muenzer, Lauren Kohler, Steven Breedlove, Chaz Kelley addressed the Commission as a citizen of Chico and not a representative of BEC, Dee Austin, Patrick Newman, Steve Depa, Casey Doran, Rob Berry, Eric Chisler, Robin Indar, and Scott Thompson addressed the Commission.

Commissioner Moore made a motion that more information be gathered by staff for the next meeting as to the best locations in the Park and greenways for four, six, and eight additional portable restrooms. Seconded by Commissioner Haar.

Motion carried as follows:

AYES: Commissioner Moore, Commissioner Liles, Commissioner Grist, Commissioner Haar, Chair McReynolds

NOES: Commissioner Glatz

ABSENT: Commissioner Smith Peters

The Commission recessed at 7:37 p.m. for a 15-minute break. The meeting was reconvened and all members of the Commission were present.

5.2 **CONSIDERATION OF PROVIDING PRIVATE VEHICLE ACCESS BEYOND SALMON HOLE IN UPPER BIDWELL PARK**

At its 3/05/19 meeting, the City Council approved the BPPC's recommendations regarding a phased approach to redesign/repair Upper Park Road and to allow vehicle access to Salmon Hole in Upper Bidwell Park. The Council also directed Staff to continue policy discussions with the BPPC and the public regarding whether to allow private vehicle use beyond Salmon Hole once the repairs to the Upper Park Road are complete. **(Report – Linda Herman, Park & Natural Resources Manager)**

Julia Keener, John Merz on behalf of Friends of Bidwell Park, Eve Werner, and Patrick Newman addressed the Commission

Commissioner Grist made a motion to not allow private vehicles beyond Salmon Hole. Seconded by Commissioner Moore.

Motion carried as follows:

AYES: Commissioner Moore, Commissioner Liles, Commissioner Grist, Commissioner Haar, Commissioner Glatz, Chair McReynolds

NOES: None

ABSENT: Commissioner Smith Peters

5.3 CONSIDERATION OF THE REPORT FROM THE 10/09/19 BPPC POLICY ADVISORY COMMITTEE MEETING.

The Policy Advisory Committee will provide a report on the following agenda items that were discussed at its 10/09/19 meeting (**Report – Anna Moore, Committee Chair**):

5.3.1 CONSIDERATION OF REQUESTING TRANSIENT OCCUPANCY TAX FUNDS FOR BIDWELL PARK.

At its 10/09/19 meeting, the Policy Advisory Committee discussed whether a portion of the City's Transient Occupancy Tax (TOT) could be used for Bidwell Park. It was determined that TOT funds are already used for the Park.

5.3.2 CONSIDERATION OF ADDING ADDITIONAL SIGNAGE REGARDING NO SMOKING AND FIRE RISKS IN CITY PARKS AND GREENWAYS.

The Committee considered whether to install additional signage regarding no smoking and other fire risk activities in City parks and greenways.

1. Posting larger signs at main entrances into the Lower Bidwell Park and "No Smoking or Open Fires" at each of the 36 entrances in Lower Bidwell Park, and on some of the interior trails.
2. Posting a phone number to call after office hours to report fires and other major incidents.

Commissioner Moore made a motion to post large signs of the major rules plus the no smoking signs at the main entrance to of the park. Seconded by Commissioner Haar.

Commissioner Glatz requested to make a friendly amendment to post the no smoking immediately and for staff to bring back a design or two for the larger rules and hours signs for approval.

Commissioner Moore accepted the friendly amendment.

Motion carried as follows:

AYES: Commissioner Moore, Commissioner Liles, Commissioner Grist, Commissioner Glatz, Chair McReynolds

NOES: None

ABSENT: Commissioner Smith Peters

5.4 CONSIDERATION OF A DRAFT LETTER TO THE CITY COUNCIL SUPPORTING THE CITY'S CLIMATE ACTION COMMISSION.

At its 9/30/19 meeting, the BPPC discussed Commissioner Moore's request to send a letter to the City Council supporting their approval to form a Climate Action Commission. The BPPC requested Commissioner Moore to draft the letter for the Commission's review and approval at tonight's meeting. (**Verbal Report – Anna Moore, Commissioner**).

Commissioner Moore verbally read the letter to the Commission.

Commissioner Haar made a motion to approve. Seconded by Commissioner Grist.

Motion carried as follows:

AYES: Commissioner Moore, Commissioner Liles, Commissioner Grist, Commissioner Glatz,
Chair McReynolds

NOES: None

ABSENT: Commissioner Smith Peters

6 **BUSINESS FROM THE FLOOR**

Members from the public may address the Commission at this time on any matter not already listed on the agenda; comments are limited to three minutes. The Commission is prohibited from taking action, except for a brief response from the Commission or to staff, on any comments or requests made under this section of the agenda.

Marybeth Wuerthner, Tom Wuerthner, John Crane, and Patrick Newman addressed the Commission

7 **REPORTS AND COMMUNICATIONS**

These items are provided for the Commission's information. Although the Commission may discuss the items, no action can be taken at this meeting. Should the Commission determine that action is required, the item or items may be included for action on a subsequent posted agenda.

7.1 Parks Division Report – Linda Herman, Park and Natural Resources Manager.

7.2 Street Tree Division Report – Richie Bamlet, Urban Forest Manager.

8. **ADJOURNMENT**

Adjourn at 9:01 p.m. to the next regular meeting on 11/25/19 at 6:00 p.m. in the Council Chamber of the Chico Municipal Center building located at 421 main street, Chico, California.

Date Approved: / / .

Prepared By:

Angie Irmer, Administrative Assistant

Date

Distribution: BPPC
11/22/2019



DATE: 11/25/19
TO: Bidwell Park and Playground Commission
FROM: Richie Bamlet, Urban Forest Manager
SUBJECT: CONSIDERATION OF AN APPEAL OF A DENIED TREE REMOVAL PERMIT FOR 11 BLACKSTONE DR

REPORT IN BRIEF:

Applicant Mr. Khalil is requesting to the remove shade tree in front of his residence at 11 Blackstone Dr. Mr. Khalil cites fallen tree debris on the sidewalk and lawn as justification for removal.

Recommendation: *Urban Forest Manager requests that BPPC uphold the denial of the tree removal permit.*

Background:

Pursuant to CMC 14.40.120 of Chapter 14.40 Street Trees, no tree located in the City right-of-way or public planting area shall be removed without a permit or permission of the City and only in those cases whereby the tree is dead, dying, diseased or hazardous.

A neighbor does not have the right to insist that an adjoining tree owner take responsibility for the natural growth and resulting debris of a tree so long as the tree is reasonably maintained.

On 10/22/19 Mr. and Mrs. Khalil contacted the UFM to discuss removal of the Sawtooth oak *Quercus acutissima* located at 11 Blackstone Dr. Mr. Khalil.

Discussion:

Husa Ranch Estates is a subdivision built around 2002. Trees in the subdivision are generally the same age as the subdivision, approximately seventeen years old. The neighborhood has ROW trees planted in the park strip. There is good tree canopy diversity in the public right-of-way and in private yards. Species typically found in the vicinity of 11 Blackstone Drive include Pin oak, Shingle oak, Sawtooth oak, Willow oak, Maple, Honeylocust, Pear and Dogwood. 11 Blackstone Dr is the only location containing Sawtooth oak on Blackstone Dr, but there are many sawtooth oaks to the south on Copperfield and Stirling Dr. See neighborhood tree canopy in Figure 1.

Sawtooth oak is native to Himalaya, China, Korea and Japan. The oak tree at 11 Blackstone Dr is 44' height, 14" DBH. See Figures 2 and 3. Sawtooth oak trees typically reach a mature height of 30-60' in the urban landscape. Longevity is typically greater than 150 years. Vigor of the oak tree is classified as "good". This is a typical classification healthy oak street trees in Chico. The tree shows no indication of decline. It is anticipated that the useful life, providing shade and aesthetic benefits to the community will be ongoing for many more years. To accept living in Chico is to accept natural debris from City owned and private trees.



Figure 1. Distribution of Sawtooth oak Trees in Husa Ranch. Trees in blue are Sawtooth oaks. 11 Blackstone Dr is circled in red.

ID	36763
Site ID	50494.00
Common Name	Oak, Sawtooth
Position	F:1
Address	11 Blackstone Ct
Work Zone	2.00
Theme Description	Street
Maintenance Type	Formative
Maintenance Year	2
Other	
Active	Yes
Observation Date	10/29/2008
Vigor	Good
Structure	Minor defects
Diameter	14.00
Height	44.00
Notes	

Table 1 above shows data held in the City database for the tree and its condition.



*Figure 2. Sawtooth oak tree at 11 Blackstone Dr. View from sidewalk looking west on Blackstone.
Figure 3. Photo taken 10/16 before leaf drop. Tree is in good condition.*

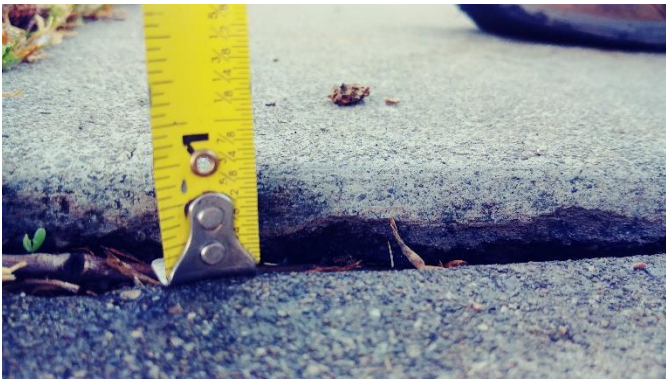


Figure 4. The tree is 12" away from adjacent mailbox. The slab is currently lifted 1/2".



Figure 5. Acorns and leaves fallen into the park strip.



*Figure 6. A shallow tree roots in the park strip showing recent mower damage.
Figure 7. Driveway and sidewalk. No significant lift. Driveway is cracked but is unlikely to be caused from this tree*



Figure 8 Tree and vicinity to mailbox. Tree is 12' away. Minor slab lift is noted on the adjacent mailbox located in the park strip



Figure 9 front lawn of 11 Blackstone.

Timeline:

9/14/16 and 9/26/16 Mr. Khalil called Public Works to complain about the messy tree in front of his residence. Spring 2019 Mr. and Mrs. Khalil came into Public Works O&M to request removal of the tree due to the mess it makes. UFM explained that the City does not remove healthy trees as well as the permit and appeal process.

10/16/19. A local tree company contacts Public Works to check if there is a tree removal permit on file. They had been asked to quote for tree removal and stump grinding by the resident. Tree company was advised that there was no permit on file. Tree company refused the work and referred resident to contact Public Works.

10/16/19 UFM assesses tree and determines to be in good health and not a hazard.

10/22/19 Mr. and Mrs. Khalil visit Public Works to complain about the mess and to inquire about the parkway conversion program. UFM provides information.

10/24/19 UFM creates a denied permit and emails it to Mr. Khalil.

10/27/19 Mr. Khalil replies by email to appeal the decision.

Attachments:

Attachment A Permit application and denial. Email response from Mr. Khalil.



PUBLIC WORKS DEPARTMENT
Parks Division

965 Fir Street
P.O. Box 3420
Chico, CA 95927-3420

(530) 896-7800
parkinfo@chico.ca.gov
<http://www.chico.ca.us>

**PERMIT
TO
PLANT, REMOVE, ALTER OR DISTURB PUBLIC TREES**

TO: Mr Souhel Khalil
11 Blackstone Ct
Chico

DATE: 10-24-2019

Your application requesting permission to plant, remove, alter or disturb public trees has been:

- Approved subject to the condition(s) listed below.
- Denied for reason(s) listed below
- Permit Not Required

Appeal Procedure: Should you disagree with this and wish to appeal this decision, you must submit a written letter addressed to the Bidwell Park and Playground Commission within 15 days of the receipt of this notice of denial. Any appeal submitted will be placed on the next regular meeting of the Bidwell Park and Playground Commission (last Monday of each month).

Condition(s) of approval/reason(s) for denial:

Location: 11 Blackstone Ct Shingle oak Tree is not dead, dying or diseased

10-24-2019

UFM Richie Bamlet

(Date)

Park Director or authorized City representative

Distribution: (When fully executed)

___ PkD ___ CDD ___ ADPW-ENGR ___ x PL DIR ___ x UF

Richard Bamlet

From: Richard Bamlet
Sent: Thursday, October 31, 2019 1:14 PM
To: Khalil Souhel
Cc: Angela Irmer
Subject: RE: 11 Blackstone Ct tree permit denied.pdf

Hello Mr. Souhel,

Thank you for your email.

Your appeal will be placed on the agenda of the next available BPPC meeting . The next meeting is tentatively scheduled for November 25.

The meeting starts at 6pm and is at the City Council chambers, 411 Main St.

Please let me know if you have any questions

Thank you



Richie Bamlet
City of Chico | Urban Forest Manager
(530) 896 – 7801 Office - (530) 895-2634 Fax
[Website](#) | [Contact Us](#)



From: Khalil Souhel <souhelkhalil@msn.com>
Sent: Sunday, October 27, 2019 2:01 PM
To: Richard Bamlet <richard.bamlet@Chicoca.gov>
Subject: RE: 11 Blackstone Ct tree permit denied.pdf

ATTENTION: This message originated from outside **City of Chico**. Please exercise judgment before opening attachments, clicking on links, or replying.

I would like to appeal this decision to the BPPC.

Souhel Khalil

Sent from [Mail](#) for Windows 10

From: Richard Bamlet <richard.bamlet@Chicoca.gov>
Sent: Thursday, October 24, 2019 12:25:25 PM
To: souhelkhalil@msn.com <souhelkhalil@msn.com>
Subject: 11 Blackstone Ct tree permit denied.pdf

Hello Mr. Khalil,

Thank you for your permit application to remove the City Street tree at 11 Blackstone.

The tree is not dead, dying or diseased. I therefore cannot authorize this removal request.

You can appeal this decision by email within 15 days of receipt of this permit.

Appeals are held at the City Council chambers at the monthly BPPC meeting. Meetings start at 6pm. The next available meeting is tentatively scheduled for November 25, subject to the Holiday Thanksgiving schedule.

Please let me know if you have any questions.

Thank you,



Richie Bamlet

City of Chico | Urban Forest Manager

(530) 896 – 7801 Office - (530) 895-2634 Fax

[Website](#) | [Contact Us](#)





DATE: 11/25/19
TO: Bidwell Park and Playground Commission
FROM: Richie Bamlet, Urban Forest Manager
SUBJECT: CONSIDERATION OF AN APPEAL OF A DENIED TREE REMOVAL PERMIT FOR 2206 ROBAILEY DR

REPORT IN BRIEF:

Applicant Mr. Vermillion is requesting that Public Works O&M remove two shade trees in front of his residence at 2206 Robailey Dr. Mr. Vermillion cites the sidewalk, driveway and water-line damage as justification for removal.

Recommendation: *Urban Forest Manager requests that BPPC uphold denial of the tree removal permit.*

Background:

Pursuant to CMC 14.40.120 of Chapter 14.40 Street Trees, no tree located in the City right-of-way or public planting area shall be removed without a permit or permission of the City and only in those cases whereby the tree is dead, dying, diseased or hazardous.

A neighbor does not have the right to insist that an adjoining tree owner take responsibility for the natural growth and resulting debris of a tree so long as the tree is reasonably maintained.

On 8/16/2018 Mr. Vermillion contacted the UFM to discuss removal of the two City-owned Tallow trees *Triadica sebifera* located at 2206 Robailey Dr. Mr. Vermillion does not wish to arrange and fund tree removal but petitions the BPPC to direct Public Works to remove the two trees at public expense.

Discussion:

Notre Dame neighborhood (Meadow Glen Village) is a subdivision built between 1991 and 1996. #2206 was built in 1994. Trees in the subdivision are generally the same age as the subdivision, approximately twenty-five years old. The neighborhood has contiguous sidewalk with Right-of-way extending 5.5' from back of sidewalk. There is good tree canopy diversity in the public right-of-way and in private yards. Species typically found in the vicinity of Robailey Drive include Pin oak, Cork oak, Honeylocust, Hackberry, Zelkova, Birch, Elms, Maples, Ash, Ginkgo, Pear, Plum, Palms and Grape myrtle. 2206 Robailey Dr is the only location containing Tallow trees in this subdivision.

Tallow is native to eastern Asia. It was introduced to the US in the 1700s and has been planted for the past 50 years in northern California as an ornamental landscaping and street tree. It has historically been used as a honey plant for beekeeping. The two trees on Robailey Dr are 36' height, 17" DBH and 33' height, 14" DBH. See Figures 2 and 6. Tallow trees typically reach a mature height of 30-40ft in the urban landscape. Longevity is typically 40 to 60 years. Cal-IPC (California Invasive Plant Council) classifies the invasiveness of this plant as moderate. Its potential for long-distance dispersal is classified as "occasional." The current tree inventory shows that there are twenty-six Tallow trees planted as street trees throughout the City. Figure 1 shows the distribution of Tallow trees located in the City right-of-way. The tree is no longer on the approved Chico street tree list. Alternatives include Tupelo and Red maple. An analysis Tallow tree location in proximity to riparian areas (Bidwell park, Comanche creek, Teichert ponds, Lindo Channel) show that the two trees on Robailey Dr are unlikely to be posing an invasive threat or source of seed. See Figure 1.

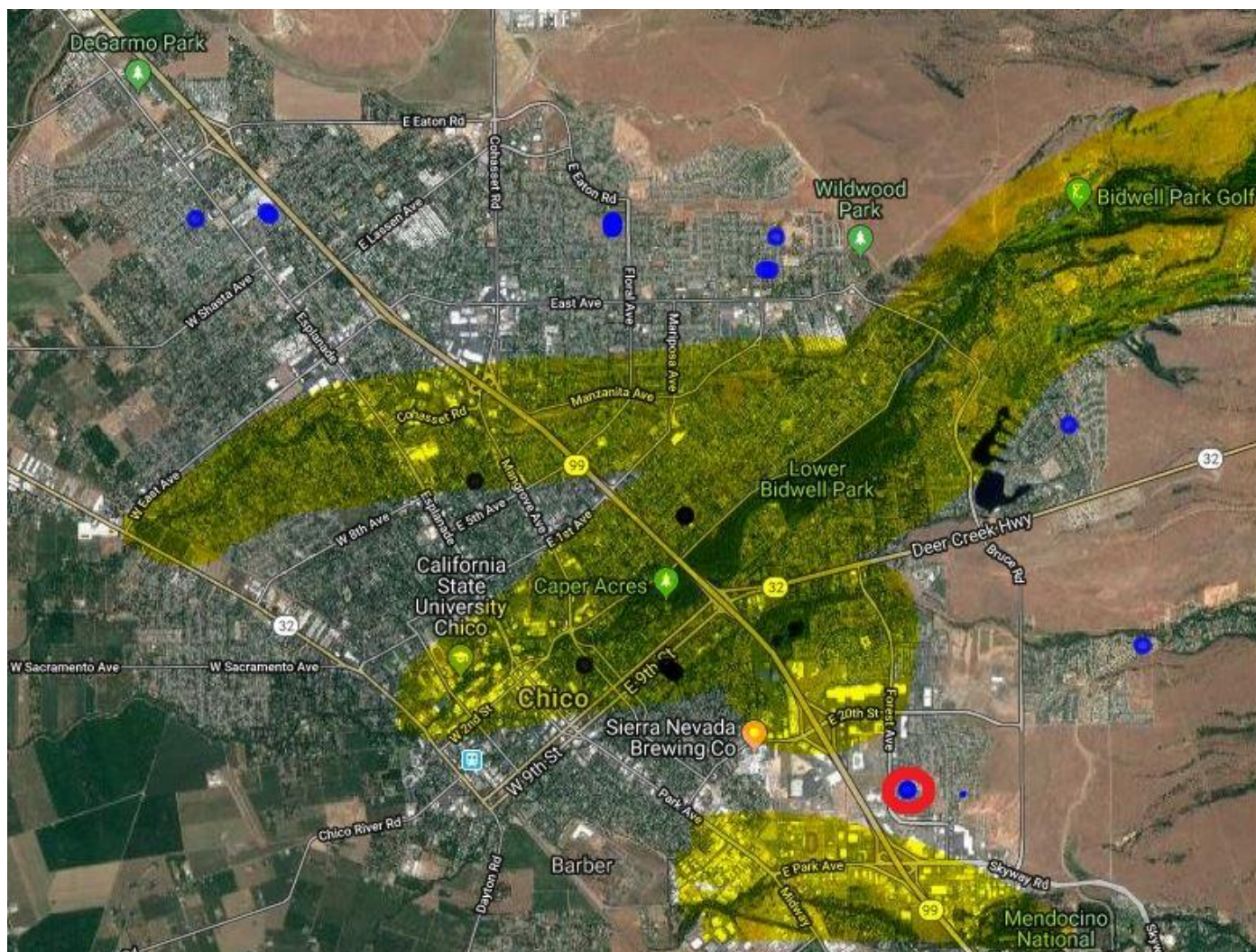


Figure 1. Distribution of Tallow trees in Chico. Yellow shaded area represents 1km buffer around Bidwell park, Teichert ponds, Comanche creek and Lindo Channel. Trees on Robailey Dr are circled in red.

Observations and suggested remedies:

Vigor of both trees is classified as “fair”. This is typical of street trees in Chico. These trees show no indication of significant decline. It is anticipated that the useful life, providing shade and aesthetic benefits to the community will be ongoing for many more years.

Slab lift is noted on the driveway. See figures 5 & 8. Removal of the trees will not fix the lift in the driveway. Repair of the raised slab will require root removal or shaving. No tort claim has been submitted for driveway repair costs. The City of Chico Risk Manager can be contacted to assist with a tort claim for driveway repairs

The southerly tree is planted close to the street light and a Cal-Water box. Mr. Vermillion has produced an invoice for \$300 for repair of water line. It is not known exactly where the repair was made in proximity to the tree or if tree roots were cut to rectify future tree root issues. The City of Chico Risk Manager can be contacted to assist with a tort claim.

The lawn appears to be well irrigated. City can provide a courtesy PCA recommendation for any seedling issues.

Minor lift of pedestrian walkway on the property was also noted but is not significant. See Figure 3. This is most likely caused by the resident’s own ash tree.

ROW sidewalk has lifted ¼” and was determined to not trigger sidewalk repair protocol. Future increase of slab lift in excess of 1” would trigger sidewalk grinding or replacement at City expense. See Figure 9.



Figure 2. Tallow trees at 2206 Robailey Dr.



Figure 3. Minor slab lift observed near ash tree located on property.



Figure 4. View from along the sidewalk. Street lamp is partially obscured



Figure 5. Driveway is partially lifted



Figure 6. Trees as depicted 7/31/19. Fair condition with minor dead limbs



Figure 7. F:1 southerly tree planted close to street light and Cal water box, <4'



Figure 8. 2 ¼" driveway slab lift



Figure 9. Sidewalk lift is ¼".

Timeline:

8/16/2018 Mr. Vermillion called Public Works and stated the 2 city trees in front of his residence need to be removed. Mr. Vermillion indicated that the trees have damaged his water systems and done other damage such as driveway and sidewalk damage. Mr. Vermillion was advised of 6 to 12 months process. The permit process was explained.
4/22/19 Mr. Vermillion called back to find out what will be done.
7/25/19 Mr. Vermillion called again as to status of tree assessment.
7/31/19 UFM assessed trees and determined trees to be healthy. Sidewalk was determined to not trigger sidewalk repair protocol. Raise of driveway slab was noted.
9/13/19 RP came in and spoke to UFM about removal of the trees. UFM indicated the City does not remove healthy trees. UFM explained the permitting and appeal process.
9/13/19 Mr. Vermillion submits a tree removal permit application.
9/20/19 Permit is denied and emailed to Mr. Vermillion.
9/23/19 UFM left Mr. Vermillion a voice message to check that he received the email and to discuss appeal process.
10/1/19 Mr. Vermillion calls UFM to state he never received the email and permit.
10/1/19 UFM resends the permit via email. A copy was also sent via USPS.

Attachments:

Attachment A Permit application and denial.
Attachment B Letter received from Mr. Vermillion. 10/29/19



PUBLIC WORKS DEPARTMENT
Parks Division

965 Fir Street
P.O. Box 3420
Chico, CA 95927-3420

(530) 896-7800
parkinfo@chico.ca.gov
<http://www.chico.ca.us>

**PERMIT
TO
PLANT, REMOVE, ALTER OR DISTURB PUBLIC TREES**

TO: Richard Vermillion
2206 Robailey
Chico, CA 95928

DATE: 9/20/19

Your application requesting permission to plant, remove, alter or disturb public trees has been:

- Approved subject to the condition(s) listed below.
- Denied for reason(s) listed below
- Permit Not Required

Appeal Procedure: Should you disagree with this and wish to appeal this decision, you must submit a written letter addressed to the Bidwell Park and Playground Commission within 15 days of the receipt of this notice of denial. Any appeal submitted will be placed on the next regular meeting of the Bidwell Park and Playground Commission (last Monday of each month).

Condition(s) of approval/reason(s) for denial:

<p>Location: 2206 Robailey</p> <p>Trees are not dead, dying, diseased.</p>
--

9/20/19

UFM Richie Bamlet

(Date)

Park Director or authorized City representative

Distribution: (When fully executed)

___ PkD ___ CDD ___ ADPW-ENGR ___ PL DIR ___ UF

Oct. 29, 2019

RECEIVED

NOV 04 2019

RE: Tree Removal (2) in City Right-of-Way

CITY OF CHICO
DEPT. OF PUBLIC WORKS

Dear Bidwell Park and Playground Commission;

I, Leslie Vermillion, owner of the residential property located at 2206 Robailey Drive, Chico, CA submitted a request to the City Urban Forester, Mr. Richie Bamlet. Mr. Bamlet has denied my request for reasons that don't recognize the damage these two trees are doing to my property. The southerly tree has broken my neighbor's and my water lines from the street to our homes at a cost of \$300.00 per line. The northerly tree's root system is raising my concrete driveway several inches next to the sidewalk that is now a public hazard to people walking along the sidewalk and anyone entering my property.

Your forester suggested that we lift the slab and shave the roots from under the driveway to help lower the slab back to normal levels. This is not possible or practical without employing super heavy equipment and still taking the chance of breaking the large concrete slab. Mr. Bamlet made his entire decision via a satellite view on his computer of my property but never made an on-site physical inspection. There are two major issues with your trees: 1) I am experiencing property damage and 2) there is a liability problem for the City and myself. I'm attempting to correct these problems with the City by having the City remove the two trees before addition damage is made to my property and possible legal issues in the future. This letter will remain in my files in the event someone is hurt because of problems noted in this letter and a law suit is filed. Let's correct the problem now!

Respectfully Submitted;



Leslie Vermillion
Property Owner



PUBLIC WORKS DEPARTMENT

Parks Division

965 Fir Street
P.O. Box 3420
Chico, CA 95927-3420

(530) 896-7800
parkinfo@chico.ca.gov
<http://www.chico.ca.us>

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<p>Location: 2206 Robailey</p> <p>Trees are not dead, dying, diseased.</p>
--

9/20/19

UFM Richie Bamlet

(Date)

Park Director or authorized City representative

Distribution: (When fully executed)

___ PkD ___ CDD ___ ADPW-ENGR ___ PL DIR ___ UF

Eric Olson Handyman

921678

Copy
my
bill

Statement		DATE	8/8/18	TERMS
TO				
Lester & Dick Vermillion 864-6115				
2206 Robarley Chico				
IN ACCOUNT WITH				
(pt F20)				
Repair				
Leak at water				
Supply from				
meter to house				
LABOR & MATERIAL				300.00
Thank You!				
Eric Olson				
410-9664				
CALIST 931577				
CURRENT	OVER 30 DAYS	OVER 60 DAYS	TOTAL AMOUNT	300.00



BPPC Staff Report

Meeting Date: 11/20/2019

DATE: 11/20/19
 TO: Bidwell Park and Playground Commission
 FROM: Linda Herman, Park & Natural Resources Manager
 SUBJECT: Consideration of a Special Use Permit to Conduct Bicycle Trolley Tours in Bidwell Park

REPORT IN BRIEF:

Regi Huber (Applicant) requests a Special Use Permit to conduct educational and historical bicycle trolley tours in Bidwell Park. The Applicant's proposal (Attached as Attachment B) is to provide approximately 1-hour tours using a 14-passenger pedal driven trolley Wednesdays through Sundays from 11 am to 3 or 4 p.m. The tours will be open to ages from 10 years old to adults and will be conducted from the One-Mile to Five Mile Recreation Areas. The Applicant has also requested to be able to conduct Pub Tours downtown but has not yet received approval. The park tours, if approved, will be booked as a separate "dry" and no smoking tours.

Recommendation: If approved by the BPPC, Staff recommends the Applicant adhere to the conditions listed below.

Event Details

Date of Application	10/23/2019
Date of Event	Wednesday through Sundays
Time of Event	11:00 AM to 3 or 4:00 PM
Event Name	Bicycle Trolley Tour
Applicant Name	Regi Huber
Location	Lower Bidwell Park to Five Mile
Description	14-passenger Bicycle Trolley Tour
New Event?	<input type="checkbox"/> Yes <input type="checkbox"/> No. Years? Click here to enter text.
# Participants	14 people per tour
Participant Fee	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No. Amount? Estimate \$15 -\$25/tour
Reason for BPPC Consideration?	Exceeds 10 hours in length or is for multiple days, use of non-reservable area
BPMMP Consideration	Bicycle and vehicle use are allowed on South Park and Petersen Drive under the Bidwell Park Master Management Plan (BPMMP).

Conditions

If approved by the BPPC, Staff recommends the following additional conditions:

1. Due to its size, that the trolley be allowed only on the portions of South Park and Peterson Drive that are open to vehicles.
2. Insurance listing the City as additional insured be obtained to operate the tours
3. Adherence to all park and vehicular rules.
4. Yield to pedestrians and other park users
5. That the tour guide microphone volume be at a reasonable level to not disturb other park users.

Distribution: Regi Huber



City of Chico

SPECIAL USE APPLICATION & PERMIT

Public Work Department - Park Division
411 Main Street, 3rd Floor/ P.O. Box 3420
Chico, CA 95927-3420
(530) 896-7800 Fax: (530) 895-4825

TYPE OF USE: (Please check applicable)			
<input type="checkbox"/>	Educational Workshop	<input type="checkbox"/>	Temporary Access
<input type="checkbox"/>	Research Project	<input checked="" type="checkbox"/>	Other:

SECTION 1 - APPLICANT INFORMATION

Must be 18 or older • Application fee due upon submittal •

THIS PERMIT IS NOT VALID UNTIL APPROVED BY THE PARK DIVISION.

PLEASE PRINT:

Regi Huber
Name of Applicant/Contact Person

Bicycle Pub 3 Tour
Employment/Organization Named on Certificate of Insurance

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]
Work Phone Cell Phone

Daily
Date(s) of Use

From: 11am To: 6pm Time: _____

Number of People: 16

AREA REQUESTED (attach diagram and additional pages if necessary) Include: Units, roads, trails, etc.

All vehicle permitted paths, trails, and roads

EDUCATIONAL FIELD TRIP INFORMATION (Skip this portion if this does not apply)

Teacher/Leader _____ Co-Teacher/Leader (Required for two or more classes): _____

School/Organization: _____

Please check the best way(s) to contact you. (Contact Person must be same listed above)

Work Phone (____) _____ Cell Phone (____) _____ Other _____
 Email _____

Grade Level: _____ Number of classes: _____

No. of Students _____ No. of Adults: _____

Related Studies/Currently Studying: _____

SECTION 2 - PERMIT FEES

For Official Use Only

Application Fee \$ 19.00 (Non-Refundable)

Reservation Fee \$ _____ (for request that charge the participants) Credit Card Convenience Fee \$ _____

Total Fee Required: \$ _____ Fee due upon submittal of application. * *Make Checks Payable to: City of Chico*

City of Chico Cash Receipt No. _____ Paid: _____ Date: _____ Received By: _____

Office	Permit File (original)	Park Ranger 1	Senior Park Ranger	Applicant	Fax (various)
Distribution:	Park Field Supervisor	Park Ranger 2	Landscape Inspector.	Risk Management (e-mail)	

SECTION 3 – Description of Activity

DESCRIPTION OF PROPOSED ACTIVITY (attach diagram and additional pages if necessary)

Include: When (seasons, days, hours); How (methods, techniques, transportation); Frequency (one time only, daily, occasionally); Types of Specimens collected (Species, quantity, size, condition); Special Needs/Access.

14 passenger bicycle trolley guiding tours for fun and educational on vehicle permitted trails

GENERAL SCOPE AND NATURE OF APPLICANT ORGANIZATION’S GOALS

Bringing more activities to the park, bringing more people into the park, Education

SECTION 4 - INSURANCE

[] Required, **Certificate of Insurance**, meeting City standards must be received by: _____

Permittee shall supply, at least two (2) weeks in advance of the scheduled event, a Certificate of Insurance issued by a company licensed to do business in California with a Best's Insurance Guide rating of "B" or better ("A" rated if Company is unlicensed) which provides evidence of comprehensive and general liability coverage in the amount of \$1,000,000 combined single limit, with policy endorsements as follows:

- (1) Identification of permit applicant, identification of activity, date(s) of activity.

NOTE: NUMBERS 2 AND 3 MUST BE SEPARATE ENDORSEMENTS:

- (2) The City of Chico, its officers, boards and commissions, and members thereof, its employees and agents are covered as additional insured as respects to any liability arising out of the activities of the named insured.
- (3) The insurance coverages afforded by this policy shall be primary insurance as respects to the City of Chico, its officers, employees, or agents. Any insurance or self-insurance maintained by the City of Chico, its officers, employees, or agents shall be in excess of the insurance afforded to the named insured by this policy and shall not contribute to it.
- (4) An unqualified statement that "The insurer will provide the City at least ten (10) days prior notice of cancellation or material change in coverage", standard Certificate of Insurance cancellation language is not acceptable.

Please Note: Your permit may be cancelled if the insurance is not approved at least two weeks prior to the scheduled dates of use.

SECTION 5 - ACCEPTANCE OF CONDITIONS

INDEMNIFICATION: Except for any act or omission to act which constitutes active negligence on the part of the City of Chico (for which City shall hold Permittee harmless as if this were a reciprocal indemnity), Permittee shall hold City, its boards and commissions and members thereof, its officers, employees, and agents harmless and free from any and all liability arising out of or relating to this Letter Agreement and/or Permittee's access to and use of the Premises by Permittee, any of its members, or any of its guests or invitees. Should City or any of its boards, commissions or members thereof, its officers, employees, or agents be named in any suit, or should any claim be made against it or any of them by suit or otherwise, whether the same be groundless or not, arising out of or relating to this Letter Agreement and/or Permittee's access to and use of the Premises, Permittee shall defend City, its boards, commissions and members thereof, its officers, employees, and agents, and shall indemnify them for any judgment rendered against them or any sums paid out in settlement or otherwise.

Read each of the statements below. After you have read the statements and understand them, please sign and date in the space provided in this section.

- a. I certify that I have read this application thoroughly, followed any and all instructions, understand its contents and supplied true and correct information herein to the best of my knowledge and belief.
- b. I understand I must comply with the attached "General Conditions for Special Use," any additional conditions set forth by this permit and all pertinent provisions of the Chico Municipal code and all other applicable laws, rules and regulations.
- c. Additionally, I will secure the necessary insurance and provide the City with the acceptable insurance certificate, without which this permit is invalid.

X 
Signature of Applicant

X 11/22/19
Date

SECTION 6 – PARKS DIVISION AUTHORIZATION

For Official Use Only

I certify that I have carefully reviewed this application and hereby recommend that this permit be:

- Approved.
- Approved subject to listed additional condition(s): Attached
- Denied. Reason:

-
-
- Application approved by the Bidwell Park & Playground Commission.
 - Application denied by the Bidwell Park & Playground Commission. Reason:
-

ADDITIONAL CONDITIONS FOR SPECIAL PARK USE

The permittee shall comply with the additional conditions set forth below:

- a. _____
- b. _____
- c. _____
- d. _____

Signature of Parks and Natural Resource Manager

Date:

RETURN ENTIRE FORM TO:

City of Chico - Park Division
411 Main Street
P.O. Box 3420
Chico, CA 95927-3420
(530) 896-7800
FAX: (530) 895-4825
parkinfo@chicoca.gov

THIS PERMIT IS NOT VALID UNTIL APPROVED BY THE PARK DIVISION.
A copy of the approved application will be returned to you.

SECTION 7 GENERAL CONDITIONS FOR SPECIAL PARK USE

City agrees to permit Permittee to access and use City property, subject to the following terms and conditions:

- Alcohol** Alcohol is not permitted in any City Park or Playground.
- BBQ's** Portable BBQ's may only be used next to existing BBQ's in Lower Bidwell Park and Five Mile Recreation Areas.
- Bicycles** Must observe all California vehicular codes including one-way streets. Riders are expected to be courteous and yield to equestrian and pedestrian traffic. Helmets must be worn at all times in Upper Park, except when on pavement. Riders must stay on designated trails. Bicycle riding is not allowed in Caper Acres or on the pool deck.
- Campfires** No campfires allowed.
- Camping** No overnight camping allowed unless otherwise approved. Bidwell Park is a "day use park" only.
- Clean up** Permittee is required to completely clean up area at the conclusion of the use.
- Damages** Permittee acknowledges the ecological sensitivity of the area and agrees not to take, cut, injure or destroy any of the flora, fauna, geological and archaeological resources or other artifacts of any kind on the property unless otherwise approved. Any damage to City property as a result of this permit will be repaired at permittee's expense.
- Dogs** Dogs may be off leash from 5:30 AM until 8:30 AM in Lower Park -- All other times **dogs must be on a leash**. Along the north side of Upper Park Road, dogs may be "off leash" anytime. While "off leash," dogs must remain under control via master's voice. Dogs are not allowed in One-Mile or Five-Mile swimming areas, or designated swimming holes in Upper Park.
- Electrical** All power extension cords, sound amplification equipment, and staging to be supplied by permittee. Permittee shall provide "tripping" prevention devices over power cords crossing any pathway.
- Fishing** Check California Fish and Game Regulations, <http://www.dfg.ca.gov/regulations/>, Freshwater Sport Fishing, page33, for fishing in Big Chico Creek. Horseshoe Lake: age 14 and over, catch and release; under 14: catch and keep.
- Gate Closures** Upper Park gate at parking area E is closed on Sundays and Mondays and during seasonal wet periods. Upon approval gates can be closed beyond normal opening times and vehicle access to closed areas may be permitted.
- Glass** No glass beverage containers allowed in any City Park or Playground.
- Horses** Horses must stay on designated trails. Horses are not allowed in One-Mile or Five-Mile Recreation Areas. Horses must cross the creek at approved crossings. Safe and courteous riding is the Park standard.
- Noise** No loud or unusual noises are allowed, including: radios and headsets that can be heard over 50' away.
- Park Closures** Lower Park is closed from 12:00 am (midnight) until 5:00 am every day, unless directly and actively proceeding to a destination outside of the park. Upper Park is closed between the hours of 11:00 pm and 60 minutes before sunrise every day, unless posted otherwise.
- Signs/Defacing** Defacing of trees, benches, tables, any park fixtures, open ground, or paved roads/paths with markings, staples, tacks, or signs is prohibited. Only barricades, cones, or self standing devices may be used for these purposes.
- Smoking** No smoking is allowed in any portion of Bidwell Park.
- Vehicle Traffic**
- While gates are closed, limited use of vehicles to set up for special use is permitted. Vehicles must be in compliance with the one-way designation of the roadway, must yield to all other activities (walking, jogging, bicycling, and horseback riding), must travel with flashers on and may not exceed ten (10) miles per hour.
 - Permittee shall provide adequate signs and supervision to avoid conflicts between vehicles, bicycles, equestrians, and general public.
 - Only approved vehicles will be allowed access through areas which have been closed to motor vehicles.
 - No vehicles are permitted to travel or park on grass areas.
- Amendment** This permit may be modified or amended only by a writing duly authorized and executed by both City and Permittee.

***I have read and agree to conform to the above rules and conditions:**



Signature of applicant

SECTION 8 SPECIAL USE INFORMATION

Please answer the following questions by checking "Yes" or "No"

Is this an annual permit? If yes, how many years have you been issued a permit? _____	Yes <input checked="" type="checkbox"/>	No
Is there a patron admission, entry or participant fee(s) required or solicitation of donations? If yes, please provide amounts: <u>\$10 a seat</u>	Yes <input checked="" type="checkbox"/>	No
Will the activity take, cut, injure or destroy any of the flora, fauna, geological or archaeological resources or other artifacts of any kind? (Subject to approval by the Director) . Please describe:	Yes	No <input checked="" type="checkbox"/>
Will the activity require that any part of the Park remain closed beyond the normal time of opening? (Subject to approval by the Department Director) If "yes" please state which gate(s): _____ Time of closure from: _____ until: _____	Yes	No <input checked="" type="checkbox"/>
Will there be early entrance into the Park or vehicle access into closed areas? (Subject to approval by the Department Director) If "yes" please state which gate(s): _____	Yes	No <input checked="" type="checkbox"/>
Will the activity involve the use of equipment? Please describe: <u>14 passenger bicycle trolley</u>	Yes <input checked="" type="checkbox"/>	No
Will your activity include the use of any signs, banners or decorations? (Please see 'General Conditions For Park Use') If yes, please describe type and location: <u>on the Trolley</u>	Yes <input checked="" type="checkbox"/>	No
Will there be amplified sound or any other loud or unusual noises? (Please see 'General Conditions For Park Use') Specify type (microphone, equipment, etc.) <u>microphone & music</u>	Yes <input checked="" type="checkbox"/>	No
Will event require overnight camping for security purposes? Please describe:	Yes	No <input checked="" type="checkbox"/>



Bicycle Trolley Tour



Bicycle Pub & Tour is a 14 passenger bicycle trolley that will be touring from the beverage district (Meyers) through downtown giving a fun, educational tour of Chico. We would also like to do "dry" all-age tours through Bidwell park. We'd like these tours to be educational, as well as giving children a new fun way to exercise socially. During the tour, we would like to talk about the history of the park, horticulture as well as the historical events that have taken place there. These tours would be able to be booked by schools, as well as individuals.

There are bicycle trolleys in over two dozen cities in the US, including Sacramento, Tahoe, San Diego, Portland OR., Nashville TN., and Flagstaff AZ. These bikes work very closely with their city and local law enforcement and so will I. I want to be sure all my passengers are safe. I want to enlighten people about Chico with these tours, giving them great history lessons while telling them what's to come for this town. We want to do Chico trivia and give prizes that come from local establishments, encouraging them to venture out after the ride. I want to partner up with the owners of our local businesses to help them be more well known to newcomers and long time citizens rediscovering their city.

I love my city and it means a lot to me to have a chance to help our economy grow, especially now when we're helping our neighbor city to feel welcome here while they have nowhere to go. Having such a fun, close counter activity really brings people together even in the toughest of times and I would like to be apart of that.

About The Bike and Safety Procedures

- The bike is made from a manufacturer that has years of experience building these bicycle trolleys. They back up their bikes with a one year warranty. I also have a contact locally that can work on the bike when it needs a tune-up.
- The microphone for the tour guide will be a wireless, hands-free headset
- Each passenger will have a seatbelt.
- Passengers will have free access to drinking water on every ride.
- There will be two security cameras on the bike, one facing the front and one facing the back. These cameras will see all customers and any traffic around us.
- We will carry collapsible cones encase of an emergency.
- We will have extensive training on traffic safety for all employees.
- There will be a 90 day probationary period for all new employees where myself or another manager will personally escort them on all their tours.
- There will be employee background checks for DUIs and other offences that might put our passengers at risk.
- We will clearly post signs indicating the right to refuse service and no smoking or vaping.
- If necessary, we will have all drivers CPR certified.

My Background

I moved to Chico in 2003. My outside view of Chico was that it was a party college town. When I discovered the art, music, and the close community here I fell in love and never wanted to leave. I joined the art and music scene but always wanted to be a bigger part of the community. In 2016 I learned that Chico Heat Baseball was coming back and I knew that would be a great way to help our community. I started as the front desk receptionist and worked my way to operating manager and accounting. Within the first six months I created an innerworks committee that consisted of one head person from all of our departments, a couple of sponsors, and a couple of consistent customers to brainstorm about how we need to improve our events in the upcoming seasons.

Working in the entertainment business helped me get very close with my community. It led me to find a greater purpose in this city. Growing relationships with so many local business owners that also have such a great love for this town and are so friendly and willing to partner up on local projects drove my entrepreneurial spirit.

I started putting pen to paper on the Bicycle Pub & Tour last year after Chico Heat decided to close. I've been wanting to own a bicycle trolley since I first heard of them in my early 20's. Since last August, I have been researching the ups and downs of owning my own bicycle trolley. I've contacted owners and managers of other bike trolleys and have had extensive conversations about any injuries or safety issues that may have come up and what are the usual negative and positive reactions from passengers and the city. After so many great conversations I felt like this was perfect for Chico.



Bicycle Pub & Tour
530-213-8351

We are a 14 passenger bicycle trolley that will be touring from the beverage district (Meyers) to downtown. There will be all-age tours through Bidwell park through reservation.

Many ways to book a tour!

 /BicyclePubandTour  BicyclePubandTour.com
 @BicyclePubandTour

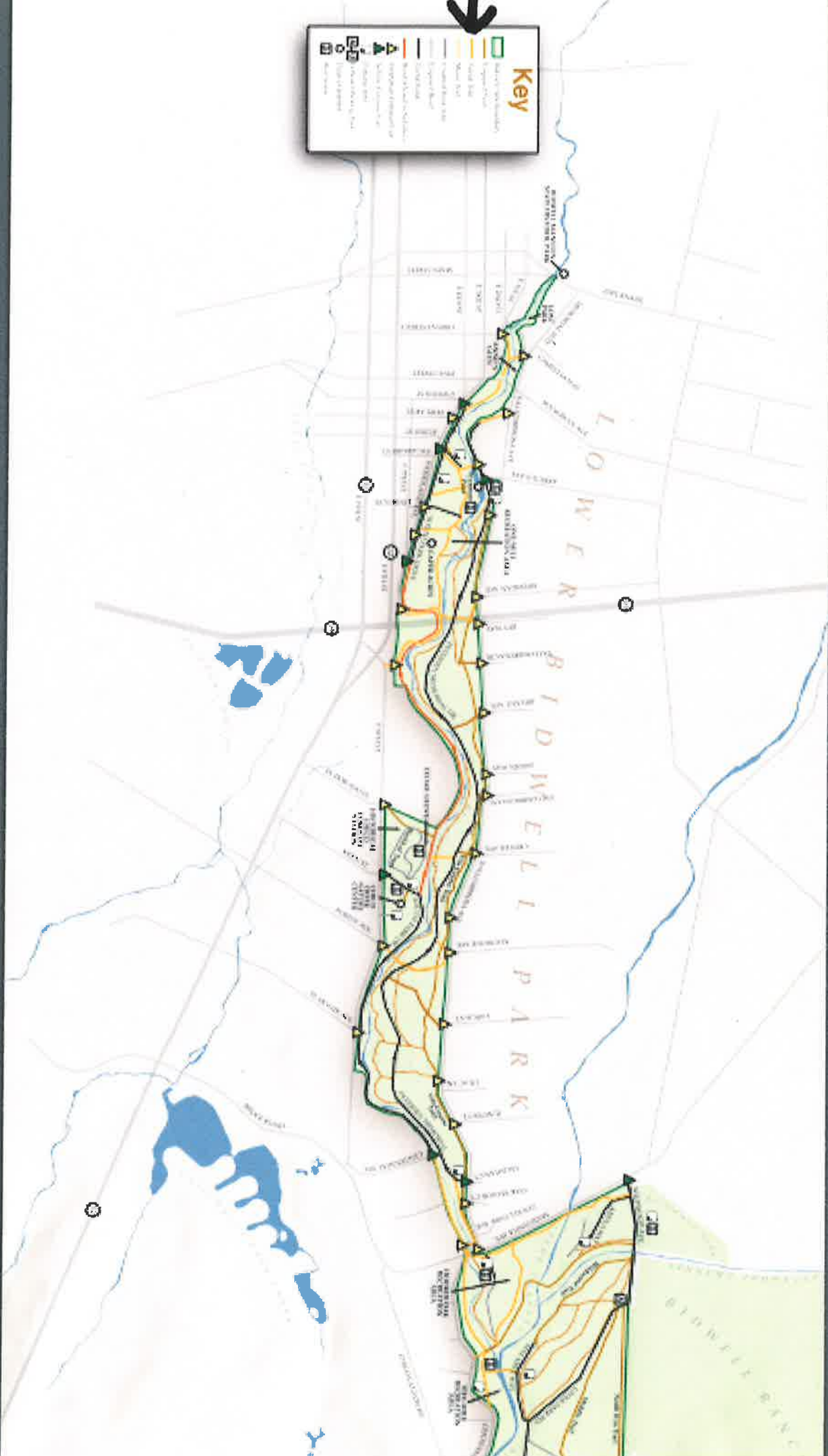


Parade of Lights 2019



Key

- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary
- Bidwell Park boundary





DATE: November 25, 2019
TO: Bidwell Park & Playground Commission (BPPC)
FROM: Richie Bamlet, Urban Forest Manager
SUBJECT: CONSIDERATION OF THE USE OF PLANT GROWTH REGULATORS IN THE CITY RIGHT-OF-WAY FOR UTILITY LINE CLEARANCE

REPORT IN BRIEF:

At its 7/30/18 meeting, staff reported to BPPC on a small-scale trial of the use of Plant Growth Regulator (PGR) Cambistat to manage utility right-of-way clearance requirements on City trees. In October 2018, forty-two trees in the City right-of-way were treated with PGR's to test tree response and program effectiveness. The trial yielded valuable information. PG&E and Public Works Tree Division would like to consider the future use of PGRs as another "tool in the box" to manage tree growth in City right-of-way utility easements.

Recommendation: *Staff requests that BPPC discuss and provide direction on the management and continuation of the partnership Plant Growth Regulator (PGR) program between The City of Chico and PG&E.*

Fiscal Impact: None. PG&E funded operation. Additional longevity of City trees translates into reduced maintenance and replacement as well as extended societal benefits afforded by large canopied trees

BACKGROUND:

Cambistat is the Tradename of the Plant Growth Regulator (PGR) containing the active ingredient Paclobutrazol. Cambistat acts to reduce twig elongation by up to 90%. It can be applied at any time of year but not when the ground is frozen or waterlogged. It is ideally is applied thirty days before or after pruning to maximize utility clearance benefits. Effects last up to three years. See photo 1. Photo shows reduced twig elongation in 2019 growing season in comparison with the previous 2018 season.

EPA classify Cambistat as non-carcinogen. Cambistat has an EPA Caution signal label. See Attachment A SDS label and additional information sheet provided by Rainbow Scientific. LD₅₀ (lethal dose) comparison to household products, indicates the low toxicity of the active ingredient paclobutrazol. For example, toothpaste has an LD₅₀ making it nearly 40 times more toxic than Cambistat. Cambistat binds to soil and does not move freely in the ground.

Cambistat is a professional product. Like other professional use products, the correct dose should only be applied using carefully calibrated equipment and trained operators.

The intent to commence a trial was first reported at the 7/30/18 BPPC meeting.

At City of Chico's request, PG&E hosted a Plant Growth Regulator conference 7/19/18 in Chico. Rainbow Treecare Scientific Advancements gave a presentation. City of Oroville and Town of Paradise also attended as well as staff from WECL and PG&E. It was reported that it is the intention of City of Chico Tree Division to enter into an agreement with PG&E to apply Plant Growth Regulators (PGR's) on a trial basis to City street trees in the utility right-of-way. The purpose of the trial was to test program performance and tree response. A successful trial would result in a reduced need for aggressive tree trimming and longer pruning cycles. Rainbow Treecare would be contracted by PG&E to manage the trial. The trial would be funded by PG&E.

It is noted that other PGR contractors operating in the USA and working with utility providers on vegetation management programs include Plant Growth Management Systems, using a PGR with tradename Shortstop, with same active ingredient paclobutrazol and concentration. Davey Resource Group also carries a product with Tradename Arbor Lock 2SC with the same active ingredient paclobutrazol and concentration as Cambistat. Foliar application products with different active ingredients also exist to eliminate unwanted fruit production, such as brand name Florel.

At the 8/27/18 BPPC meeting it was reported that PGE were approved to go-ahead with the small-scale trial on City trees to test the effectiveness of plant growth regulators in utility right-of-way maintenance. Information was provided as to the mode of operation of Cambistat; it works by reducing the production of gibberellic acid, a naturally occurring plant growth hormone that regulates the elongation of plant cells. It was reported that it was the intent of the trial to demonstrate that PGR's can be effectively applied to slow down the growth of trees. This would in turn reduce the amount of undesirable tree pruning required on trees in the utility right-of-way.

It was reported that desirable side benefits of PGR's include increased drought tolerance, increased stress resistance, direction of energy to fibrous root growth and enhanced chlorophyll resulting in darker green healthy leaves. Supplemental info on Cambistat was provided. See attachment B.

During the trial application during the first week of October 2018, one resident noticed the applicator in the right-of-way. See photo 2 (applicator injecting ground). That resident became upset that growth regulators were being applied in her neighborhood without notification. After feedback with PG&E and its contractor, Rainbow Scientific, the following protocols were developed, as reported at the 10/29/18 BPPC meeting.

1. No fruit or nut trees will be treated with PGR's. Some residents harvest nuts from City Black walnuts and use them for cattle feed.
2. Residents adjacent to any trees identified for treatment will receive a door knocker outlining what the treatment is, the objectives and a number to call for more information.
3. Residents will receive a courtesy call from the technician on the day of treatment.
4. Any residents that do not wish to have the city tree adjacent to their residence treated with Cambistat will be placed on a "do not treat" list. Such trees will continue to receive traditional tree trimming operations to maintain the utility right-of-way.
5. A media release will be considered to disseminate information on the program, its objectives, timelines etc.

Rainbow Scientific also provided answers to the residents' concerns. See attachment C. Additional Q&A is also provided to address other commonly asked questions.

It was also reported at the 10/29/18 BPPC meeting that the Urban Forest Manager visited staff from Rainbow Treecare in Fresno October 2018 for a tour of right-of-way trees treated in the 2017 growing season with PGR's. See **photos 3 and 4**. Photo 5 shows a comparison of tree growth response. The tour demonstrated the results of PGR treatment in the year following treatment. Photo 3 shows closeup of a branch that shows shortened growth between nodes. Photo 4 shows sweetgum trees on a private ranch treated with PGRs before being side-trimmed. The re-trimming interval will be extended due to the reduced growth of branches towards the utility easement.

Photos 6 and 7 highlight growth response in a Camphor tree treated as part of the trial in Chico. Areas ringed in white demonstrate shortened twig growth.

No additional trees in Chico have been treated with PGR's since the time of the initial trial application in October 2018. There are no plans in the short-term to apply PGRs to any additional trees growing in utility easements in Chico. There has however, been renewed interest and concern regarding the use of PGR's in Chico. Urban Forest Manager has received emails from concerned residents. See attachment D. Additionally, campaigns on Social media have been initiated, as well as door to door canvassing to gather petition signatures.

DISCUSSION:

City of Chico Public Works is responsible for the care and management of approximately 38,000 trees. An unknown, but significant number of City trees conflict with energized lines. To ensure safe reliable electric service, utility providers must ensure energized lines are free from vegetation. If branches make contact with energized lines, they can cause power outages. Trees are the most common reason for power outages. If trees are not properly maintained, trees may impede access by maintenance personnel and create safety issues. As an alternative to traditional pruning for line clearance, the use of Plant Growth Regulators (PGRs) is being explored. PGR's would not be suitable in every case and are not intended to fully replace traditional tree pruning practices. They would however, serve as another "tool in the box" in order to reduce the amount of pruning required to achieve California Public Utilities Commission (CPUC) mandated clearance requirements. Attachment E outlines CPUC utility requirements.

Trees that require pruning are those that currently, or will within a year, encroach on high-voltage power lines. Tree inspectors assess the location of trees and their growth rate. In addition, limb configuration and potential wind conditions are taken into consideration. The amount of pruning necessary is prescribed by a qualified utility forester contracted by the utility company. based on tree growth and structure, wind sway and line sag. Factors that influence the amount and type of pruning necessary include species of tree, environmental factors, irrigation, proximity of the tree to a line and line configuration. Ideally, utility pruning should remove only the minimum vegetation required by CPUC in order to meet state mandated clearances. In practice, additional clearance is required in order to account for wind sway and tree growth response between trim cycles

However, excessive vegetation clearance is costly, causes additional injury to trees and leads to adverse public relations. Excessive pruning on short trim cycles places trees under stress. It also releases stored Greenhouse gas carbon back into the atmosphere as well as reducing canopy benefits for citizens.

Benefits of using PGRs

Traditional pruning with chainsaws only focuses on the part of the tree that conflicts with the utility. PGRs when applied as a root collar soil drench benefit the entire tree.

The pruning cycle is increased. Trees that are pruned sometimes every year would not need to be traditionally pruned with the same frequency.

The tree would benefit from increased drought response, enhanced chlorophyll levels and thicker leaves, enhanced root production, increased carbohydrate production, increase in vigor and ability to withstand environmental stress and pest resistance. (see appendix B for additional information)

Disadvantages to using PGR's.

Additional over-sight is required by both the City, the utility company and its contractor to ensure the program is managed safely and effectively.

Additional laws and regulations will require to be followed.

Public mistrust and misinformation require additional outreach and enhanced communication and customer service.

Traditional utility tree trimming practices

The correct technique to prune trees for electric utility line clearance is by directional pruning. This pruning method removes branches growing toward conductors in favor of those growing away. Reduction cuts are used for all branches that are pruned. With reduction cuts branches are pruned properly back to a lateral branch that is at least one-third the diameter of the branch being removed. This allows for good wound closure and protects apical dominance, which reduces water sprouting. In addition, directional pruning removes fewer leaves, which trees need for making food. Directional pruning should remove fewer branches and increases wound closure, thereby reducing internal decay.



Figure 1 Directionally pruned trees following ANSI A300 pruning standards.

Tree Topping

In the past, utilities obtained line clearance by "topping" trees or "rounding" them over every few years. These techniques give little consideration to tree health or structural integrity. Current research shows that topping or heading cuts create entry points for wood decay. This slowly weakens the tree internally, shortening its life and in many cases causing future storm damage.

Trees growing directly under conductors appear U or V shaped. Trees growing alongside a conductor may appear L shaped from side pruning. At first the tree may appear misshapen, especially if you are looking down the curb line, but that changes over the years as the tree leaf's out and grows in. Viewed from directly across the street, the form of a tree that has been pruned by directional pruning appears natural, with lines running through it. Directionally pruned trees stay healthier than topped trees, have a much better form, and require less pruning in the future because of the use of reduction cuts.

If properly pruned back to sound lateral branches, free of internal decay, V-shaped trees do not split apart, even in storms. The tree's strength is in its solid wood and strong natural branch attachments. Internal decay from poor pruning, such as topping, or structural defects such as weak branch unions often are factors in tree failures. Directional pruning is done to minimize decay and improve weak branch unions.



Figure 2. Directional tree pruning as seen looking down the street



Figure 3. View from across the street of the same tree

Misinformation abounds regarding tree-pruning practices. The American National Standards Institute publishes the ANSI-A300 Standards for Tree Maintenance. These standards are recognized and approved by the National Arborist Association, the ISA, and the USDA Forest Service. Directional pruning for trees in conflict with utility lines meets these guidelines, while tree topping is a prohibited practice. Topping or rounding over removes more foliage, makes more pruning wounds, and stress the tree, causing unstable decay and water sprouting. In addition, the National Arbor Day Foundation recognizes utilities that practice proper tree pruning and train their contract crews by providing them with awards such as the Tree Line USA Award. PG&E holds this award. It is unknown if all sub-contractors adhere to the requirements of the program.

The reality and practice are that many tree trimming sub-contractors are employed to trim utility trees within Chico. There is often high staff turnover and production targets are high. Tree trimming standards are not always adhered to.

Photos 8 and 9 show recent directional pruning on Humboldt Ave. The trees have the “V” shape appearance after directional pruning. However, long stubs have also been left on the tree.

Long-range measures to mitigate tree/utility conflicts:

As large trees that are under utility lines age out, replacement with more suitable trees will help reduce the need for extreme pruning practices for utility clearance requirements. One method to help regulate inappropriate tree planting near utility lines is by use of City ordinances. Currently, only one California city classifies the potential for tree growth to grow towards power lines as a “nuisance.” Better urban forest design and regulation could in the future minimize tree/utility conflicts. The need for large tree trimming programs in urban utility easements could be reduced.

Another practice being utilized in new subdivisions in Chico is “under-grounding”, whereby utilities are placed below ground. This eliminates above ground tree/utility conflicts.

In conjunction with other long-term measures, staff believe that PGRs are a useful “tool in the box” to manage the enormous work load of utility clearance trimming while at the same time helping to preserve Chico’s tree canopy for all residents to enjoy.

Staff wish to improve the PGR program and address resident feedback and concerns. Staff believes that PGR's can be incorporated into the Public Works Integrated Pest Management program that is currently being developed.

PHOTOS



Photo 1. Close up of foliage from an ash tree that was part of the trial. Twig growth highlighted in purple was formed in the 2017 season. Twig growth in the 2018 season is highlighted in red. Adjacent to the 2018 season twig growth are the 2018 leaves, highlighted in white. It is noted that the leaves are normal size. Comparison to 2017 and 2018 growth rates indicate an approximately 90% reduction in twig growth.

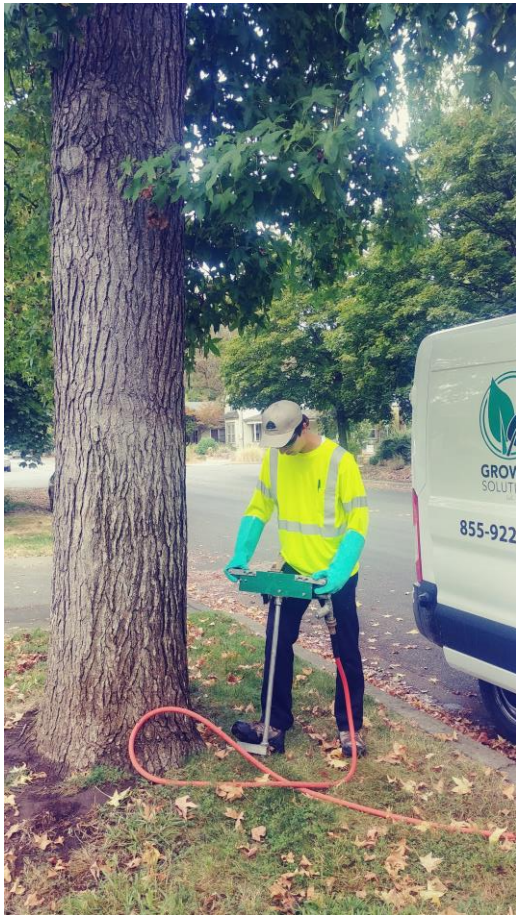


Photo 2. Rainbow Treecare applicator. 10/3/2018
On Oleander Ave. Sweetgum



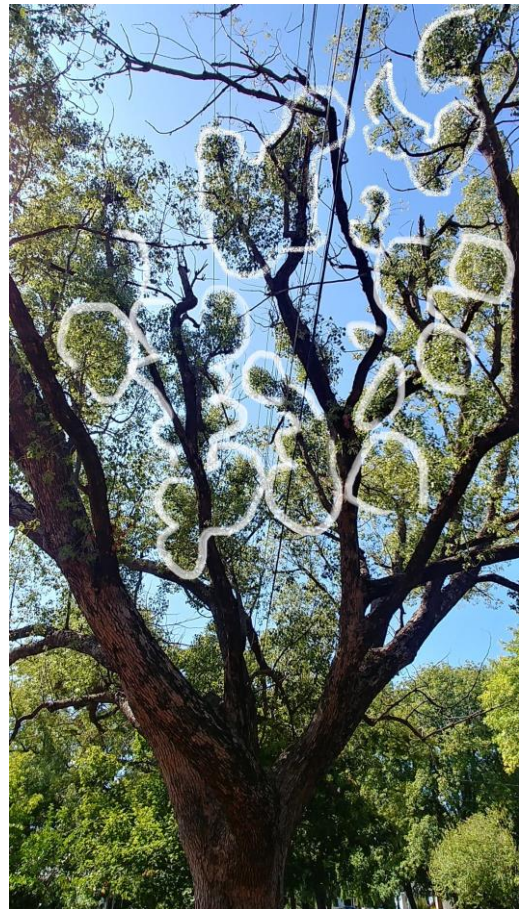
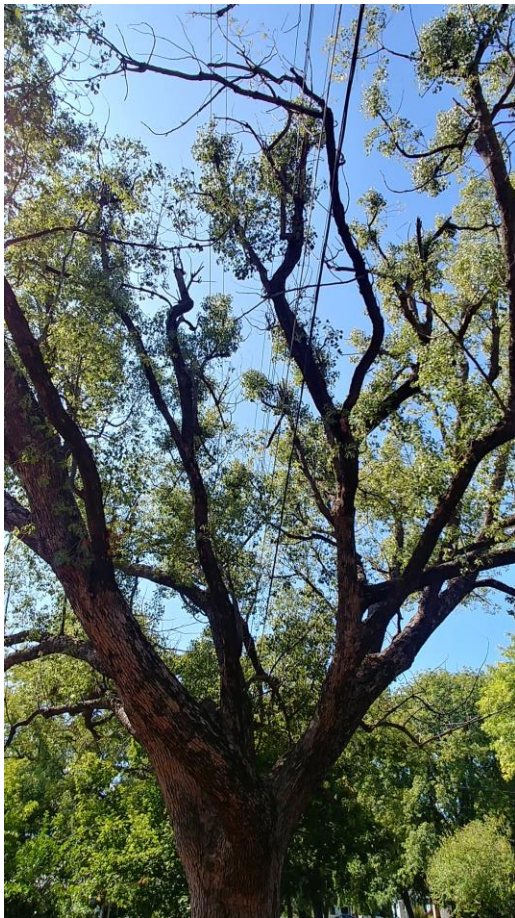
Photo 3. Avenue of Sweetgum trees. Fresno County.
these trees were treated with Cambistat and will not need to
be pruned this season.



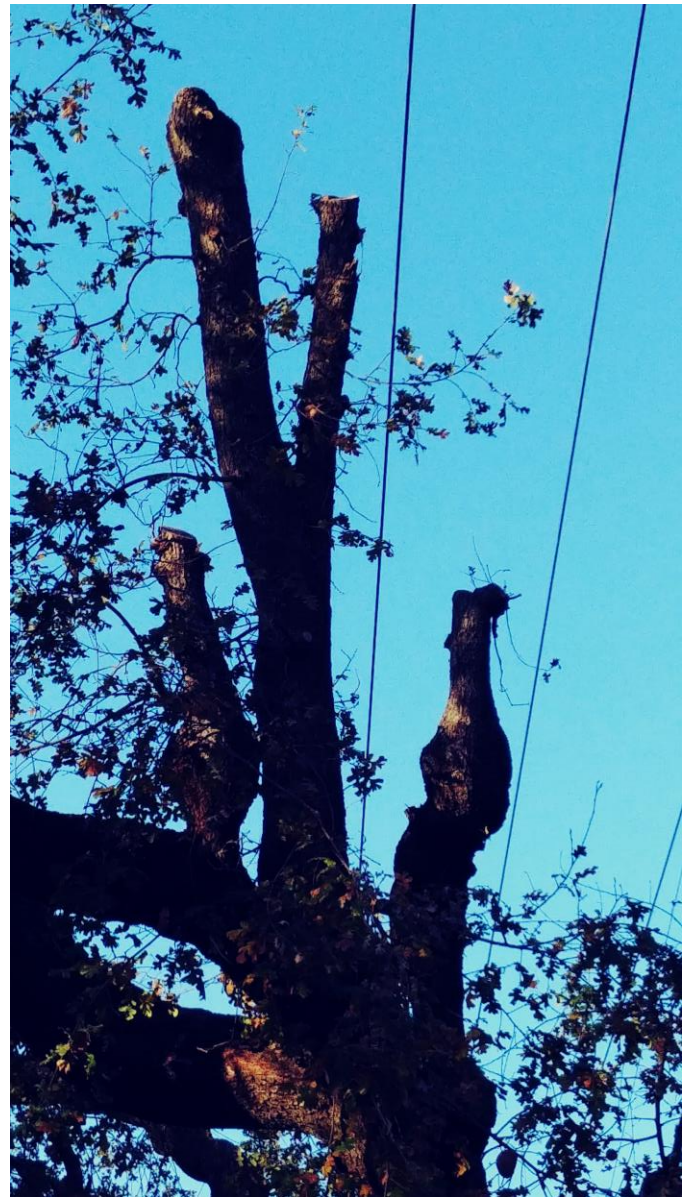
Photo 4. Closeup of twig growth from Sweetgum. Fresno County. Note shortened twig growth with normal sized leaves.



Photo 5. Rainbow Treecare demonstrating reduction of tree growth after treatment with Cambistat. Fresno County. October 2018



Photos 6 and 7. Camphor tree. Chico. White rings highlight clusters of leaves with shortened twig growth



Photos 8 and 9. Oak tree directionally pruned by PG&E contractor. October 2019. Humboldt road. Tree has classic “V” shape. However, long stubs were also left.

ATTACHMENTS:

- Attachment A: Cambistat SDS sheet and product label
- Attachment B: Rainbow Treecare Cambistat information leaflet
- Attachment C: Q&A of resident concerns and other FAQ's
- Attachment D: Emails received from residents
- Attachment E: PG&E information of utility clearances required by CPUC

**CAMBISTAT**

Safety Data Sheet

US and GHS

Revision date: May 29, 2015

Version: 1.0

SECTION 1: Product and Company Identification**1.1. Product identifier**

Trade name : CAMBISTAT
 Product code : EPA Reg. No. 74779-3

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/preparation : Plant Growth Regulator

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Rainbow Treecare Scientific Advancements
 11571 K-Tel Drive
 Minnetonka, MN 55343
 Phone: 1-(877) 272-6747 (toll free)
www.treecarescience.com

1.4. Emergency telephone number

Emergency number : (800)-424-9300 (CHEMTREC)

SECTION 2: Hazards identification

Hazard Symbols :



Signal word :

WARNING

Hazard statements (health) :

Harmful if swallowed, absorbed through the skin or inhaled.

Precautionary statements :

Avoid contact with skin, eyes, or clothing.
 Avoid breathing spray mist.

Hazard statements (environmental) :

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

Hazard statements (physical/chemical) :

Do not store near heat or open flame.

SECTION 3: Composition/information on ingredients

Chemical Name	CAS Number	%/wt.
Paclobutrazol	76738-62-0	22.3

Ingredients not precisely identified are proprietary or non-hazardous.



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SECTION 4: First aid measures

4.1. Description of first aid measures

- IF SWALLOWED** : Call physician or Poison Control Center immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a Poison Control Center or a physician. Do not give anything by mouth to an unconscious person.
- IF INHALED** : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
- IF ON SKIN OR CLOTHING** : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or physician for treatment advice.
- IF IN EYES** : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222 for emergency medical treatment information 24 hours a day, seven days a week.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, foam, or CO₂ extinguishing media.

5.2. Special hazards arising from the substance or mixture

Specific Hazards : This product will burn with flames if ignited. This product has a minimum ignition energy between 100 and 300 millijoules. Mechanical sparks, open flames, and certain hot surfaces can serve as ignition sources for this material. Eliminate the presence of mechanical sparks and other ignition sources where dust clouds of this material could form. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

5.3. Advice for firefighters

Protective Equipment : Wear full protective clothing and self-contained breathing apparatus with full facepiece.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to **Section 8 "Exposure controls/personal protection"**

6.2. Environmental precautions

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

6.3. Methods and materials for cleaning up

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil, or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area



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with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible storage container. Once all material is cleaned up and placed in a disposal container, seal the container and arrange for disposition. This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

SECTION 7: Handling and storage

KEEP OUT OF REACH OF CHILDREN!

7.1. Precautions for safe handling

Precautions for safe handling : Use in a well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not contaminate water, food or feed by storage or disposal. Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

SECTION 8: Exposure controls/personal protection

8.1. Personal protective equipment

Exposure Limit:

OSHA PEL: Not Listed

ACIGH TLV: Not Listed

Individual protection measures:

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the state or tribal agency responsible for pesticide regulation.

EYE PROTECTION – Use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

CLOTHING – Wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

GLOVES – Wear chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC), viton.

RESPIRATOR – A respirator is not normally required when handling this substance. Use effective engineering controls to comply with the occupational exposure limits.

Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under circumstances where air-purifying respirators may not provide adequate protection. In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.



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8.2. Exposure controls

Engineering Controls:

No applicable information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Off-white/beige liquid
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting/freezing point	: No data available
Boiling point	: Approx. 212 °F
Flash point	: Does not flash
Flammability	: No data available
Explosive properties	: No data available
Vapor pressure	: Paclobotrazol: 7.5×10^{-9} mmHg @ 68 °F (20 °C)
Vapor density	: No data available
Relative density	: 1.09 g/ml
Solubility(ies)	: Water: 26 mb/l @ 20 °C Fat: No applicable information available
Partition coefficient	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No applicable information available

10.2. Chemical stability

Stable under standard conditions.

10.3. Possibility of hazardous reactions

No applicable information available

10.4. Conditions to avoid

None known

10.5. Incompatible materials

Oxidizing agents (e.g. chlorates, nitrates)

10.6. Hazardous decomposition products

Can decompose at high temperatures forming toxic gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Based on an evaluation of the ingredients and/or similar products.

ACUTE TOXICITY		
Oral	LD50 rat	>2000 mg/kg body weight
Inhalation	LC50 rat	>250 mg/M ³ air
Dermal	LD50 rat	>2000 mg/kg body weight
Irritation		
Eye Contact	Rabbit	Slightly irritating
Skin Contact	Rabbit	Non-irritating
Respiratory tract	-	No applicable information available
Sensitization	unknown	Not a sensitizer

Carcinogenicity	: No evidence of carcinogenicity in 2-year rodent studies.
Mutagenicity	: No applicable information available.
Reproductive Toxicity	: Dose-related increase in minor skeletal defects and evidence of fetotoxicity in rat studies (urogenital defects). No adverse effects seen on reproductive parameters or reproductive organs in a 2-generational rat study. Liver effects were noted at the highest dose level in the FO females and male and female offspring (active ingredient).
Chronic Toxicity	: Evidence of liver toxicity in repeat dose rodent studies at high dose levels. (1250 ppm, 90 day and 2 year tests). No effects noted in rabbit studies. No adverse health effects are expected in humans at airborne levels below the occupational exposure limit.
NTP/IARC/OSHA listing(s)	: No applicable information available.

SECTION 12: Ecological information

12.1. Toxicity

ECOTOXICITY:

Fish: LC ₅₀	: 23.6 ppm
Daphnia: EC ₅₀	: 33.2 ppm
Bird (8-day dietary – Bobwhite Quail): LC ₅₀	: >20,000 ppm
Bees: LC ₅₀	: >50 ug/bee

12.2. Persistence and degradability

No applicable information available.

12.3. Bioaccumulative potential

Soil DT50 0.5-1.0 y in general; in calcareous clay loam (pH 8.8, 14% o.m.), DT50<42 d.; in coarse sandy loam (pH 6.8, 4% o.m.), DT50>140 d. Stable in water. Mixes in water (after 24 h).

12.4. Mobility in soil

No applicable information available.



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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Pesticide disposal:

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Container disposal:

Less than or equal to 5 gallons: Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

Over 5 gallons: Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

SECTION 14: Transport information

UN number	: Not applicable
Proper shipping name	: Plant growth inhibitor, modified or regulator
Class	: Not applicable
Packaging group	: Not applicable
NMFC number/class	: 101685/65
Marine pollutant	: Not applicable

SECTION 15: Regulatory information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.



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EPA signal word

: CAUTION

Precautionary statements

: **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION. Harmful if swallowed, absorbed through the skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse

Pictograms/symbols

: None

SECTION 16: Other information

MSDS US

***Disclaimer:** The information provided by Rainbow Treecare Scientific Advancements, contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.*

REVISED DATE: May 2015

REVISED FOR: GHS Compliance

Cambistat[®]

Tree Growth Regulator

Available in:

1 gallons
(3785ml)

2 Liters
(2000ml)

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See Side/Back Panel for Additional Precautionary Statements, First Aid and Directions for Use

Cambistat™ is a plant growth regulator that slows the vegetative growth of plants by inhibiting gibberellin biosynthesis. Cambistat™ is designed to gently and predictably slow the growth of trees. A single application provides a long lasting reduction of vegetative growth, effectively extending the trimming cycle of trees and reducing the amount of woody growth that must be removed. In addition, use of Cambistat™ may cause other plant growth effects that are beneficial for trees such as increased root density, improved drought and heat resistance, and higher tolerance to insects and diseases. Cambistat will also benefit trees that are too large for their growing site and increase the longevity of trees growing in stressful environments.

Active Ingredient

Pacllobutrazol (R*, R*)-(?)-[4-(4-chlorophenyl) Methyl]-?--(1,1-dimethylethyl)- 1H-1,2,4-triazole-1-ethanol	22.3%
Other Ingredients.....	77.7%
Total	100%

EPA Reg. No. 74779-3

EPA Est. No. 63416-MN-001

Distributed by:



Rainbow Treecare Scientific Advancements

11571 K-Tel Dr

Minnetonka, MN 55343

1-877-272-6747

www.treecarescience.com

FIRST AID:

IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or a doctor. • Do not give anything by mouth to an unconscious person
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call poison control center or doctor immediately for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call poison control center or doctor immediately for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER	
For 24 hour medical emergency assistance (human or animal), or chemical emergency assistance (spill, leak or accident). Call CHEMTREC at 1-800-424-9300.	
NOTES TO PHYSICIAN	
No specific antidote is available. Treat the patient symptomatically.	

PRECAUTIONARY STATEMENT

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any water proof material
- Shoes plus socks

Applicators and other handlers are also recommended to wear protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR LESS THAN OPTIMAL GROWTH REDUCTION.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

General Information

Cambistat™ is a plant growth regulator that slows the vegetative growth of plants by inhibiting gibberellin biosynthesis. Cambistat™ is designed to gently and predictably slow the growth of trees. A single application provides a long lasting reduction of vegetative growth, effectively extending the trimming cycle of trees and reducing the amount of woody growth that must be removed. In addition, use of Cambistat™ may cause other plant growth effects that are beneficial for trees such as increased root density, improved drought and heat resistance, and higher tolerance to insects and diseases. Cambistat will also benefit trees that are too large for their growing site and increase the longevity of trees growing in stressful environments. Cambistat™ may be applied by soil injection or basal soil drench.

Cambistat™ may be used on utility rights-of-way, residential areas, urban areas, and other non-crop areas.

Indications of Tree Response:

Cambistat™ is readily absorbed by plant roots and is translocated to the actively growing points. Initially, an intense greening of the foliage may occur in response to Cambistat™ treatment. Long-term effects include: shortened internodes and smaller, thicker leaves. Visible results may be seen in as little as 2 months but measurable growth reduction may take as long as a year to occur.

General Use Precautions

- Apply at recommended rates and follow safety precautions.
- Non-fruit or nut bearing trees that are not specified on this label may be treated if all other label directions are followed.
- The degree and duration of Cambistat™ applications can be affected by local soil and environmental conditions. Carefully read and follow label instructions to ensure effectiveness.
- Retreat every 3 years or wait until the effects from the previous application subside.
- Heavily compacted soils around trees may need to be vertical mulched, aerated or receive other remedial soil compaction treatments for Cambistat™ to effectively promote root growth.

General Use Precautions -continued

- Localized stunting or injury of turfgrass or other non-target plants immediately adjacent to the treatment site may occur if Cambistat flows off of the application site.
- Avoid Cambistat™ basal drench applications on inclines and other areas where treated soil is likely to be washed away from the base of the tree by rainfall or irrigation.
- Shrubs and/or herbaceous ornamentals next to treated trees may be affected if their roots extend into the treatment zone.
- Do not treat sugar maple trees or any other trees if they could be or will be tapped for sugar.
- Do not treat fruit or nut trees that will be harvested within one year.
- Do not treat severely stressed trees or trees in rapid decline.
- Do not apply Cambistat™ through any irrigation system.

DOSING

It is important to apply the proper dose to the tree you are treating. Use the following steps to determine the required dose:

- 1) Correctly identify the tree species.
- 2) Measure tree diameter at breast height (DBH). (See determining DBH)
- 3) Locate the correct dosage rate category for your species (See tables 2 and 3).
- 4) Locate the amount of material to use based on the category and DBH of your species (See tables 4 and 5).
- 5) Determine if any rate reductions are necessary (See Dosage Reduction Considerations).

DETERMINING DBH

Single Stem: Measure the standard DBH of the tree at 4' 6" above the soil.

Multiple Individual Trees Growing in Close Proximity: For trees that have grown close together, measure the DBH of each stem and treat each tree individually. You may need to make rate reductions due to the overlapping canopies (See Dosage Reduction Considerations). Also, because of close proximity of trees, it may be necessary to apply Cambistat to outer perimeter of clumped trees.

Multi-stem Split Below DBH: For a tree that has multiple stems splitting below DBH, measure the tree at the narrowest point between the root flare and the split.

Stem Clusters: For trees that are grown too close together to be treated as individual trees, measure the DBH of each stem and add the measurements together. You may need to make rate reductions due to overlapping canopies (see Dosage Reduction Considerations). Also, because of close proximity of trees, it may be necessary to apply Cambistat to outer perimeter of clumped trees.

Tree Splits at DBH: For a tree that splits into two or more stems at DBH, measure and add the diameter of the stems and measure the narrowest point below the split. Take the average of these values.

DOSAGE REDUCTION CONSIDERATIONS

Canopy Missing: Look at the canopy of the tree and compare it to a "normal" canopy for that trunk diameter. For example, if a tree is missing large branches from storm damage or utility line clearance pruning it is necessary to estimate the percentage of canopy missing and subtract this percentage from the dosage amount. i.e. subtract 30% from dosage if 30% is missing from the canopy.

Canopy Suppression: Trees growing in close proximity to other trees, multi-stemmed trees, and trees growing in clusters may have overlapping canopies. Your judgment is required to compare the canopies of these trees to the "normal" canopy for trees with similar trunk diameter. It may be necessary to reduce the dosage amount based on the percent of suppression and canopy overlap

DOSAGE REDUCTION CONSIDERATIONS - continued

Stressed or Declining Trees: Dosage rates for trees that have lost canopy from construction damage, storm damage, insects, disease, girdling roots and/or other types of stress must be reduced to minimize the risk of over-regulation. A full dose of Cambistat applied to a tree with small, thin, or declining canopy may result in smaller leaves and a sparse canopy.

- Reduce the dosage rate on highly stressed trees by 25% or more
- Trees that show significant stress and are in rapid decline are NOT good candidates for treatment.
- For stressed trees, consider that additional canopy may decline before treatment response begins so you may need to reduce the dose by more than what is presently missing.

Trees with Confined or Compromised Root Systems: Trees in sidewalk boxes, above ground planters, and new transplants may absorb Cambistat from the treatment area in a higher proportion than a tree with a full root system. Reduce the dosage rate by 25% or more.

MIXING PROCEDURE

Dilute 1 part Cambistat with 11 parts water. To make a large Ready to use solution, combine 1 quart of Cambistat with 11 quarts of water to make 3 gallons of solution. See table 1 for additional examples. When mixing large amounts of Cambistat, mix only the amount that will be used within that day. Cambistat is best applied with equipment that has constant agitation.

Table 1. Examples of the volumes of Cambistat and Water needed to make Ready-to-Use solution.

Volume of Cambistat	Volume of Water	Makes
1 qt	11 quarts	3 gallons
1 gallon	11 gallons	12 gallons
4 gallons	44 gallons	48 gallons

If applying mixture to compacted soils, high clay content soils, or other hard-to-wet soils, use a nonionic, organosilicone wetting agent (surfactant) to increase penetration of the soil. Mix approximately ½ ounce surfactant per 3 gallons or 1 pint surfactant per 100 gallons. Follow all label directions and precautions on the surfactant product label.

APPLICATION METHODS

Soil Injection

Inject the Ready to Use solution approximately 2-6 inches deep at 50-200 psi using the volumes in Table 5. Orient injection orifices to release the diluted product horizontally at the point of injection. Divide the required dose evenly among injection sites spaced as uniformly as possible around the base of the tree. Position the injection sites to release the diluted Cambistat™ as close as possible to the point of contact between the soil and the tree beneath the soil so that the solution is readily absorbed by the tree (Figure 1). Locate injection sites next to buttress roots (Figure 1). For trees less than 6 inches DBH, use at least 4 injection sites evenly spaced around the tree.

Soil Basal Drench

Carefully dig a shallow furrow 2 – 6 inches deep around the base of the tree. If treating an individual tree, use the volumes determined in Table 4. If treating multiple trees, a Ready-To-Use solution can be created by using the volumes in Table 5. Carefully pour the Ready-To-Use solution evenly around the tree into the furrow using an applicator that provides a controlled flow. Make the application at the point of contact between the soil and the tree trunk (Figure 2). After the diluted product has been absorbed by the soil, refill the furrow with untreated soil. Note: If making an application on a slope, a soil dam may be created to contain the application within the furrow.

APPLICATION TIMING

For a more manicured look, apply Cambistat™ to trees 30 to 180 days before they are pruned. To allow some regrowth and a more natural look, apply Cambistat™ at the time of pruning.

Soil applications can be made throughout the year, except when the soil is frozen or saturated with water. Note: When applied to the soil, Cambistat™ is absorbed by tree roots and translocated to the growing points (sub-apical meristems) in response to evaporative water loss (transpiration). If applications are made after leaf drop, uptake of Cambistat™ will not occur until development of new leaves and resumption of transpiration.

For questions, contact Rainbow Treecare Scientific Advancements at 877-272-6747.

Table 6. Partial hole volumes for soil injection (based on 250 ml delivered per hole)

Partial hole	Volume
.1	25 ml
.2	50 ml
.3	75 ml
.4	100 ml
.5	125 ml
.6	150 ml
.7	175 ml
.8	200 ml
.9	225 ml

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage: Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

Notice: Read the entire Directions For Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

Follow the Directions For Use carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Tree injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or tree conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS and Seller harmless for any claims relating to such factors.

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions For Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, and Buyer and User assume the risk of any such use. RAINBOW TREECARE MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF RAINBOW TREECARE OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS.

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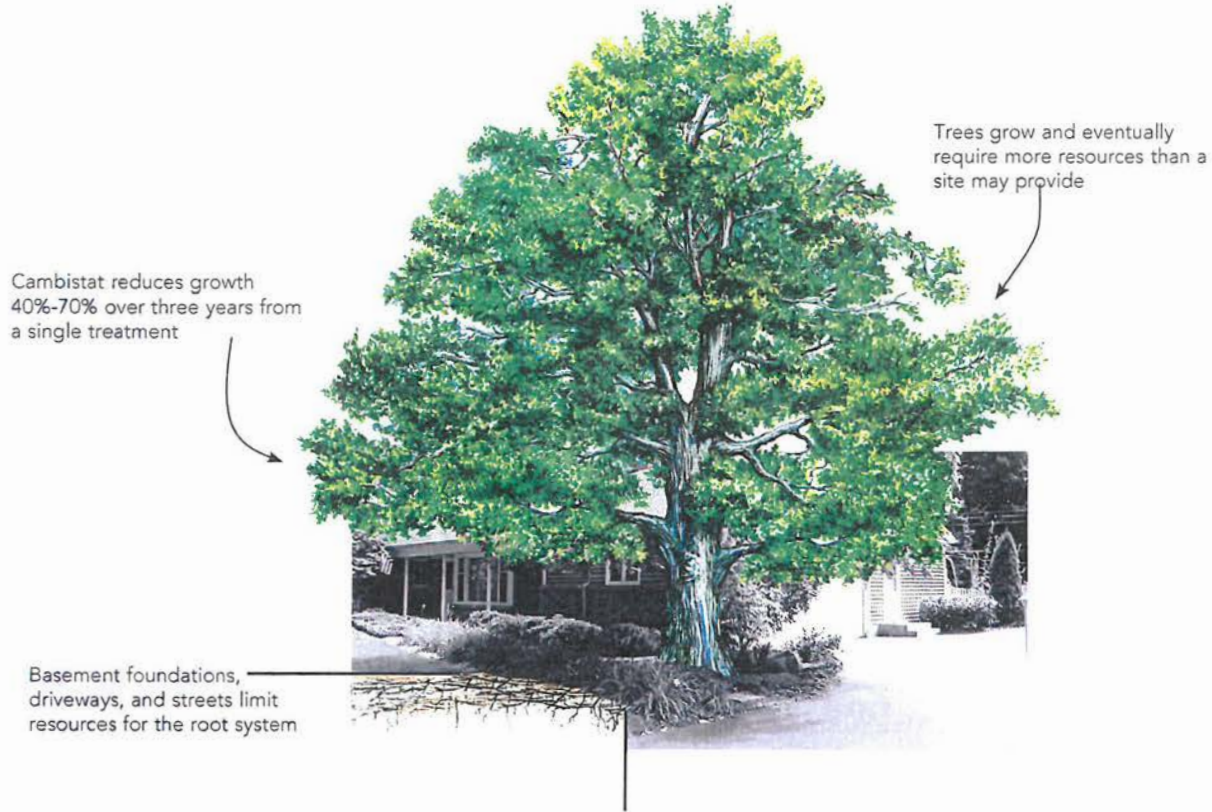
Rainbow Treecare Scientific Advancements

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Using Cambistat® to Reduce Growth



Slowing Growth for a Healthier Tree

Large trees add beauty, character, and value to the landscape, and they are highly desired by many homeowners. While it is appealing to think most trees in the landscape will eventually grow large and provide these benefits, this may not always be in the best interest of your tree and property.

There are two main reasons why:

- 1. The size of a mature tree** is often underestimated, and many trees are planted too close to houses, garages, power lines, and other structures. This type of interference may cause damage to the property and require additional maintenance to correct.
- 2. Large trees** require more water, minerals, and soil volume for roots than smaller trees, and these resources may not be available in sufficient quantity in smaller urban sites. If these resources are limited tree health will eventually suffer.

What does Cambistat do?

Cambistat is a tree growth regulator that reduces canopy growth by 40-70% over a three year period. Reducing the amount of tree growth can help you:

- Safely maintain the visual appeal of the landscape.
- Reduce the amount of live wood pruning required.
- Prevent premature overcrowding of competing trees.
- Maintain a smaller, more appropriate tree size when there is a restricted root zone.
- Maintain vista views with less frequent pruning.
- Extend the time in between pruning events.
- Minimize intrusion by power companies.

Additional Cambistat Benefits

As a result of growth reduction, some favorable changes occur that enhance the durability of your tree to the stresses associated with living in an urban yard. These include:

- Stimulate fine root production
- Improve drought and heat resistance
- Higher tolerance to certain diseases



Slower Growing Trees

A common myth about trees is that a faster growing tree is healthier than a slower growing tree. The truth is that slower growing trees will outlive trees that grow faster, especially in situations such as yards where space and resources are limited. The chart below shows some important differences between a tree growing relatively faster or slower.

Cambistat Treated Tree



Slower Growth is Beneficial

Tree Characteristic	Tree Growth Rate Comparison	
	Faster Growth	Slower Growth
Resource Demand	Higher	Lower
Sensitivity to Resource Availability	Higher	Lower
Stored Energy Reserves	Lower	Higher
Root : Shoot Ratio	Lower	Higher
Sensitivity to Stress or Damage	More Sensitive	Less Sensitive
Overall Tree Durability	Less Durable	More Durable

An Integrated Approach

When caring for urban trees it is important to make a thorough evaluation of the site to accurately diagnose all stressing agents and tailor your recommendation to the specific circumstances. These must be dealt with so that your tree can live to its fullest potential. Utilize your arborist for a comprehensive maintenance program.

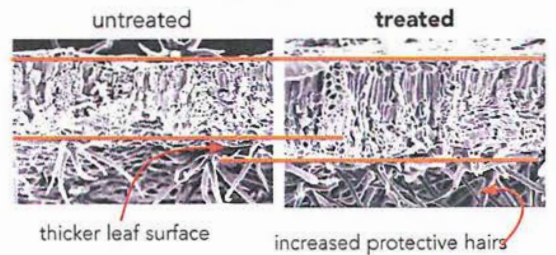
Benefits of Cambistat for Urban Trees

Cambistat is a soil applied product that is absorbed through the roots. Cambistat gently slows the growth of trees, allowing the tree to redirect some of its energy from canopy growth to defense chemicals, fibrous root production, and other uses. The resulting reallocation of energy makes your tree healthier and more durable.

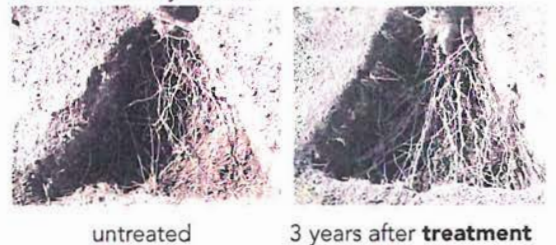
Drought is a major cause of tree death and decline in the urban landscape. Research shows Cambistat increases drought resistance by helping the tree reduce water losses during dry, hot periods.



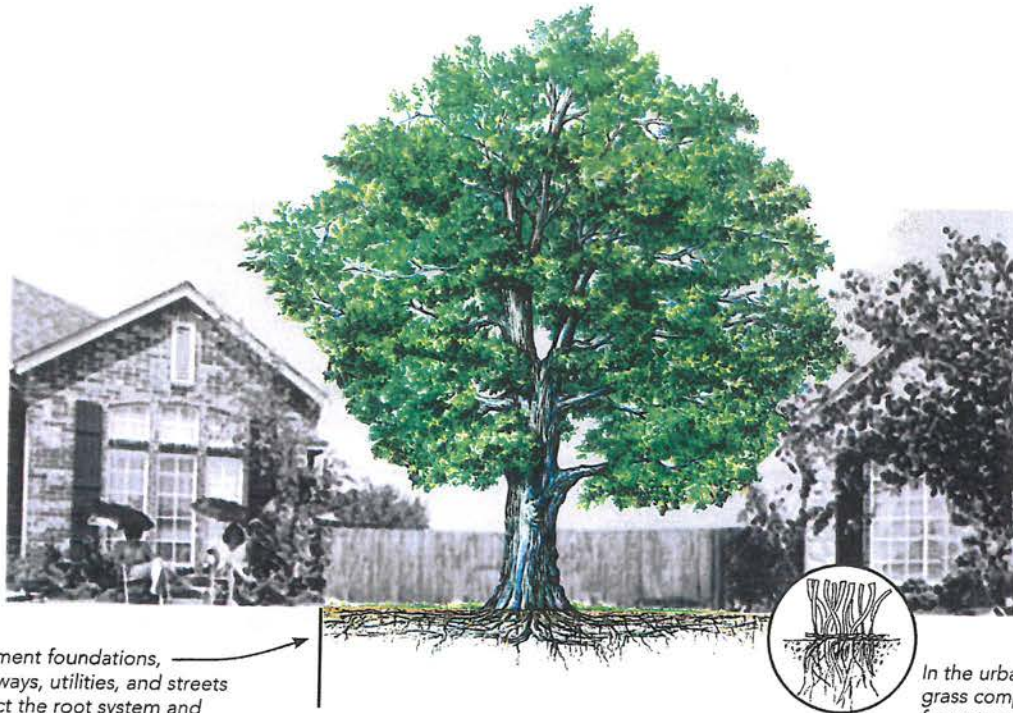
Cambistat changes some important physical traits of leaves. Leaves of treated trees tend to be greener (higher concentrations of chlorophyll) than untreated and have an enhanced protective barrier (thicker leaf surface and denser surface hairs).



Research has shown Cambistat increases fine root density in trees



Using Cambistat® to Help Manage Drought Stress



Basement foundations, driveways, utilities, and streets restrict the root system and limit available resources.

In the urban environment grass competes with trees for water and minerals. This significantly reduces the capacity of a yard to support a tree.

Why Urban Trees are Drought Stressed

➤ Less Water is Available –

Unless regularly irrigated, urban trees generally have less water available than their counterparts in natural settings. Why? Paved surfaces encourage runoff instead of absorption, and these surfaces cause higher soil temperatures and faster evaporation of rainfall.

➤ Restricted Root Space –

Building foundations, streets, driveways, and other obstacles limit the expansion of tree roots and significantly reduce the amount of water and minerals available to the tree.



photo: Dr. Gary Watson

➤ Compacted Soils –

Urban soils are usually compacted from human activity, and this creates stress for a tree. Soils can become difficult for roots to penetrate, and compacted soils hold much less water and oxygen which are critical for tree health.

➤ Competition –

Most yards have a dense layer of turf that surrounds a tree. Turf aggressively competes for minerals and water, which reduces their availability to other plants. Adding several inches of mulch within the dripline of the tree reduces competition with turf, keeps the soil cooler, and holds more moisture.



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A common myth about trees is that a faster growing tree is healthier than a slower growing tree. The truth is that slower growing trees will outlive trees that grow faster, especially in situations such as yards where space and resources are limited. The chart below shows some important differences between a tree growing relatively faster or slower.

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Root : Shoot Ratio	Lower	Higher
Sensitivity to Stress or Damage	More Sensitive	Less Sensitive
Overall Tree Durability	Less Durable	More Durable

An Integrated Approach

When caring for urban trees it is important to make a thorough evaluation of the site to accurately diagnose all stressing agents and tailor your recommendation to the specific circumstances. These must be dealt with so that your tree can live to its fullest potential. Utilize your arborist for a comprehensive maintenance program.

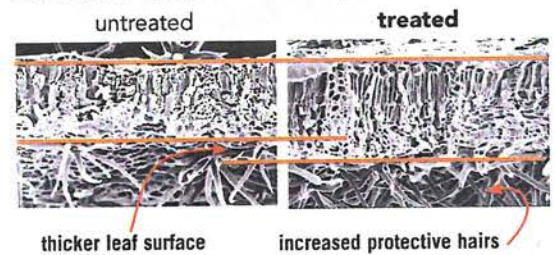
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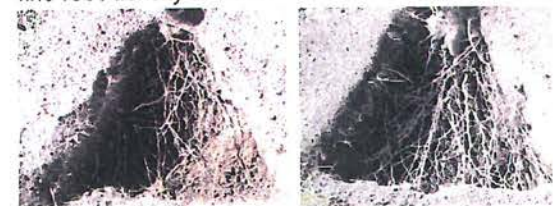
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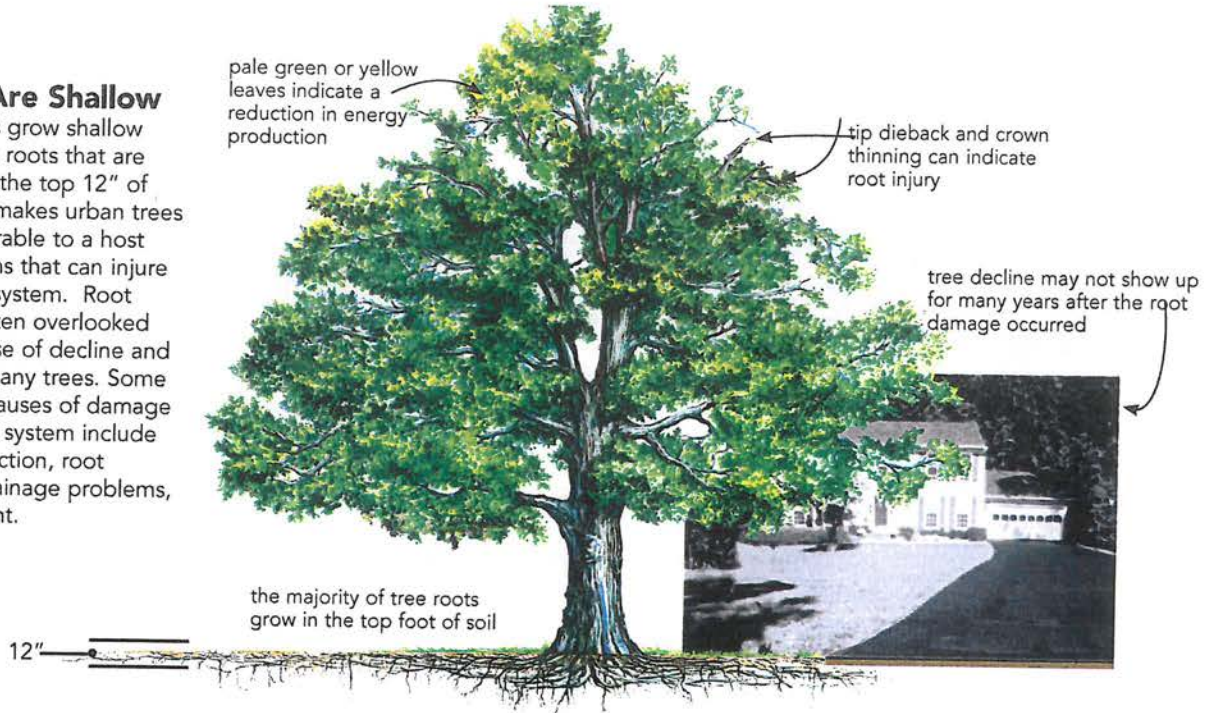


untreated 3 years after treatment

Using Cambistat® to Help Trees with Injured Roots

Roots Are Shallow

Most trees grow shallow absorptive roots that are located in the top 12" of soil. This makes urban trees very vulnerable to a host of problems that can injure their root system. Root injury is often overlooked as the cause of decline and death of many trees. Some common causes of damage to the root system include soil compaction, root cutting, drainage problems, and drought.



Soil Compaction	Root Cutting	Drainage Problems	Drought
Soil compaction harms tree roots by reducing oxygen and water exchange which inhibits root expansion. Trees in compacted soils are smaller, less healthy, and will die sooner if the compaction is left untreated. There are a variety effective methods to alleviate soil compaction. Talk to your arborist.	This can place a tree in jeopardy from structural failure and dehydration. Good planning is the best solution. If possible, re-cut any crushed or broken roots with a sharp saw or pruning shear. This will enhance their recovery.	Too much water suffocates roots and allows anaerobic conditions to form. This promotes diseases for both your trees and grass. It is better to water deeply and infrequently than many small watering events. A general guideline is to deliver one inch per week in a single watering event.	Since fibrous roots are so close to the soil surface, they can dehydrate and die when the soil loses significant moisture and becomes over heated. Mulching the root zone with wood chips is a very effective method of protecting tree roots as it buffers heat and holds moisture.

The Best Strategy for Managing Root Damage is Avoidance.

How Close Can Root Damaging Activity Come to a Tree without Causing Injury? The simple answer is the farther away it stays the better. If possible, avoid damage within the drip line of the tree. The more area you can protect the less impact on your tree.

Before Root Damage Occurs. Cambistat is best used before construction activity. Cambistat puts the tree in a more conservative mode by reducing water needs, slowing top growth and redirecting energy to fibrous root growth. A tree

with a bottom-heavy balance between the roots and crown will have greater stability during the stress and a stronger likelihood of long-term survival.

Damage that has Already Happened. If root damage has already occurred, try to stabilize the tree and prevent decline. Not all trees may be savable if the damage is severe, and there is significant decline. Cambistat should be used in conjunction with other cultural practices to get the best results.



Slower Growing Trees

Trees are energy systems that make their own food, and decline begins when a tree uses more energy than it is making. Cambistat reduces vegetative growth, improves the root to crown ratio, and improves the plant's ability to photosynthesize under adverse conditions. In many species it stimulates fibrous root growth that gives the tree greater ability to mine the soil for water and nutrients. Conservative growth strategies will extend the longevity and help shift the tree back into a favorable energetic balance.



1989 treated

1994

2001

Information and photos from Watson, G.W. 1996. Tree Root System Enhancement with Paclobutrazol. J. Arboriculture 22:211-217

Slower Growth is Beneficial

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photo: Dr. Gary Watson

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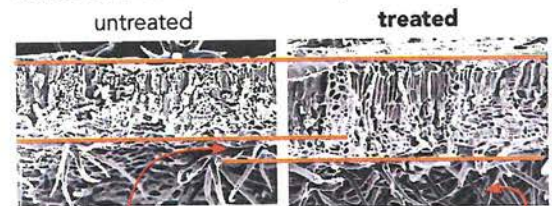
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untreated

3 years after treatment

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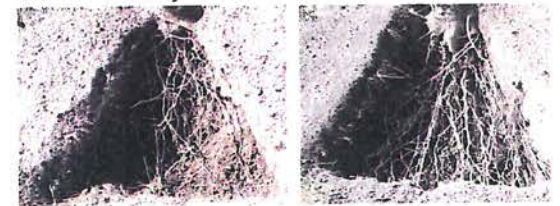
untreated

treated

thicker leaf surface

increased protective hairs

Research has shown Cambistat increases fine root density in trees



untreated

3 years after treatment

ATTACHMENT C

Question & Answers regarding Cambistat and its use in the environment

Below are responses from Rainbow Tree Company to questions from a concerned resident in the City of Chico. An additional Q&A is also included that addresses commonly asked questions.

Question: Resident was concerned of how will citizens would be notified of Cambistat applications?

Answer: The City of Chico had previously approved the use of Cambistat on the trees within the City's ROW, a door hanger will be left for the homeowner adjacent to the City's tree moving forward.

Question: Will trees be treated near fruit trees and vegetable gardens?

Answer: Trees within 10 feet of fruit trees and/or vegetable garden's will not be treated

Question: Customer has a concern about hazards of burning treated trees in fireplaces.

Answer: The fire hazard section of the SDS does state "During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion." This language pertains to the concentrated product in its original container. When used to treat trees, the product is diluted with water and then injected into the sub-surface soil. Cambistat is then gradually absorbed and taken up by the tree. Ochoa found after 30 days, only 81 ug/g of paclobutrazol in stem tissue from a soil application of 20 mg of paclobutrazol (Ochoa, 2009). This value had dropped to 26 ug/g after 156 days. This research demonstrates that only a small concentration of paclobutrazol will be present in the wood. These low levels do not pose a hazard of generating toxic gases when burned.

Question: What happens to the air when the wood treated with this chemical for years is burned in fireplaces?

Answer: Paclobutrazol does not build up within the wood over time. The reason trees are retreated every few years is that paclobutrazol degrades and the growth regulation effects are no longer occurring. The low level of paclobutrazol that is present in wood will not pose a hazard when burned.

Question: How will the soil injections affect nearby vegetable and herb gardens, nearby fruit trees?

Answer: Trees within 10 feet of fruit trees and/or vegetable garden's will not be treated.

Question: If it is known to cause severe liver damage in rodents, what happens to the birds, squirrels, raccoons who eat from these trees?

Answer: The liver damage mentioned here is derived from Chronic Toxicity studies that were generated to support EPA registration. These studies found evidence of liver toxicity in repeat dose

Question: Provide data on what Cambistat does to humans, birds and squirrels who eat the fruit and berries from trees treated with Cambistat and encouraged me not to eat the fruit for a year.

Answer: The effects of Cambistat are highly specific to processes found in plants. Research shows that there is minimal risk to people, pets, and wildlife.

Cambistat has been registered by the US EPA and the California Department of Pesticide Regulations. To be approved for registration Cambistat had to have numerous toxicity tests performed to measure toxicity. Based on the results from these tests, the toxicity of Cambistat placed this product into a CAUTION signal word, which is the lowest signal word granted by EPA.

The toxicity of a product is evaluated based on its LOSO (a standard measurement of toxicity that is stated in milligrams (mg) per kilogram (kg) of body weight) of Cambistat. Because LOSO values are a standard measurement, it is possible to compare relative toxicities among pesticides. Products other than pesticides, such as household products are also measured for LD50's and therefore can also be compared for relative toxicities. Table 1 lists the relative toxicities for common household products compared to Cambistat. The lower the LOSO the higher the safety risk.

Table 1: Comparison of Cambistat to Common Household Products

Material	LD 50*
Cambistat	2140 mg/kg
Aspirin	1200 mg/kg
Windex	506 mg/kg
Coffee	230 mg/kg
Mouthwash	160 mg/kg
Toothpaste	54 mg/kg

*The lower the number - the higher the toxicity

rodent studies at high dose levels. (1250 ppm, 90 day and 2 year tests). However, no effects were noted in rabbit studies.

These studies must be put into context. The Chronic Toxicity Test entails feeding the chemical to the test animal every day for the duration of the trial. In the studies here, the animals were fed paclobutrazol at a concentration of 1250 ppm (~100 mg/kg of body weight) every day for 90 days for the 90 day study and for 2 years for the 2 year study.

Considering the amount of solution needed to be consumed to be toxic and the fact that the application is injected approximately 4 inches beneath the soil surface, it is unrealistic to expect that treatments with Cambistat will cause harm to birds, squirrels, and raccoons that feed on these trees.

Question: I eat these walnuts and had for many years gathered them for cattle feed for the ranchers. What happens to humans and cattle who eat the black walnuts?

Answer: As noted above, the animals were fed paclobutrazol at a concentration of 1250 ppm (~100 mg/kg of body weight) every day for 90 days for the 90 day study and for 2 years for the 2 year study. Scaling this to humans, the 1250 ppm study would be equivalent to feeding a 70 kg adult human 336 ml of the applied solution every day for the duration of the study. In addition, no effects were noted in rats when these tests were performed at 250 ppm (20 mg/kg/day). 250 ppm would be equivalent to an adult human consuming 67 ml of the applied solution every day for the duration of the trial.

In addition, it has been shown that paclobutrazol is unlikely to move into fruit. When paclobutrazol was applied to mango trees as soil applications and trunk injections, no paclobutrazol was found in the mature fruit (Subhadrabandhu, 1999).

Considering the amount of paclobutrazol needed to be consumed to cause a health issue and that paclobutrazol does not move into fruit, eating walnuts or using them for cattle feed has little to no risk of causing health issues.

In addition, as mentioned earlier, Cambistat is applied to the sub-surface soil at the base of the tree which minimizes off site movement or coming into contact with humans, cattle, or pets.

Question: Since the chemical permeates every cell of the tree affecting its hormones, is it dangerous to compost the leaves for vegetable gardens, for landscaping?

Answer: As mentioned previously, the level of paclobutrazol present in leaf tissue is very low. In addition, composting the leaves will further breakdown paclobutrazol. Kupper looked at the dissipation of pesticides during composting for a period of 112 days. Based on the rate of decomposition, paclobutrazol was categorized as a material that can be removed during composting (Kupper, 2008).

Therefore, it is highly unlikely that the use of composted leaves of treated trees in vegetable gardens or landscaping to pose a risk.

Question: The data says it can give off irritating and possible toxic fumes. How will it affect run-off water, ground water?

Answer: Cambistat is injected 4 inches underground making it unlikely to run-off. Once in the soil, Cambistat is bound by soil organic matter until the tree roots absorb it, minimizing off site movement. In addition, measures such as not applying directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark are followed to further minimize the potential for Cambistat to impact run-off water or ground water.

Cambistat is applied to the sub-surface soil at the base of the tree by trained and professional applicators. Cambistat is not sprayed so there is no spray drift. Cambistat is applied below the soil surface where it binds tightly to soil organic matter right at the base of the tree, which minimizes any opportunity that it will come into contact with humans, cattle or pets. All manufacturers are required to conduct soil mobility tests prior to seeking EPA registration. Due to Cambistat ability to bind tightly to soil organic matter it was rated as a product with Low Soil Mobility.

Question: Is it unsafe to allow children and pets near the injected area?

Answer: The effects of Cambistat are highly specific to processes found in plants. Research shows that there is minimal risk to people, pets, and wildlife. Cambistat is applied 4 inches underground at the base of the target tree. Cambistat is held by soil organic matter until the tree roots absorb it, minimizing off site movement. This maximizes the tree growth response, while minimizing the potential for any non-targeted impact including exposure to people, pets and wildlife.

Question: How will the citizens be kept updated on health hazards that are present if they unknowingly engage in any of these activities, as I almost did?

Answer: Rainbow is unaware of how this is done with other products of a similar nature. City of Chico and PG&E intend to initiate a public outreach program when and if a program of PGR use is initiated in the ROW

Literature Cited:

Kupper Bucheli TD, Brandli R(Ortelli D, Edder P {2008} Dissipation of pesticides during composting and anaerobic digestion of source-separated organic waste at 15 full-scale plants. Bioresour Technol 99:7988-799

Ochoa J, Banon S, Franco J, Fernandez J {2009} Distribution in plant substrate and leachate of paclobutrazol following application to containerized Nerium oleander L. seedlings. Spanish Journal of Agricultural Research 7(3), 621-628

Subhadrabandhu S, Iamsub K, Kataoka I {1999} Effect of paclobutrazol application on growth of mango trees and detection of residues in leaves and soil. Jpn. J. Trap. AGR. 43{4}: 249 - 253

Additional Q&A

Q: Are Tree Growth Regulators new?

A: No. Plant and tree growth regulators have been researched and used in the green industry since the late 1970's.

Q: Will PGRs affect the appearance of my tree?

A: Trees treated with Paclobutrazol will typically have a rich green color that can be attributed to an increase in chlorophyll concentration.

Q: Can I use the tree leaves as mulch or ground cover?

A: Yes. Leaves from treated trees can be used as mulch around trees or in gardens.

Q: Can PGRs affect surrounding vegetation?

A: Yes, it is possible to affect the surrounding vegetation if the roots come in contact with the injected Paclobutrazol. The plant growth will be slowed with similar effects as on trees.

Flowers and perennials may be planted near treated trees or shrubs, but leave a space of approx. 12-18 inches between the trunk of the tree or woody shrub and the decorative plants. Note a 10' clearance is to be provided in Chico from untreated trees or residential vegetable gardens.

Q How long have Tree Growth Regulators been available in the US?

A Tree Growth Regulators have been around since the late 1940's and used effectively since the 1980's.

Q Does the Plant Growth Regulator change the plant's genetics?

A The growth control is natural and doesn't change the tree's genetic make-up.

Q Can fertilizers be used if a tree has been treated?

A Fertilizers can still be used along with Plant Growth Regulators.

Q: Are PGRs safe for people, pets and wildlife?

A: Paclobutrazol has an EPA Caution label. The effects of PGRs are highly specific to processes found in plants. There are no reported cases of adverse effects on people, pets, or wildlife. PGRs, by law, must always be applied according to label instructions.

Q: What is the effect of PGRs on groundwater?

A: Industry standards require laboratory and field studies of all technologies. Paclobutrazol is recognized as having Low Mobility in soil (which means minimal leaching potential).

Q: How long will PGRs stay in the tree?

A: The effects from Paclobutrazol lasts from 2 to 8 years depending on species, rates, timing of application and pruning techniques. Typical re-treatment intervals are three years.

ATTACHMENT D

Richard Bamlet

From: scorpio1720@hushmail.com
Sent: Tuesday, September 24, 2019 5:50 PM
To: Richard Bamlet; jeff@oldriverroad.com; aaronhaar@yahoo.com; gcliles@csuchico.edu; elainamcreynolds@gmail.com; annabmoore8@gmail.com; lspbsp@yahoo.com; scottgrist@gmail.com
Subject: My Case Against the Use of Cambistat in Chico
Attachments: My Case Against the Use of Cambistat.doc

Dear Mr. Bamlet and Commissioners,

I plan to attend the Parks Commission meeting on Sept 30th. But I wanted to send ahead the attached file so that you could review it ahead of time and because I could not possibly make all my points in the 3 minute time period. It contains my research and my case against the use of Cambistat in Chico.

Thanks for your consideration on this issue.

Marybeth Wuerthner

Chico, CA

Sent using Hushmail

My Case Against the Use of Cambistat in Chico

To our Chico Urban Forester and the Parks Commission,

Chico was founded in 1872 and is proudly called the City of Trees by its people. For 147 years our city has managed trees without using chemicals to shrink them.

As I researched, I found that Cambistat injection projects have been springing up in cities across the country in the last few years, with reports from the public of nontransparency, environmental concerns, and the unusually rapid pace of the projects. (1) Did you ever wonder why you're suddenly being asked to approve such an unconventional tree management method?

WHO BENEFITS?

We need to ask, who benefits? Cambistat is the latest wonder drug (this time for trees) being pushed by the chemical industry for huge profits. Big utilities collaborate with this industry because it increases profits for them as well, by not having to prune the trees. There is no benefit to the people - just ever more chemicals poured into our environment, unnatural alteration of the beautiful canopy of our urban forest, and lost jobs for tree workers.

I worry that utilities are putting pressure on city leaders to accept this money-making scheme. You, our urban forester and the parks commissioners have been entrusted to promote responsible stewardship practices. Do you really want to go down in Chico history as the commissioners who caved to PG&E and chose to chemically shrink the trees in Chico? Don't jump on the Cambistat bandwagon. Cambistat is not a responsible solution. It's a toxic chemical that has not been properly tested for its long-term environmental and health affects. Please strive to work **with** nature rather than against it. Say NO to the use of Cambistat and opt for healthy, safe, and sane solutions.

When making decisions, track records are important. Let's look at some track records.

PG&E's TRACK RECORD

PG&E has proven to be a monstrous profit-driven monopoly with an abysmal environmental track record, responsible for the Paradise fires, the San Bruno gas explosions, the Hinkely, CA ground water contamination cover-up, and more. (2) We shouldn't for a moment, consider accepting any solutions PG&E has to offer, knowing how they disrespect the environment and their customers - not to mention their utter contempt for trees, the way they hack away at them instead of adopting proper pruning methods. In short, PG&E does not care what happens to the environment **we** have to live in. PG&E DOES NOT CARE ABOUT US!

EPA's TRACK RECORD

Some will argue that the EPA has determined Cambistat to be safe. Let's take a look at EPA's track record, as well as the USDA before 1972. Over the years they've approved lead in gasoline and paint, asbestos, DDT, BPA, and many more dangerous products and medications. After 911, the EPA even approved sending first responders, police and citizens back to the scene claiming the air was safe to breathe, with thousands since, sick and dying from toxic fume inhalation at ground zero. The EPA's track record tells us they are an unreliable guide for chemical safety. (3)

Yet, I did read over the EPA report, as well as Cambistat's label information and the Materials Safety Data Sheet. Despite being approved, these documents admit that water runoff of Cambistat causes environmental damage, that it can contaminate soil and water and should be prevented from entering sewage and drainage systems, and bodies of water, that liver toxicity was found in rats, that Cambistat is flammable creating toxic fumes during a fire, that it's chemically incompatible with chlorates and nitrates, that it creates toxic fumes when it decomposes, that it should not be used on fruit, nut or sugar maple trees that will be harvested within a year, and that it can affect nearby vegetation. (4) BUT IT'S SAFE!

Can you see the double speak going on here?

CAMBISTAT IS EASY TO MISUSE

The application procedure is complicated, requiring extensive knowledge of tree species, soils types and very subjective on-site evaluations based on many criteria in order to determine precisely how to mix the correct dosage for each individual tree. It requires skilled professionals because it is so toxic. A miscalculation or careless handling can cause environmental damage. This makes **Cambistat very easy to misuse or abuse**. And that's why the company carries a disclaimer right on the label absolving them of any responsibility once the product leaves their shelves (4)

Disclaimer:

["Tree injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or tree conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or seller."]

RAINBOW TREECARE TRACK RECORD (subsidiary: T&S Growth Solutions)

Online employee reviews are shocking and eye opening. Employees indicate that these injection jobs are often temporary and/or summer jobs for young adults who don't mind lots of traveling, and who are clearly not skilled professionals with a career in tree care. Their comments are consistent with my observations in #10 below. They also report that the company has poor management, questionable ethical practices, poor employee training, expecting them to work long hours for little pay and to work with chemicals in poorly designed vehicles. They say management pushes hard for production with little

concern for employee safety. More than one person said the company has its perks **if you don't ask too many questions**. Another said he was let go immediately following his expression of concerns about treating nearby fruit-bearing plants without any real explanation. The same situation happened in Chico. (5) Very disconcerting.

WHAT HAPPENED IN CHICO

The Cambistat injections in Chico in October of 2018 show how easily things can go wrong and how easily Cambistat can be unintentionally or carelessly misused, and why I believe environmental damage is inevitable in Chico if Cambistat injections are allowed to continue. Here are my observations and concerns:

1. The public was not notified then, or since. This nontransparency is inexcusable.
2. People who live at the selected addresses for these injections were not notified.
Who selected these trees and why?
3. There appeared to be no oversight from the city, PGE, or the contracted company.
4. I was refused a list of addresses of the treated trees so I could warn my neighbors.
5. A tree on private property next to a home was injected without the knowledge or consent of the property owner.
6. Black walnut trees along my street and others in my neighborhood were treated. Black walnuts are food for people (my family!), cattle, squirrels, birds, raccoons and possums. A decision was made to inject these trees with no consideration whatsoever for the people who may unknowingly eat them or gather them for cattle feed. Likewise, no consideration was given to wildlife that are eating nuts and fruits that are now too toxic for human consumption.
7. A black walnut tree in close proximity to an apple tree was treated.
8. I observed an employee working at the base of my parkway black walnut. PG&E and the company both claim that it was an accident and it was not treated. Who to believe?
9. Markings that are supposed to indicate treated trees are inconsistent or non-existent.
10. The young employee from Minnesota whom I observed did not strike me as an arborist or skilled professional. He did not wear required personal protective equipment. He clearly could not correctly identify tree species or else he would have refused to inject walnut trees, or maybe he was just blindly following orders. He was moving from tree to tree pretty fast too, not spending too much time on the evaluation process.
11. A PG&E arborist who came to my home was unaware what had taken place. When I told him nut trees were treated, he casually told me not to eat the nuts for a year. He couldn't answer my questions nor could he cite any studies that prove Cambistat's safety. He gave me his card, but has since not answered my phone call or email.

QUESTIONS THAT NEED ANSWERS

Cambistat has only been on the market since 2003, not long enough for **published independant studies to determine its long-term and cumulative effects**. Most information available online comes from companies making or selling it. There are so many questions still to be answered:

1. It is not uncommon for Chicoans to grow herbs, vegetables and fruit trees on their parkways. How will Cambistat affect nearby gardens?

2. How will it affect the abundant variety of birds who ravenously feed on berries from trees like Pisache and Chinese Hackberry. What about the wildlife that feed on black walnut, pecan, acorns, etc.? What about the bees who collect nectar and pollen from flowering trees?
3. Since the chemical permeates every cell of the tree altering its hormones, is it dangerous to compost the leaves for vegetable gardens and landscaping?
4. What happens to the air when the wood treated with Cambistat is used for fuel in fireplaces? What about outdoor leaf burning in the fall?
5. Given the fact that Cambistat is flammable, how do we know that it will not cause treated trees to become dangerously incendiary in a wildfire?
6. How will it affect run-off water, ground water? How will it affect aquatic plants, and animals and people who swim, bathe or drink water contaminated with Cambistat?
7. PGE warned me not to eat the nuts from the treated black walnuts for a year. What would happen if I had? How do we know it is safe in the second or third year, or after years of multiple injections?
8. Why does the label warning say to keep children and pets away from treated areas?

It's painfully obvious independent long-term studies of the cumulative effects of Cambistat are needed before such a strange and unnatural approach to tree care should ever be considered. More importantly, we as a society, need to stop turning to chemicals as the easy way out and the answer to everything. We need to respect nature, approach the latest "scientific advancements" with a critical eye, strive to keep our City of Trees a safe and clean environment to live in, and always ask "who benefits?". Say no Cambistat.

ALTERNATIVE SOLUTIONS

There are healthier, safer and saner solutions that I hope you will consider now that you've reviewed my research and my personal experience with Cambistat.

1) Require PG&E to insulate the wires running through tree limbs.

Insulated wires are used all over the country. It is far cheaper than putting the wires underground and **is proven effective in greatly reducing the chances of a tree limb causing a fire.** With insulated wires, the need to prune trees will be far less often. Southern California's Edison Company has already started insulating their wires for the express purpose of mitigating wildfire risk and increasing public safety.(6) There is no reason why PG&E can't do the same.

2) Require PG&E to follow standard lateral pruning techniques that encourage tree growth away from the wires. Pruning will be less necessary with insulated wires. But when it is necessary, this solution is a no brainer. Lateral pruning encourages growth away from the wires. PG&E deliberately prunes by topping and rounding which actually encourages rapid regrowth back into the wires! Plus, it is unhealthy for our trees! City Utilities of Springfield, Missouri has had great success in keeping tree limbs from growing into the wires by employing these basic lateral pruning techniques.(7) We cannot allow PG&E to push their chemicals on Chico and ignore these obvious solutions!

SOURCES

(1) Public Concerns

Hillsboro, Ohio

<https://www.timesgazette.com/news/3437/mayor-arborist-oppose-aep-tree-treatment-plan>

Paw Paw, Kalamazoo, Michigan

https://www.mlive.com/opinion/kalamazoo/2011/06/letter_american_electric_power.html

Greensboro , Charlotte, & Durham, North Carolina

<http://greensboroperformingarts.blogspot.com/2014/04/just-say-no-to-cambistat.html>

<https://www.wfae.org/post/duke-energy-stops-tree-treatments-after-customers-complain-poor-communication#stream/0>

<https://experiencelife.com/article/arbor-day-2014-stand-up-for-trees-and-the-environment/>

Midtown, Montgomery, Alabama

<http://www.midtownmontgomeryliving.com/?p=1287>

(2) PG&E Track Record

https://en.wikipedia.org/wiki/Hinkley_groundwater_contamination

<https://www.theverge.com/2019/5/15/18626819/cal-fire-pacific-gas-and-electric-camp-fire-power-lines-cause>

<https://www.npr.org/2018/12/14/677003961/pg-e-falsified-gas-pipeline-safety-records-regulators-say>

(3) EPA Track Record

<https://newrepublic.com/article/92252/pesticide-ddt-usda-agriculture>

<https://www.factcheck.org/2018/09/did-the-epa-just-approve-use-of-asbestos-in-the-u-s/>

<https://www.epa.gov/sciencematters/are-bpa-substitutes-any-safer-bpa>

<https://nypost.com/2018/08/11/nearly-10k-people-have-gotten-cancer-from-toxic-9-11-dust/>

<https://www.ucsus.org/our-work/center-science-and-democracy/promoting-scientific-integrity/ground-zero-air-pollution.html>

<https://www.nbcnews.com/news/us-news/epa-eases-path-new-chemicals-raising-fears-health-hazards-n838201>

(4) Reports

Cambistat Spec Label

http://www.treecarescience.com/pdf/Growth_Regulators/Cambistat_Specimen_Label.pdf

https://www.rsi.com/wp-content/uploads/Cambistat_2_SC_LABEL1.pdf

EPA Pesticide - Summary Document

archive.epa.gov/oppsrrd1/registration_review/web/pdf/paclobutrazol_summary.pdf

Materials Safety Data Sheet

<https://www.thetreegeek.com/wp-content/uploads/Cambistat-MSDS.pdf>

Video: Cambistat Application Introduction and Overview

<https://www.youtube.com/watch?v=XIhMOFFcc7M>

(5) Employee Reviews

<https://www.indeed.com/cmp/Rainbow-Tree-Company/reviews>

(6). Insulating Wires

Electrical Contractor Magazine - **The Link Between Power Lines and Wildfires**

<https://www.ecmag.com/section/systems/link-between-power-lines-and-wildfires> While undergrounding is often prohibitively expensive, there is also a growing interest in having utilities insulate their power lines, making them less likely to trigger sparks and resulting fires.

CalMatters - **Power Companies Must Do More to Fireproof Their Equipment**

<https://calmatters.org/environment/2018/11/california-power-companies-fireproofing/> Edison has begun replacing older lines with ones that are more robustly insulated, and the company utilizes drones to monitor on-the-ground conditions. PG&E, like most of the other companies, is expanding its weather forecasting.

Southern California Edison - **Insulated Wires Help Reduce Fire Risk**

<https://energized.edison.com/stories/insulated-wires-help-reduce-wildfire-risk>

Edison is taking a proactive approach to try to mitigate any wildfire in these areas.

New York Energy Weekly - **Wildfires Caused by Power Lines - Some Possible Solutions to Curb the Problem** <http://nyenergyweek.com/wildfires-power-lines-solutions/>

In order for California to prevent such catastrophic wildfires in future, there is a need to find measures to make existing power systems safe. Here are some measures that can be taken: 1. Undergrounding wires ... 2. **Insulating the lines and wires**

CA Utility Replacing 1000s Of Miles Of Power Lines To Reduce Wildfire Risk

<https://sanfrancisco.cbslocal.com/2018/09/10/ca-utility-replacing-1000s-of-miles-of-power-lines-to-reduce-wildfire-risk/> CBS - San Francisco

(7) Lateral Tree Pruning **FAQ from City Utilities of Springfield, Missouri**

<https://www.cityutilities.net/wp-content/uploads/tree-faqs.pdf>

"Why does City Utilities of Springfield, Missouri prune trees the way they do?"

Although utility pruning has different objectives than other types of pruning, CU arborists adhere to professional industry standards recognized by the International Society of Arboriculture. The natural structure of the tree, the growth pattern, and the tree's mature size and shape are all considered before pruning begins. The intent is to remove branches back to lateral branches or parent stems that will grow away from utility facilities. Topping or rounding over the tree's canopy is discouraged because this practice severely damages trees and encourages rapid re-growth back into facilities."

Thanks for your consideration on this issue. Marybeth Wuerthner, Chico, CA

Richard Bamlet

From: J. Crane <mr.john.crane@gmail.com>
Sent: Tuesday, October 1, 2019 9:31 AM
To: Richard Bamlet; parkinfo@ci.chico.ca.us; J. Crane
Subject: Resident request (Opt Out Cambistat Tree Treatments)

Follow Up Flag: Flag for follow up
Flag Status: Flagged

10/01/2019

Mr. Bamlet, it is my understanding that the City of Chico has a current standing agreement with PG&E that allows them to control tree growth in Chico greenways and open spaces by the application of Cambistat injections upon trees in public spaces and not on individual private residences.

- 1) How can I opt out of this treatment on public trees that may be adjacent to my property please?
- 2) Can you tell me when the last application of Cambistat was applied near my residence (address below) please?
- 3) Can you relay to me when the next Cambistat treatment is schedule in the area of East 3rd Ave and Spruce Ave in Chico please?

Thank You:

John Crane (Home Owner)
452 East 3rd Ave Chico
mrjohncrane@gmail.com

Richard Bamlet

From: Anne Jones <abjones3@gmail.com>
Sent: Saturday, September 7, 2019 8:30 AM
To: Richard Bamlet
Subject: Cambistat

Dear Mr. Bramlet,

It just came to my attention that Cambistat is being used to stunt growth in trees near power lines. And also that it's not just a few but all trees near the lines.

Can you confirm this for me? Can you speak also to the many environmental concerns this brings up? How does this affect the soil, long term? Other trees nearby? Are these trees ever used for firewood and what kind of off-gassing does burning the wood make? How are animals and birds affected who use the tree's parts daily. What affect does rain have on leaching the chemicals into air, soil, leaves?

Last, I don't recall hearing about public hearings/meetings so I hope you can make that change for any future decisions about chemical infusions to Chico trees in the future. Thank you for you time and consideration.

Sincerely,

Anne Jones
Concerned Resident

Richard Bamlet

From: Ashley Morse <carrion.ashley@gmail.com>
Sent: Wednesday, September 4, 2019 2:29 PM
To: Richard Bamlet; gcliles@csuchico.edu; jeff@oldriverroad.com; scottgrist@gmail.com; elainamcreynolds@gmail.com; lspbsp@yahoo.com; elaina; annabmoore8@gmail.com; lspbsp@yahoo.com; aaronhaar@yahoo.com
Subject: Cambistat Injections

Please take the Cambistat issue to the City Council so the public has a chance to discuss it.

Thank you,
Ashley Morse

--
Ashley Morse

Richard Bamlet

From: Janet Leslie <janles@igc.org>
Sent: Tuesday, September 3, 2019 10:21 AM
To: Richard Bamlet; Jeffrey Glatz; Garrett Liles; Scott Grist; Anna Moore; Aaron Haar; Lise Smith Peters; Elaina McReynolds
Cc: Jim Anderson; Bob Runyan; Kathy Runyan; Scott Wolf; Linnea Hanson
Subject: Cambistat? Please reconsider.

Dear Richard Bamlet and Chico Park commissioners,
I am impressed and convinced by Tom Wuerthner's letter (below) and ask that you reconsider the use of this toxic chemical on Chico trees. There are better solutions.

Thank you,
Janet Leslie

Here is Tom Wuerthner's letter:

Cambistat Injections Again!

In October 2018, Chico urban forester, Richard Bamlet and the Parks Commission approved Cambistat injections into the soil around some trees in Chico under power lines to stunt their growth 40 to 90%. See my post on Jan 4, 2019 - "Concerns about Chico's New Tree Policy...". This was supposedly a "test run". Now suddenly PGE says they're going to do it in Chico, period. Unless we speak up. The soil around every treated tree must be re-injected every 3 years to adequately stunt growth. I've since learned the EPA deemed it toxic enough to make it illegal to use in the soil on or around food crops. There is a much more fire-safe, healthier, and saner solution - that is for PG&E to insulate the wires around tree limbs growing near wires. Cambistat has not been thoroughly tested. We need to learn from past mistakes. Chemicals put on the market without thorough testing occurs all the time and often leads to disastrous results. At one time, asbestos was widely used. So was lead used in paint and gasoline. DDT was sprayed on crops. Then years later, people are sick and dying, and the chemical is banned. Opioids were widely over-prescribed. Now we have an epidemic of prescription opioid addiction. We have to stop turning to chemicals as the easy way out and the answer to everything. There are many questions still to be answered: How will the injections affect nearby vegetable and herb gardens, nearby fruit trees? It is known to cause severe liver damage in rodents. So what happens to the birds, squirrels, raccoons who eat berries, nuts, fruit from these trees? I eat black walnuts, for instance, and had for many years gathered them for cattle feed for the ranchers. What happens to humans and cattle who eat the treated black walnuts? Since the chemical permeates every cell of the tree altering its hormones, is it dangerous to compost the leaves for vegetable gardens and landscaping? What happens to the air when the wood treated with this chemical for years is burned in fireplaces? The data available says the chemical itself can give off irritating and possible toxic fumes. How will it affect run-off water, ground water? How will people be kept updated on health hazards present when they unknowingly engage in activities on treated soil, as I almost did? Where are our local environmentalists on this issue? This is all taking place without the knowledge or consent of the public. Failure to notify the public, which is even against the company policy that produces the chemical, is inexcusable! I believe the people of Chico are due the respect of not only being notified, but given ample time to weigh in on such an important issue at the City Council. We live in the "City of Trees"! What are we thinking?? Write to the Urban Forester, Richard Bamlet and the Chico Park Commissioners. (emails below) Their duty is to promote responsible stewardship practices of the land in Chico. If you agree that a simpler and safer solution would be for PG&E to insulate the wires near tree limbs instead of pouring chemicals into our environment, please let them know. Urge them to take the issue to the City Council agenda so the public has a chance to discuss it. Richard Bamlet richard.bamlet@chicoca.gov Jeffrey Glatz jeff@oldriverroad.com Garrett Liles

ATTACHMENT E

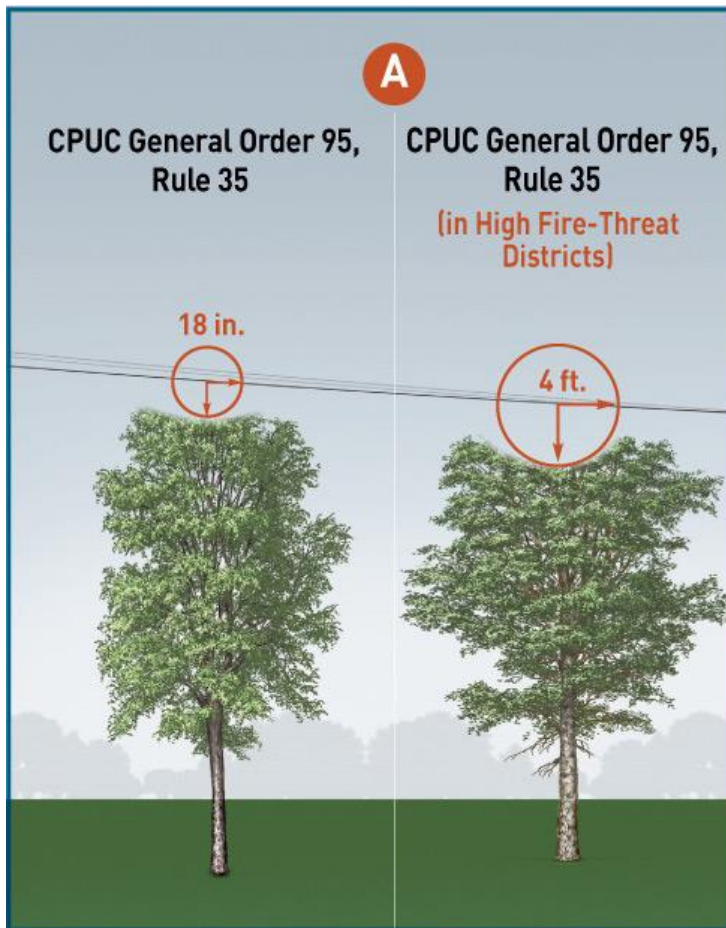
Source: https://www.pge.com/en_US/safety/yard-safety/powerlines-and-trees/laws-and-regulations.page

Laws and regulations

When performing our vegetation management duties as required by law, we do our best to preserve the trees on your property. In some cases, however, problem trees or improperly planted trees pose too high a risk to public safety and electric system reliability and must be removed. If we don't comply with regulations, we put the public at risk, increase the possibility of outages and face hefty fines.

These are the regulations we follow:

General Order 95, issued by the California Public Utilities Commission (CPUC), requires a year-round clearance below power lines of a minimum 18 inches. New fire safety regulations require a minimum clearance of four feet year-round for high-voltage power lines in the CPUC-designated High Fire-Threat Districts.



PRC 4292 is administered by the California Department of Forestry and Fire Protection (CAL FIRE). It requires that PG&E maintain a firebreak of at least 10 feet in radius of a utility pole, with tree limbs within the 10-foot radius of the pole being removed up to 8 feet above ground. From 8 feet to conductor height requires removal of dead, diseased or dying limbs and foliage. This applies in the State Responsibility Area during designated fire season.



PRC 4293, administered by CAL FIRE, requires a 4-foot minimum clearance be maintained for power lines between 2,400 and 72,000 volts, and a 10-foot clearance for conductors 115,000 volts and above. PRC 4293 also requires the removal of dead, diseased, defective and dying trees that could fall into the lines. This applies in the State Responsibility Area during designated fire season.



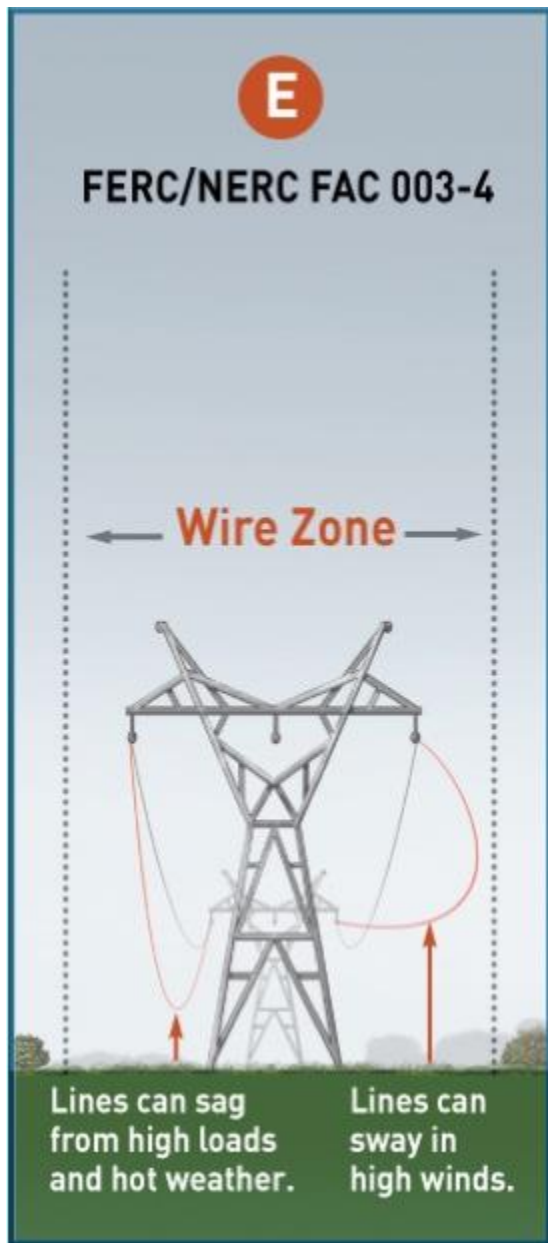
ESRB-4

Following the Governor's January 2014 Drought State of Emergency Proclamation, the CPUC issued Resolution **ESRB-4**. The resolution directs utilities to take practicable measures necessary to reduce the likelihood of fires. Those measures include increasing vegetation inspections; removing hazardous, dead and sick trees and other vegetation near electric power lines and poles; sharing resources with CAL FIRE to staff lookouts adjacent to the utilities' property; and clearing access roads under power lines for fire truck access.



NERC FAC 003-4 is a Federal Energy Regulatory Commission (FERC)-approved standard implemented to eliminate transmission outages and resulting blackouts due to vegetation contact. The standard applies to all utilities across the United States and directs them to manage vegetation clearances between trees and power lines to ensure the reliable operation of the transmission system.

The standard applies to transmission line voltages carrying 200,000 volts and higher and certain lower voltages transmission lines identified as critical by the Western Electric Coordinating Council (WECC)





DATE: 11/22/19
 TO: Bidwell Park and Playground Commission (BPPC)
 FROM: Linda Herman, Park & Natural Resources Manager (P&NRM)
 SUBJECT: CONSIDERATION OF A PROVIDING ADDITIONAL RESTROOMS IN CITY GREENWAYS

REPORT IN BRIEF:

At its 10/28/19 meeting, the BPPC discussed the feasibility and costs to provide eight additional portable restrooms in City Parks and greenways. The BPPC requested that Staff recommend locations to place 4, 6, and 8 portable restrooms on Lindo Channel, Big Chico Creek, and Little Chico Creek. (**Report - Linda Herman, Park & Natural Resources Manager**).

Recommendation: The Commission is requested to provide direction regarding this item.

BACKGROUND:

On 10/28/19, the BPPC discussed the costs to place additional portable restrooms at the eight locations along the City's greenways. The locations are depicted on the attached map (Attachment A). Staff informed the Commission that according to the City's contractor the estimated monthly and annual costs to add 1, 2 or 8 portable ADA restroom, cleaned 5 times a week, is as follows:

	<u>Cost Per Month</u>	<u>Annual Cost</u>
One (1) ADA toilet, (1) sink, serviced 5 days a week	\$1,356	\$16,272
Two (2) ADA toilets, (2) sinks, serviced 5 days a week	\$2,712	\$28,944
Eight (8) ADA toilets (8) sinks, serviced 5 days a week	\$10,848	\$130,176

Cost with the expected \$20 waste removal fee for each toilet service due to trash:

One (1) ADA toilet, (1) sink, serviced 5 days a week	\$1,790	\$21,480
Two (2) ADA toilets, (2) sinks, serviced 5 days a week	\$3,580	\$42,960
Eight (8) ADA toilets (8) sinks, serviced 5 days a week	\$14,320	\$171,840

There could also be additional costs for replacement for any damages to the restrooms, which will be charged each time damage occurs and that in some cases, trash containers may be needed. The contractor also advised that the restrooms need to have 20 feet of clearance and be on a paved surface for them to be serviced by their pump truck. The truck also cannot drive across pedestrian/bicycle bridges. The company also did not recommend that the portable restrooms be located near creeks as they are often vandalized and tipped over.

Based on the probability that the restrooms will need to be on residential streets in some locations to be accessed by the contractor, the Public Works Director O&M suggested allowing Staff to review the locations or other locations to help prioritize preferred locations. The Commission approved directing Staff to obtain a more information as to the best locations in Bidwell Park and the greenways, for four, six, and eight additional portable restrooms.

DISCUSSION:

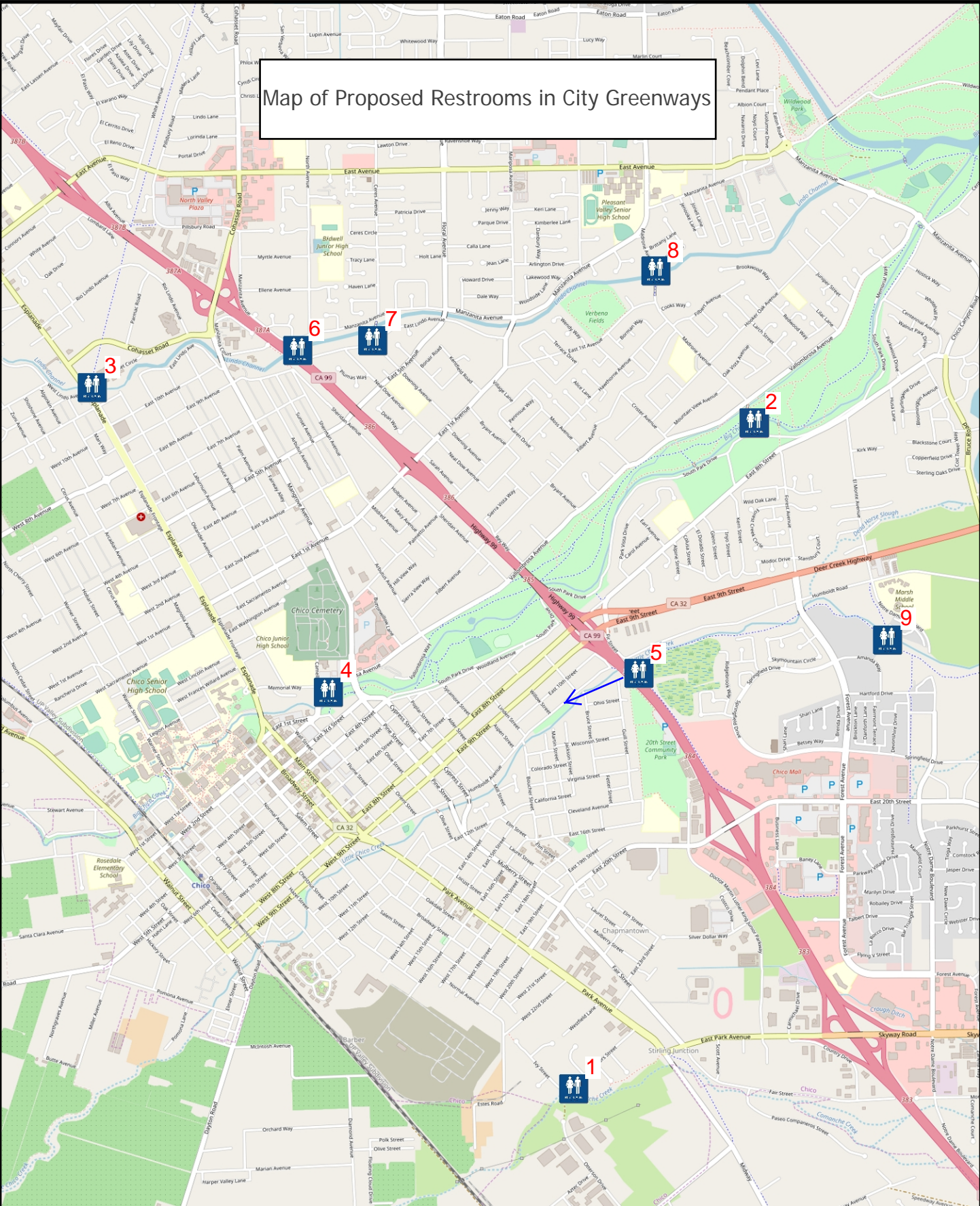
There are pros and cons to all the locations, with some being more problematic than others. Access for the contractor and proximity to residents and businesses were also factors. After consideration of the eight locations and others, the following table depicts Staff's priority rankings and the reasons for the rankings.

Location	Ranking	Reasons
Comanche Creek at Otterson Drive near the bridge.	1	Middle of a greenway entirely on City property, more room and easy access for contractor. No restrooms currently available for greenway users and passing through bicyclists.
Peterson Drive in Bidwell Park, at Madrone	2	Middle of a park, easy access for contractor, entirely on City property. Provides additional restrooms on south side for all park users.
Bridge over Lindo Channel at the Esplanade	3	Accessible to contractor, offers facilities for the nearby busy bike path.
Bridge over Big Chico Creek at Annie's Glen.	4	On busy street. If chosen, recommend move it to 1st Street entrance near parking stalls instead of bridge for access by contractor.
Humboldt Park	5	No restrooms currently available for park users. Accessible to contractor. Entirely on City property. Mixed business and residential neighborhood.
Crossing adjacent to Hwy 99 on Lindo Channel	6	Difficult access for contractor, steep slopes, busy traffic area
Bicycle/footbridge over Lindo Channel at the end of Downing.	7	Needs to be placed on residential streets.
Bridge over Lindo Channel at the north end of Madrone.	8	Needs to be placed on residential streets. In the middle of neighborhoods, on school bike route,
Bridge over Little Chico Creek at El Monte/ Notre Dame.	9	No access for contractor, near school bike route

Attachments:

Attachment A: Map of Proposed Restrooms Locations

Map of Proposed Restrooms in City Greenways



Mercator Projection
 WGS84
 USNG 10SEJ-10SFK
 SARTopo





DATE: 11/21/2019
TO: Bidwell Park and Playground Commission
FROM: Natural Resources Committee (Commissioners Grist (Chair), Haar, and Smith-Peters)
SUBJECT: REPORT ON THE NATURAL RESOURCE COMMITTEE MEETING HELD ON 11/20/19

1. CALL TO ORDER

Committee Chair Grist called the meeting to order at 6:05 pm.

Attendees: Commissioners present: Scott Grist (Chair), Lise Smith-Peters
Commissioners absent: Aaron Haar
Staff/Consultants present: Linda Herman (P&NRM), Jim Dempsey (Dempsey Vegetation Management) and Wolfie Rougle (Butte Co. Resource Conservation District)

2. REGULAR AGENDA

2.1. CONSIDERATION OF A DRAFT RESTORATION PLAN FOR THE NATURE CENTER AREA

On 5/20/19, the Bidwell Park & Playground Commission (BPPC) approved restoring the tree-clearing area near the Nature Center area in Lower Bidwell Park as a Valley Oak Woodland demonstration site. The Natural Resources Committee (NRC) will consider a rough draft restoration plan prepared by the City's consultant Dempsey Vegetation Management to achieve this goal. **Report – Linda Herman P&NRM and Jim Dempsey)**

Recommendation: The Committee is requested to provide comments and recommendations to Staff and the BPPC regarding the draft restoration plan.

Linda Herman provided an overview of the proposed plan. Jim Dempsey reported that he had some questions of the Committee. One was to clarify that the project area boundaries should be adjusted slightly to not include the area leased by CARD for the Nature Center. The Committee agreed. Dempsey also questioned whether the large, non-native trees, such as Incense Cedars, should be removed over time since they are typically not found in Valley Oak Woodlands, or if they should remain for shade benefits.

Public Comment:

Ally Meders Knight stated that the Mechoopda Tribe has much history, knowledge, and expertise regarding native vegetation and restoration, and would be able to help guide the City in developing an appropriate restoration plan for this area.

John Merz questioned the current signage stating there are not enough of them and that they do not accomplish what they were intended to do. He also stated that the area needs better fencing and that public courtesy noticing should occur when herbicides are used.

Woody Elliott asked why the invasive Catalpa and Hackberry trees near the Nature Center pond are not being removed and whether CEQA was conducted for the plan.

Richard Harriman concurred with Mr. Elliott regarding the CEQA requirements and requested a copy of the Nature Center lease.

Wolfie Rougle replied that since it is a small area and it is a restoration project that the project is likely a Categorical Exemption under CEQA.

Jim Dempsey stated that CEQA review will delay implementation of the restoration Plan for a year.

The Committee directed Staff to consult with the Mechoopda Tribe regarding the plan, to begin CEQA review for the project, and report back to the Committee at the next NRC meeting

2.2 UPDATE ON DEVELOPMENT OF A VEGETATIVE FUELS MANAGEMENT PLAN

The City was awarded a Community Wildfire Prevention grant from CalFire to develop a Vegetative Fuels Management Plan (VFMP) for Bidwell Park and City parks and greenways. Staff will provide an update on the status of developing the plan. **(Report – Linda Herman P&NRM)**

Recommendation: None, this is an information item only.

The Committee was provided an overview of the proposed VFMP. Staff also discussed the five potential implementation projects, stating that the projects may change after the fire risk assessment, biological surveys, and public input. It was also stated that an Environmental Impact Report for the plan and project was anticipated.

Public Comment:

Timmarie Hamill suggested that the City's Stormwater Resource Plan might provide some guidance on potential implementation projects.

Ally Meders Knight stated she is glad to see that the City is doing this plan and recognizing the benefits that fire can bring for vegetation management. She also suggested that Staff consult with Bill Tripp on how to successfully use and introduce controlled burns to the public.

Meleiza Figueroa concurred and spoke about the carbon sequestration benefits of biochar from control burns.

Woody Elliott asked how the EIR will address both the plan and the implementation projects in which Staff responded that it will be a programmatic EIR, with more specific CEQA to be conducted for each project before implementation.

2.3 CONSIDERATION OF CHANGES TO THE ANNIE BIDWELL TRAIL IN UPPER BIDWELL PARK.

The Committee will consider Staff's proposal to make some changes to the western portion of the Annie Bidwell Trail on the south side of Upper Bidwell Park. **(Report – Linda Herman P&NRM)**

Recommendation: The Committee is requested to provide comments and recommendations to Staff and the BPPC regarding this proposal.

Linda Herman provided brief overview of the request to include the new trail that runs through the olive grove be incorporated as the Annie Bidwell Trail. Staff also requested that the trailhead for Annie Bidwell be established at the Centennial Chico Canyon Road entrance.

Staff also stated that after receiving concerns from the mountain bike community that the potential of rerouting or decommissioning sections of the South Rim trail be tabled until after the Upper Park trails assessment that is being compiled by the City's consultant, Trails Lab is complete.

Public Comment:

Woody Elliott commented on CEQA review for the project and how it should not be piece-mealed.

Mr. Harriman commented on the CEQA process and the need for public vetting process.

Jenna Walker, Shawn Hughes, Mike Matiasek and several members of the mountain bike community voiced concerns about the changes to the South Rim trail but agreed that the olive grove section made sense for Annie Bidwell. They also expressed concern about other trails being built by users without City permission.

The Committee concurred with the proposal to identify this section as part of the Annie Bidwell Trail and to postpone discussion of the South Rim Trail.

2.4 UPDATE ON THE CALIFORNIA CONSERVATION CORPS FUEL REDUCTION GRANT

The Shasta Cascade California Conservation Corps (CCCs) and the Park Division worked together to obtain a grant to provide 8,000 hours of labor to reduce vegetation fuel loads and fire risks in Bidwell Park. Staff will provide an update on this grant project. ***(Verbal Report – Linda Herman P&NRM)***

Staff updated the Committee on the work that the CCCs are currently doing in Five Mile area to remove and chip downed dead wood. Committee Member Smith-Peters asked if they are “bucking” up the wood. Staff responded the crews are collecting and chipping smaller downed dead wood and only cutting larger trees into 8 ft lengths if they are not already completely touching the ground.

Public Comment:

Wood Elliott asked if CEQA was conducted for this project.

Mr. Harriman requested a copy of the CEQA review be provided to the full Commission at their meeting on Monday November 25, 2019.

The Committee requested that Staff provide a copy of the CEQA review for this grant project, which is actually the Bidwell Park Master Management Plan EIR Notice of Determination attached as Attachment 2 to this report.

3. BUSINESS FROM THE FLOOR

Members of the public may address the Committee at this time on any matter not already listed on the agenda, comments are limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda.

Public Comment

Woody Elliott spoke From the Floor regarding CEQA review for the goat grazing at Foothill East Preserve.

He also requested the following information regarding the Peregrine Point Disc Golf Course and the Outside Recreation Advocates, Inc (ORAI) agreement:

1. Lack of mulch on the new alternate basket locations
2. Completion of the tree protection measures
3. Installation of new signs on the tees and kiosks
4. Conflict between the agreement and the exhibit regarding ORAI fiscal responsibilities
5. Status of BPPC’s 5-year review of the agreement with ORAI

4. ADJOURNMENT

The meeting was adjourned at 8:17 p.m. Unless otherwise noticed the next regular Natural Resource Committee meeting will be held at 6:00 p.m. on 12/18/19.

ATTACHMENTS:

Attachment A: 11/20/19 NRC Agenda/Reports

Attachment B: CEQA Review for CCC Project



BPPC Natural Resource Committee Report

Meeting Date 11/20/19

DATE: 11/14/19
TO: BPPC Natural Resource Committee (Commissioners Grist (Chair), Haar, and Smith-Peters)
FROM: Linda Herman, Parks and Natural Resources Manager
SUBJECT: CONSIDERATION OF A DRAFT RESTORATION PLAN FOR THE NATURE CENTER AREA

REPORT IN BRIEF:

On 5/20/19, the Bidwell Park & Playground Commission (BPPC) approved restoring the tree-clearing area near the Nature Center area in Lower Bidwell Park as a Valley Oak Woodland demonstration site. The Natural Resources Committee (NRC) will consider a rough draft restoration plan prepared by the City's consultant Dempsey Vegetation Management to achieve this goal.

Recommendation: The Committee is requested to provide comments and recommendations regarding the draft restoration plan and questions from the consultant.

BACKGROUND:

At its 5/20/19 and 6/24/19 meetings, the BPPC approved the NRC's recommendations to conduct a baseline vegetation survey, to treat invasive non-native weeds, and prepare the Oak Woodland restoration plan for the tree-clearing area near the Nature Center in Lower Bidwell Park. The Park Division contracted with Jim Dempsey of Dempsey Vegetation Management, who has vast experience and expertise in vegetation management and restoration, to complete these tasks. It was also agreed by the NRC and the BPPC to wait a period of time to see what transpires at the site after treatment and over the coming months.

DISCUSSION:

Mr. Dempsey has prepared a rough draft of a plan to attempt to restore the area as a Valley Oak Woodland demonstration site, which is attached as Exhibit A. In summary, the draft plan proposes to:

1. Restore the area as a native vegetation site to make it more fire resistant and climate change resilient.
2. Provide desirable native plants without irrigation, if possible, and to control undesirable plants.
3. Foster the growth of existing desirable native volunteers on site
4. Plant additional natives to complement and augment existing vegetation to:
 - a. Re-establish shade canopy
 - b. Achieve a shaded fire fuel break spacing standard
 - c. Improves existing species diversity, and
5. Provide a 3-year plant establishment period and long-term maintenance schedule.

Mr. Dempsey provided an estimated cost of \$1,287 for plant materials, \$1,400 for herbicide weed control, and an estimate of 45 hours of skilled labor needed for planting. He is also seeking the NRC's input on the following questions and ideas presented in the draft plan that will help formalize the final plan:

- Whether to adjust the area to reflect the CARD's current leased boundaries of the Nature Center
- Whether the NRC and BPPC are interested in also providing recreational or interpretive uses in the area.
- Should existing standing exotic trees, such as Black Walnuts and Incense Cedars, be removed in phases.

Attachments:

Exhibit A: Draft Restoration Plan

DRAFT RESTORATION PLAN FOR NATURE CENTER CLEARING AREA.

(NRC and BPPC questions - phase out remaining standing exotic trees: which if any black walnut and incense cedar to keep? See notes in 6/19/19 NRC agenda survey report on these species attached as Exhibit A)

PURPOSE

Restore the cleared area and surroundings (total two acres) to native vegetation. *(Assumes no recreation nor interpretive features are considered?)*. Within the tree canopy opening ("clearing" of ~0.7 acre), plantings will complement existing volunteer natives such that intended spacing is consistent with a shaded wildfire-fuel break vegetation spacing standard¹ after 10-15 years. All non-natives will be controlled over the entire two acres during the three years of establishment following initial plantings.

SITE LOCATION

(reduce this area per C.A.R.D. management of the Nature Center parcel/perimeter? Note that current positions of restoration area signs do not correspond with this description.)

The two acre area is delimited by Cedar Grove Way, the bike path on north side of East 8th Street, a line following the west roof line of the Nature Center to the large Valley oak between Nature Center and Lab, a line from that Valley oak to trunks of two walnut trees west of the Lab, and the paved road on the north side.

MEANS

Restoration consists of establishment of desirable plants without irrigation and control of undesirables.

Establishment of desirable plants involves finding native volunteers on site (selecting for species variety and structure at the shaded fuel break spacing standard) and encouraging their successful growth over three years. This may include placing temporary protection (staked tree tubes, wire mesh) from animals (deer, rodents, people) and wood chip mulch, and removing competing plants including natives within the mulch perimeter of 24"+ radius from each selected plant.

¹ Shaded wildfire fuel break standard for this purpose: individual tree canopies separated by $\geq 15'$ of open sky after 10-15 years growth= canopy $\sim 20'$ diameter for Valley oaks; shrubs separated by open space that is 2x their mature height from adjacent shrubs or tree trunks or herbaceous patches; herbaceous vegetation planted in patches of 100-400 sq. ft. by species.

Additional natives will be needed to complement volunteers for several reasons: lack of distribution of trees to reestablish shade canopy; the heavy wood chips on the site will suppress native seed bank that could otherwise volunteer; expected mortality ('crop failure' to weather or pathology, herbivory, human damage); and the opportunity to add native species diversity value in the course of restoration (ecological succession from sunny opening herbs/shrubs to shaded forest) of this future shaded Valley oak forest stand. Blue and interior live oak (10% of trees to be established) are suggested to hedge/adapt for climate change future (e.g. lowering of ground water table affecting Valley oaks).

Weed control will be needed for the three seasons of establishment: typically this may be early March and mid May for winter-spring control of annual weeds, May for follow up on resprouting stumps, and fall for treating additional mature trees to be phased out as plants grow out in the clearing.

Irrigation is not necessary, however manual irrigation during the first year or two can help ensure establishment, and this might be weekly to extend the spring growing season (until temperatures are 85-90degF), and thereafter only once a month deeply (e.g. 5 gallons/tree) until fall/winter rain.

FOLLOW UP WORK AFTER YEAR 3 OF PLANT ESTABLISHMENT

It may take 4-8 years for Valley oaks (from acorns) to grow sufficiently above deer browse height plus develop free standing trunk support before removing tree tubes and stakes.

Recommend phasing out of remaining exotic trees remaining on the site (Catalpa, hackberry, incense cedar, black walnut, pistache) after the clearing has sufficient growth to keep the area from looking too bare, perhaps starting in fall 2022. If any of these individuals do not pose a potential fall hazard and they are >7" diameter at 12' they might be left standing dead as a snag wildlife habitat (for bole nesting birds, bats, or perches), or if felled then the bole positioned on the site as whole as possible (minimize bucking up) with full ground contact as downed coarse woody wildlife habitat (insects important to food chain, reptiles, amphibians). Neither dead snags nor ground contact coarse wood contribute to wildfire fuels hazard (with respect to fire spread on this flat site).

Like the rest of the park but priority for value-added restoration sites, vegetation should then be monitored ongoing for invasives and promptly treated to prevent spread.

ESTIMATED COSTS

The following table provides estimated costs for nursery stock and protection materials, planting labor/tools, and weed control labor/materials.

Planting materials cost estimate:

	#	\$/	cost
tree tubes 5', bird net, zip ties	50	4	\$200
orchard stakes 8'x2"round	50	5	\$250
hardware cloth 3/8", roll 25' x 24"	1	45	\$45
Valley oak acorns/existing pots	20*	on hand	\$-
shrubs coffeeberry, elderberry, ...	30*	10	\$300
herbs milkweed, goldenrod, ...	49*	3	\$147
x200 plugs of grass, sedge	2*	155 + 190	\$345
			\$1,287

Labor:

Using skilled labor (not volunteers) estimated at 45 hours (not volunteers).

Weed control, using existing City contract, estimated at \$1,400 through fall 2022.

*Red numbers to be determined

RESTORATION TASK CALENDAR – Attached as Exhibit B

*

ITEM 2.1 EXHIBIT A
SURVEY OF VEGETATION IN THE NATURE CENTER AREA

(Conducted by Jim Dempsey Vegetation Management on 6/2/19)

VEGETATION TYPE	LOCATION AND OBSERVATIONS	RECOMMENDED ACTION
NON-NATIVE ANNUALS AND PERENNIALS		
Rubus armeniacus = Himalayan blackberry	Abundant more in open understory areas or clearing edge. Actively growing.	Recommend herbicide control asap while small or as long as actively growing to avoid collateral damage, outcompeting natives, and avoid buildup of thicket biomass later. Otherwise treat after fruiting is done in September until frost.
Vinca = periwinkle	Two patches — behind Nature Center Lab approximately 50'x20', and behind the Nature Center building patch is of similar size.	If herbicide control is desired this would be during active new growth starting late January - May, and can take a couple of years. Manual control would involve substantial root removal over similar period, releasing seed bank (weeds) from soil disturbance.
Silibum - milk thistle	Present, not currently abundant.	Should be eliminated ASAP before producing seed that would love to spread into the disturbed area.
Cirsium = bull thistle	Present, not currently abundant.	Should be eliminated ASAP before producing seed that would love to spread into the disturbed area.
Exotic weedy grasses (Bermuda, Italian ryegrass, squirrel tail etc.)	Present west side of Lab and between the Center and Lab	These seed sources could easily spread to the disturbed area, hence consider mowing short with a bagged lawnmower ASAP to collect and dispose of this season's seed production.
Exotic vetch	Could be an abundant colonizer in the disturbed area within 5 years if left alone,	Whether a priority for control depends on what is desired to accomplish and how, could compete with desired plantings.
Bur chervil (or similar various species)	This plant is a hassle for visitors, burrs in socks etc. A likely abundant colonizer in the disturbed area if left alone	Whether a priority for control depends on what is desired to accomplish and how, e.g. could compete with desired plantings.
Pigweed, dandelion, other common weeds	Potential abundant colonizers in the disturbed area if left alone	Candidates for control ASAP before spreading seed into the site.
Colutea = bladder senna	Potential abundant colonizers in the disturbed area if left alone	Should be manually removed with weed wrenches ASAP since this is starting to bloom and will set seed soon.
NON-NATIVE WOODY TREES AND SHRUBS		
Crataegus = Hawthorne	A proven invasive in lower park, abundantly resprouting from cut stems up to 8" diameter.	Suggest letting it resprout through summer, herbicide with foliar treatment in fall. A few standing saplings bearing fruit should all be removed.
Catalpa	Target of the tree removals; Most or all stumps are resprouting. A half dozen standing large trees near the Center along E 8th St,	Suggest letting them resprout through summer, herbicide in fall. May take a couple years to kill resprouting for such large stumps. Consider creating standing snag habitat with individuals along 8th street if not a fall hazard to the fence etc.
Pistache	A 9" dbh tree stands behind the Center amidst elderberries	This individual should be phased out as part of any actionable restoration.
Juglans = black walnut	Some sprouting from up to large stumps.	Suggest letting them resprout through summer, herbicide in fall. May take a couple years to kill resprouting for such large stumps.
Juglans x hindsii = northern Ca black walnut .	Not native to this part of the State, probably hybrid from ag root stock. Four 1 to 2 foot diameter standing individuals behind Lab	No urgency if considering conversion to snag habitat or removal.
Oliva = olive	Resprouting stumps	Suggest letting it resprout through summer, herbicide in fall.

ITEM 2.1 EXHIBIT A
SURVEY OF VEGETATION IN THE NATURE CENTER AREA

(Conducted by Jim Dempsey Vegetation Management on 6/2/19)

VEGETATION TYPE	LOCATION AND OBSERVATIONS	RECOMMENDED ACTION
Celtis = hackberry	Resprouting Stumps. Significant seedlings present, especially near Cedar Grove Way entrance. Three mature trees (two 6" dbh, one 10" dbh) stand behind the Center.	Suggest letting it stumps resprout through summer, herbicide in fall. Seedlings could be manually removed with a weed wrench tool only after complete removal of Bladder Senna. Suggest phasing out mature trees as part of any restoration action.
Prunus = ornamental purple plum	A 10" dbh stump is resprouting along with multiple root sprouts, behind Center.	Suggest letting it resprout through summer, herbicide in fall.
NATIVE ANNUALS AND PERENNIALS		
Aristolochia calif = Calif pipevine	Abundant mostly in open understory, some along perimeter of clearing.	
Vitis = native grape	Abundant mostly in open understory, some along perimeter of clearing.	If active restoration is desired on this site, because of its vigor the grape could become a candidate for control to allow the full complement of restoration species to get established.
Juncus = rush	Present in open understory, doubt an indicator of wetland soils in this case	
NATIVE WOODY TREES AND SHRUBS		
Umbellularia = Ca bay	A number of cut stumps are vigorously resprouting on west side of clearing	No action.
Quercus lobata = Valley oak	Minority of cut stumps resprouting so far. Only noticed two first-year seedlings present, one in the open clearing.	No action.
Toxicodendron = poison oak	Abundant; dominant understory plant on south and west side.	No action.
Calocedrus = incense cedar	Not really native to the Valley floor, mature individuals were no doubt planted, and now we have seedlings volunteering nearby. Between the Nature Center and Lab there are a cluster of these crowding a large Valley oak	Suggest which individuals to keep for Nature interpretive purposes, but these are not in the natural character of lower Bidwell Park and otherwise should be removed in my opinion as they could become a gradual shade tolerant localized 'invasive'. Cedars near the Valley Oak should be removed at some point.
Fraxinus latifolia = Oregon ash	Good	No action.
Heteromeles arbutifolia = toyon	More a foothill than Valley species, probably here due to seed sources from nearby residential yards.	No action.
Quercus wislizenii = interior live oak	One mature tree and a couple of saplings between SW end of the area and road.	No action.
Sambucus = elderberry	Protected species	No action.
Solanum = nightshade	Need to ID species to determine if this is native or exotic.	Inviting looking berries are poisonous, possibly should be removed since it is near a Nature Center visited by swarms of children.

EXHIBIT B - RESTORATION PLAN SCHEDULE

Task Calendar - Restoration Plan for Nature Center clearing area.	
DRAFT 11/12/2019 Jdempsey	
Timing depends on weather	Task (Expected 'weeds' are annotated in the 6/19/19 BPPC NRC agenda site survey report.)
2019 = year 0	
November	Last fall weed control followup.. Remove coast(?)live oak seedlings along Cedar Grove Way. Determine # of what native plants desired, purchase plants and planting materials (materials/cost estimate attached)
early December	Planting installed with protection and mulched.
2020 = year 1 of planting establishment	
late January	Monitor winter annual weeds, start Vinca control (spray new growth through April).
March	Monitor to treat winter-early spring weeds.
April	Monitor to treat cut stump resprouts through June. ?supplemental watering until 85-90degF.
late May	Monitor to treat spring weeds. Maintain planting protection.
June	?supplemental watering monthly until fall/winter rain.
October	Monitor to treat weeds. Maintain planting protection.
December	Evaluate planting mortality and replant.
2021:yr 2	
lateJan	Monitor winter annual weeds, start Vinca control (spray new growth through April).
March	Monitor to treat winter-early spring weeds.
April	Monitor to treat cut stump resprouts through June. ?supplemental watering until 85-90degF.
late May	Monitor to treat spring weeds. Maintain planting protection.
June	?supplemental watering monthly until fall/winter rain.
October	Monitor to treat weeds. Maintain planting protection.
December	Evaluate planting mortality and replant.
2022:yr 3	
lateJan	Monitor winter annual weeds, start Vinca control (spray new growth through April).
March	Monitor to treat winter-early spring weeds.
April	Monitor to treat cut stump resprouts through June. ?supplemental watering until 85-90degF.
late May	Monitor to treat spring weeds. Maintain planting protection.
June	?supplemental watering monthly until fall/winter rain.
October	Monitor to treat weeds, to remove planting protection as ready. ?start phasing out exotic mature trees by priority: hackberry, pistache, Catalpa, walnut, incense cedar.
2023	March Monitor to treat weeds, to maintain planting protection.
	October Monitor to treat weeds, to remove planting protection as ready. ?phase out exotic trees.
2024	March Monitor to treat weeds, to maintain planting protection.
	October Monitor to treat weeds, to remove planting protection as ready. ?phase out exotic trees.
2025	March Monitor to treat weeds, to maintain planting protection.
	October Monitor to treat weeds, remove planting protection. ?phase out exotic trees.



BPPC Natural Resource Committee Report

Meeting Date 11/20/19

DATE: 11/14/19
TO: BPPC Natural Resource Committee (Commissioners Grist (Chair), Haar, and Smith-Peters)
FROM: Linda Herman, Parks and Natural Resources Manager
SUBJECT: UPDATE ON DEVELOPMENT OF A VEGETATIVE FUELS MANAGEMENT PLAN

REPORT IN BRIEF:

The City was awarded a Community Wildfire Prevention grant from Cal Fire to develop a Vegetative Fuels Management Plan (VFMP) for Bidwell Park and City parks and greenways. Staff will provide an update on the status of the plan.

Recommendation: None, this is an information item only

BACKGROUND:

With the assistance from the Butte County Resource Conservation District (BCRCD), the City applied for and was awarded a \$158,907 Community Wildfire Prevention grant from Cal Fire to develop the VFMP. The VFMP will cover approximately 6,800 acres of City parks, greenways and open spaces (see map as Exhibit A). The City pledged a local match of \$55,828 for a total project cost of \$214,735. The purpose of this grant is to build local capacity to complete community-based fire prevention projects, so the project also includes identification of five (5) potential "shovel-ready" implementation projects. The VFMP and all other associated planning work must be completed by March 2021.

DISCUSSION:

The City's grant application proposed collaborating with various local partners to achieve the following scope of work:

1. Grant Administration
2. Biological Surveys/Mapping
3. Fire Severity and Risk Analysis/Mapping
4. Identification of Treatment Methods (i.e. manual, prescribed burn, mechanical, grazing etc.)
5. Identification of the five potential implementation projects
6. Development of the Draft VFMP
7. CEQA review for both the VFMP and the five implementation projects
8. Development of Final VFMP
9. Public education and outreach for the VFMP and CEQA

Staff has been working on executing the contracts and agreements for the following consultants and partners who will be working on various aspects of the VFMP (Project Team):

- BCRCD - Project Management, CEQA Review, and Permitting
- Dempsey Vegetation Management – Composition of VFMP
- CSU, Chico Research Foundation - Interns for biological surveys under the guidance of the Big Chico Creek Ecological Reserve
- Deer Creek Resources – Wildfire risk assessment, mapping, and prevention planning
- Terra Fuego – Simtable public education demonstrations.

Potential Proposed Implementation Projects:

The Project Team has been meeting and reviewing existing plans developed for Bidwell Park, Comanche Creek, Little Chico Creek, and Lindo Channel. The Team has also been reviewing vegetation fuels management plans developed by other agencies, such as the East Bay Municipal Parks and the City of Oakland. The Team participated in a video conference with the consultant who is preparing the City of Oakland's plan, who provided valuable insight and information.

The Team has preliminarily identified the following five potential future fuel reduction locations/projects, but these may change after the fire risk mapping/analysis, environmental surveying, and BPPC and public input:

1. Removal of Arundo in Little Chico Creek.
2. Elevating/thinning/grazing of invasive and fire risk vegetation on Lindo Channel from Manzanita to HWY 99.
3. Elevating/thinning of invasive and fire risk vegetation on Lindo Channel from HWY 99 to Nord Ave.
4. Addressing yellow star thistle and invasive vegetation in Middle Bidwell Park.
5. Vegetation thinning/prescribed burn as needed for fuel reduction on south side of Upper Park (Chico Canyon area to 10-Mile House Road).

The BPPC and the City Council will have the final approval of the proposed implementation projects.

Environmental Review:

“After reviewing comparable plans developed by other cities, the Team found that preparation of an Environmental Impact Report (EIR) is likely the best and most streamlined approach. Under this approach, the Team would not prepare an Initial Study and will go straight to developing an EIR. The environmental review will also include the implementation projects with the intent to have preliminary CEQA review of these projects completed so that future funding, such as grants, can be pursued. The required project specific CEQA review and any regulatory permitting will still occur prior to implementation of the projects.

Public Outreach:

An important goal of this project is to provide ample opportunity for stakeholders and the general public to provide input on the VFMP and proposed projects. The Team intends to solicit ongoing public input through the NRC and BPPC regular meetings and will hold more focused public workshops as the project progresses. These will include field days and fire simulation demonstrations, among other events. Attached as Exhibit B is a tentative timeline and schedule of tasks for the development of the VFMP, CEQA, and public outreach.

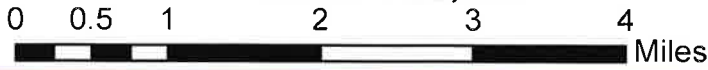
Attachments:

Exhibit A: VFMP acreage map





Exhibit B: Proposed project timeline

City of Chico Vegetative Fuels Management Plan [18-FP-BTU-1051]: Priority Communities and Wildfire Hazard




Scale: 1:80,000.

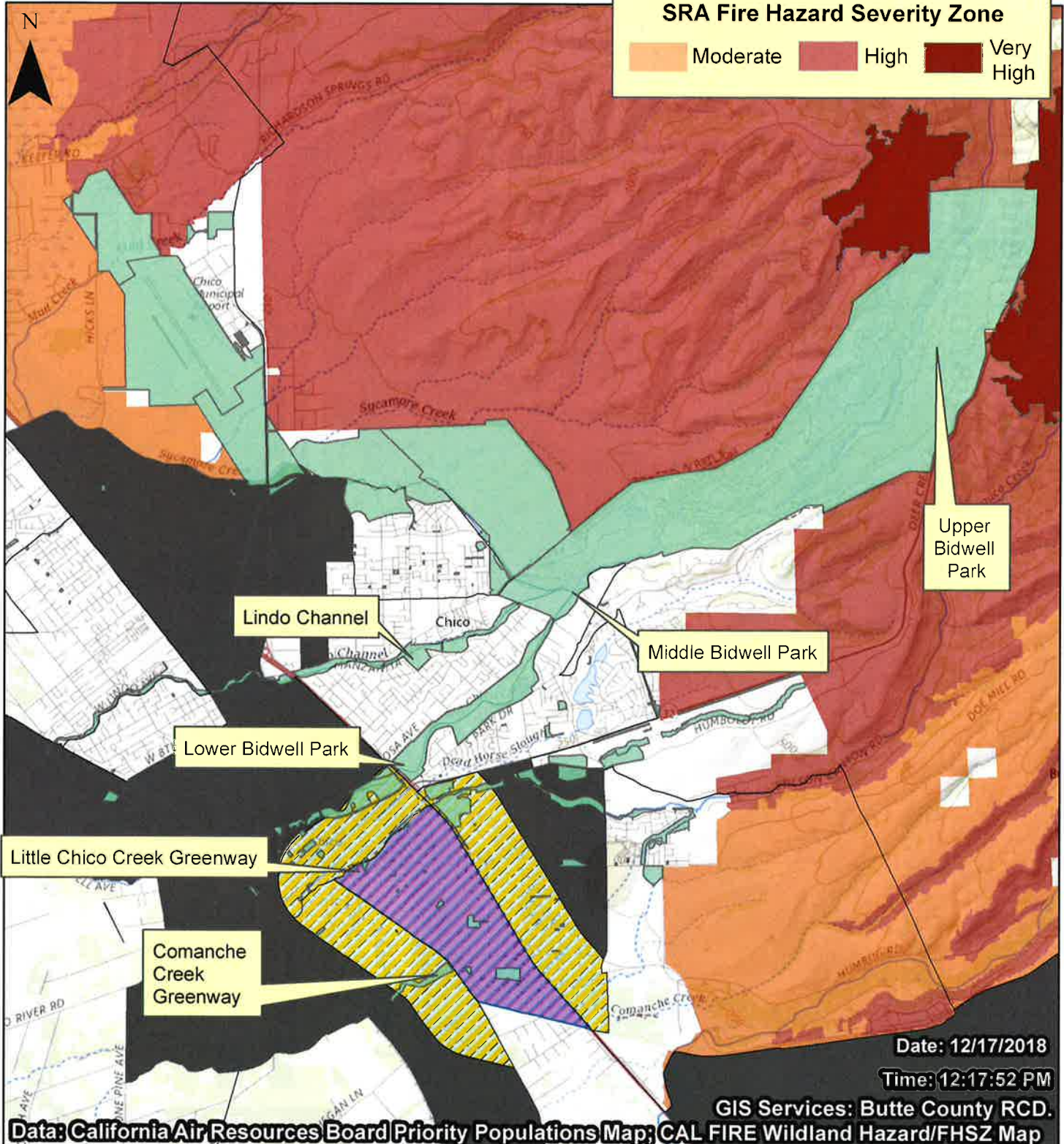


Legend

-  18-FP-BTU-1051 Project Area
Project Proponent: City Of Chico
-  AB 1550 Low-Income Community
-  SB 535 Disadvantaged Community
-  1/2-Mi Buffer Around SB 535 Disadvantaged Community

SRA Fire Hazard Severity Zone

-  Moderate
-  High
-  Very High



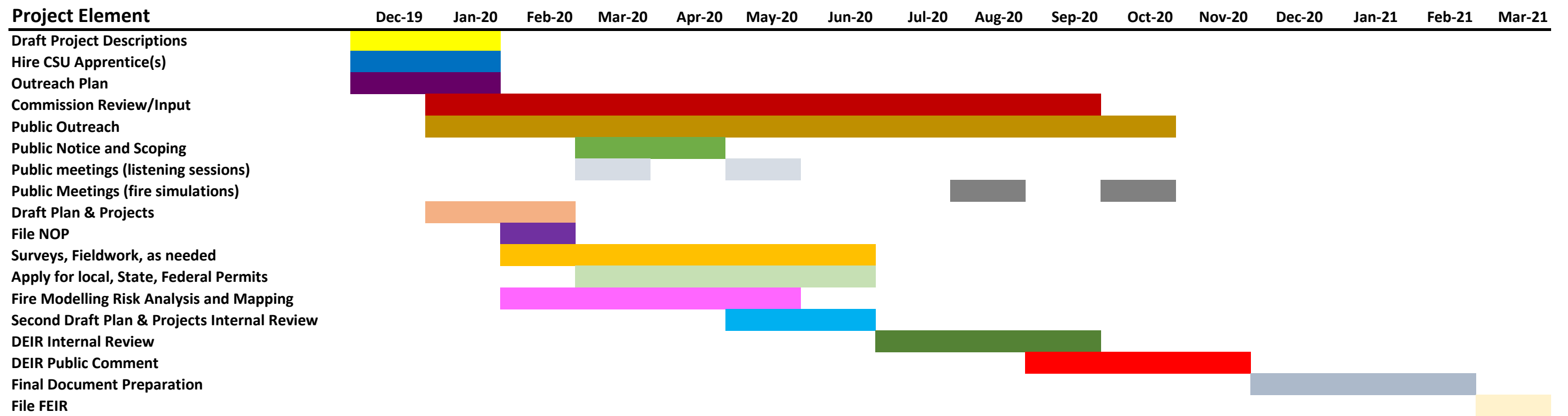
Date: 12/17/2018

Time: 12:17:52 PM

GIS Services: Butte County RCD.

Data: California Air Resources Board Priority Populations Map; CAL FIRE Wildland Hazard/FHSZ Map

VEGETATIVE FUELS MANAGEMENT PLAN TENTATIVE TIMELINE





BPPC Natural Resource Committee Report

Meeting Date 11/20/19

DATE: 11/14/19
TO: BPPC Natural Resource Committee (Commissioners Grist (Chair), Haar, and Smith-Peters)
FROM: Linda Herman, Parks and Natural Resources Manager
SUBJECT: CONSIDERATION OF CHANGES TO THE ANNIE BIDWELL TRAIL IN UPPER BIDWELL PARK.

REPORT IN BRIEF:

The Committee will consider Staff's proposal to make some changes to the western portion of the Annie Bidwell Trail on the south side of Upper Bidwell Park.

Recommendation: The Committee is requested to provide comments and recommendations to Staff and the BPPC regarding this proposal to reroute a portion of the trail.

BACKGROUND:

In 1995, the City purchased approximately 1,400 acres between Big Chico Creek and Hwy 32 as an addition to Bidwell Park. This acquisition provided public access and the opportunity for additional trails to some of the most scenic and diverse landscapes. In the early 2000s, work began on the Annie Bidwell Trail (ABT), which is accessed by the Pistol Range/Chico Canyon trailhead where Centennial Avenue, Chico Canyon Road, and Falcons Pointe Rd meet. The trail transverses eastward for approximately 4.5 miles to 10-Mile House Road.

DISCUSSION:

The official ABT is flat as it travels along Big Chico Creek to just past the pedestrian bridge to the golf course. After that, the trail elevation changes to involve climbing a pretty steep slope bringing the trail to a top of a ridge, which can be difficult for hikers and is susceptible to erosion. Over time, park users have developed an alternate route through the old olive orchard that continues along the golf course and rejoins the official ABT that continues to the junction of the South Rim and Guardian Trails. This alternate route, which has evidence of being cut and groomed by users, provides a cool, shady, trail that is used extensively by both hikers and bikers.

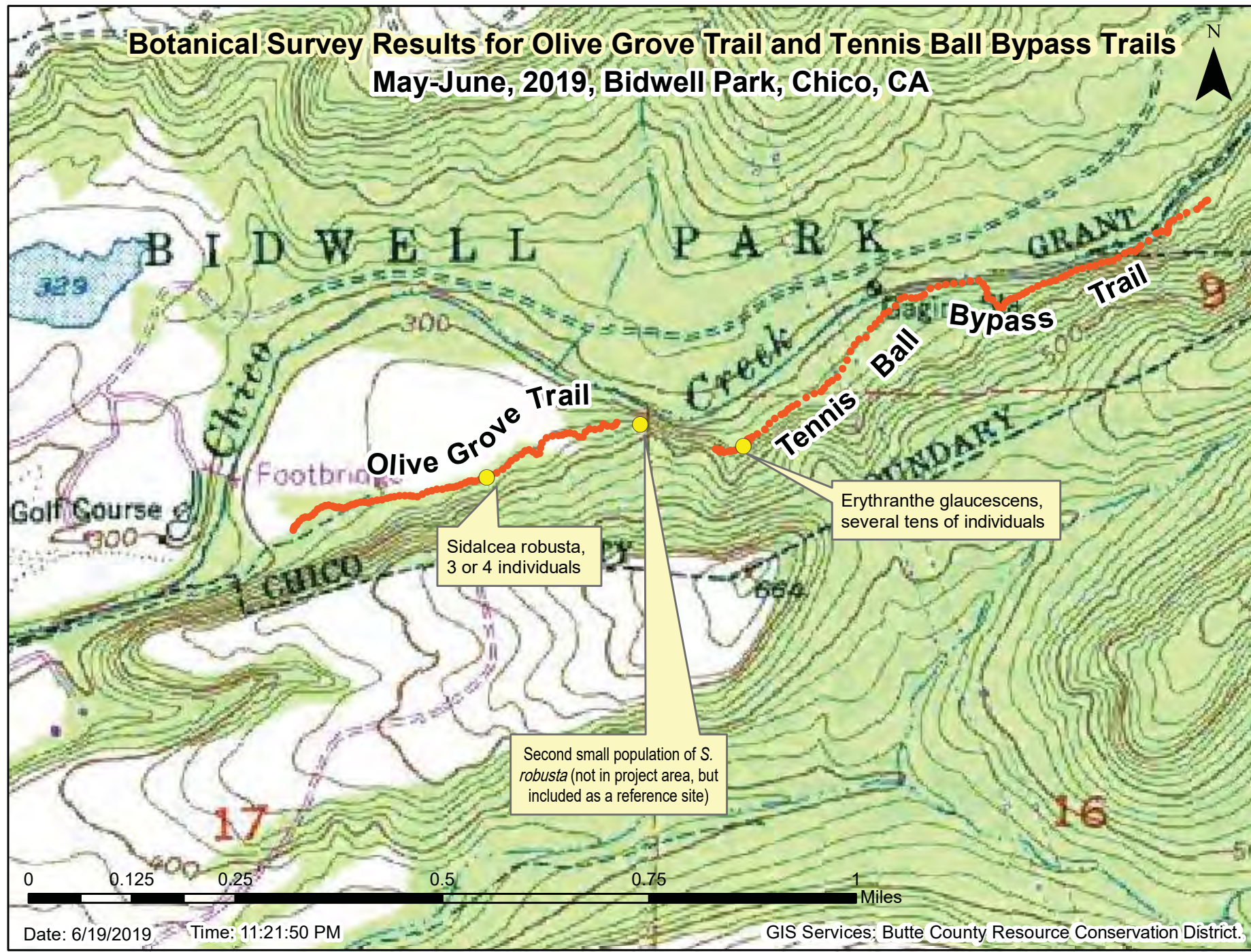
Staff is proposing that this alternate route be officially incorporated into the ABT trail and that the old ABT section in this area be decommissioned. Staff is also proposing that the section of Tennis Ball Hill/Old Jeep Road bypass also be decommissioned as it is severely eroded and is no longer safe and sustainable.

An initial botanical survey has been conducted on this alternate route and the bypass. There are a 3-4 individual Butte County Checker bloom plants and some Monkey Flower. A map of the proposed ABT and Tennis Ball Hill realignments is attached for the Committee's review and consideration. If approved by the NRC and BPPC, Staff will complete the environmental review, which is anticipated to be a mitigated negative declaration, before any work will be conducted to make these trail realignments official.

Attachments:

Exhibit A: Trail realignment map

Botanical Survey Results for Olive Grove Trail and Tennis Ball Bypass Trails May-June, 2019, Bidwell Park, Chico, CA



Date: 6/19/2019 Time: 11:21:50 PM

GIS Services; Butte County Resource Conservation District.

**California Environmental Quality Act (CEQA)
Compliance Certification Form**

Grantee/Applicant: Shasta Cascade California Conservation Corps

Project Name: Bidwell Park Fuel Reduction Project

Project Address: Lower Bidwell Park, Chico, Butte County California

When was CEQA analysis completed for this project? Date: November 18, 2008

What document(s) was filed for this project's CEQA analysis: (check all that apply)

- Notice of Determination
- Notice of Exemption
- Initial Study/Negative Declaration
- Initial Study/Mitigated Negative Declaration
- Environmental Impact Report
- Other: _____

Please attach the Notice of Exemption or the Notice of Determination as appropriate. If these forms were not completed please attach a letter from the Lead Agency explaining why, certifying the project has complied with CEQA and noting the date that the project was approved by the Lead Agency.

CEQA Lead Agency Contact Information:

Agency Name: City of Chico Contact Person: Tracy Bettencourt

Mailing Address: P.O. Box 3420, Chico CA 95927

Phone: (530) 879-6900 Email: tracy.bettencourt@chicoca.gov

Certification:

I hereby certify that the Lead Agency listed above has determined that it has complied with the California Environmental Quality Act (CEQA) for the project identified above and that the project is described in adequate and sufficient detail to allow the project's construction.

I certify that the CEQA analysis for this project encompasses all aspects of the work to be completed with these funds. This project is not part of any legally mandated mitigation.



Authorized Representative
(Signature)

3/1/19
Date

Tracy Bettencourt, Regulatory & Grants Mgr.

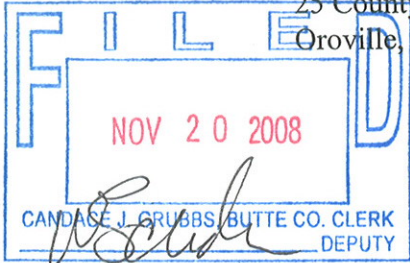
Authorized Representative
(Printed Name and Title)

NOTICE OF DETERMINATION

TO: [X] Office of Planning & Research
State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

From: City of Chico
Planning Services Department
P. O. Box 3420
Chico, CA 95927

[X] County Clerk
County of Butte
25 County Center Drive
Groville, CA 95965



DATE RECEIVED FOR FILING _____
Posted 11/20/08 through _____
(Date) (Date)

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Project Title: Bidwell Park Master Management Plan (BPMMP) Update

State Clearinghouse No. (if applicable): SCH# 2004102045

Lead Agency Contact: Brendan Vieg, Principal Planner **Area Code/Telephone:** (530) 879-6806

General Project Location: Bidwell Park, Chico, Butte County

Location - Specific: Bidwell Park extends in a northeasterly direction from near downtown Chico approximately ten miles into the Sierra Nevada/Cascade foothills. The Park is approximately 92 miles north of Sacramento and 72 miles southeast of Redding

Description of Project: The BPMMP Update presents a complete update of the 1990 Master Management Plan completed for Bidwell Park). The updated BPMMP incorporates the acquisition of 1,455 acres of additional park land, updates baseline data on park resources, addresses important planning issues pertaining to management and public use of the Park, provides a venue for public input, and clarifies allowable uses in the Park.

This is to advise that the City of Chico, as Lead Agency, approved the above described project on November 18, 2008 and has made the following determinations regarding the above described project:

- 1. The project will not have a significant effect on the environment (with incorporation of mitigation).
- 2. An Environmental Impact Report was prepared for this project pursuant to CEQA.
- 3. Mitigation measures were made a condition of approval of the project.
- 4. A mitigation reporting and monitoring plan was adopted for this project.
- 5. Findings were made pursuant to the provisions of CEQA.

This is to certify that the final environmental document with comments and responses and a record of project approval is available at the City of Chico Planning Services Department Office, 411 Main Street, 2nd Floor, Chico, CA 95928.

Signature: Brendan Vieg
Brendan Vieg

Date: November 20, 2008 Title: Principal Planner

DECLARATION OF FEES DUE

(California Fish and Game Code Section 711.4)

FOR CLERK USE ONLY

NAME AND ADDRESS OF LEAD AGENCY:

City of Chico Planning Services Department
411 Main Street
Chico, CA 95928

NAME AND ADDRESS OF APPLICANT:

Same as above.

Project: Bidwell Park Master Management Plan Update

FILING NO.

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

1. NOTICE OF EXEMPTION/STATEMENT OF EXEMPTION

- A. **Statutorily or Categorically Exempt**
\$50.00 Butte County Clerk's Filing Fee
- B. **De Minimus Impact - Certificate of Fee Exemption Required**
\$50.00 Butte County Clerk's Filing Fee

2. NOTICE OF DETERMINATION - FEE REQUIRED

- A. **Negative Declaration**
\$1,876.75 State Filing Fee
\$50.00 Butte County Clerk's Filing Fee
- B. **Environmental Impact Report**
\$2,606.75 State Filing Fee
\$50.00 Butte County Clerk's Filing Fee

3. OTHER (Specify) General Rule Exemption
\$50.00 Butte County Clerk's Filing Fee

TWO COPIES OF THIS FORM MUST BE COMPLETED AND SUBMITTED WITH ALL ENVIRONMENTAL DOCUMENTS FILED WITH THE BUTTE COUNTY CLERK'S OFFICE.

ALL APPLICABLE FEES MUST BE PAID AT THE TIME OF FILING ANY ENVIRONMENTAL DOCUMENTS WITH THE BUTTE COUNTY CLERK'S OFFICE.

THREE COPIES OF ALL NECESSARY DOCUMENTS ARE REQUIRED FOR FILING PURPOSES.

THE \$50.00 HANDLING FEE IS REQUIRED PER FILING IN ADDITION TO THE FILING FEE SPECIFIED IN FISH AND GAME CODE SECTION 711.4(d).

MAKE CHECKS PAYABLE TO COUNTY OF BUTTE.



BIDWELL PARK



BIDWELL PARK MASTER MANAGEMENT PLAN
UPDATE

INCLUDING

TRAILS PLAN, HORSESHOE LAKE AREA CONCEPT
PLAN, AND CEDAR GROVE AREA CONCEPT PLAN
PROJECTS PROGRAM ENVIRONMENTAL IMPACT
REPORT

MASTER MITIGATION MONITORING PROGRAM



AUGUST 2008

EDAW

BIDWELL PARK



BIDWELL PARK MASTER MANAGEMENT PLAN UPDATE
INCLUDING THE TRAILS PLAN, HORSESHOE LAKE AREA
CONCEPT PLAN, AND CEDAR GROVE AREA CONCEPT PLAN
PROJECTS PROGRAM ENVIRONMENTAL IMPACT REPORT



MASTER MITIGATION MONITORING PROGRAM

SCH No. 2004102045

PREPARED BY:

CITY OF CHICO PLANNING SERVICES DEPARTMENT
P.O. Box 3420
CHICO, CALIFORNIA 95927
CONTACT: BRENDAN VIEG
(530) 879-6806

CONSULTANT:

EDAW
2022 J STREET
SACRAMENTO, CALIFORNIA 95827
CONTACT: PETRA UNGER

AUGUST 2008



MITIGATION MONITORING AND REPORTING PROGRAM

I. STATUTORY REQUIREMENTS

Section 21081.6 of the Public Resources Code requires a Lead Agency that approves or carries out a project, where a California Environmental Quality Act (CEQA) document has identified significant environmental effects, to adopt a “reporting or monitoring program for the changes to the project which it has adopted or made a condition of a project approval in order to mitigate or avoid significant effects on the environment.”

The City of Chico (City) is the Lead Agency that must adopt the mitigation monitoring program for the Bidwell Park Master Management Plan Update including the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area Concept Plan Program Environmental Impact Report (EIR).

The CEQA statutes and Guidelines provide direction for clarifying and managing the complex relationships between a lead agency and other agencies with respect to implementing and monitoring mitigation measures. In accordance with CEQA Guidelines Section 15097.d, “each agency has the discretion to choose its own approach to monitoring or reporting; and each agency has its own special expertise.” This discretion will be exercised by implementing agencies at the time they undertake any of the actions identified in the EIR.

II. METHODOLOGY

The City will implement the mitigation measures listed in this Mitigation Monitoring and Reporting Program (MMRP) as part of the Bidwell Park Master Management Plan Update including the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area Concept Plan projects. The MMRP is contained within the following matrix and consists of the following components:

- ◆ Mitigation measures contained in the EIR, as adopted by the City;
- ◆ Party responsible for implementation;
- ◆ Funding responsibility;
- ◆ Implementation Trigger/Timing;
- ◆ Agency responsible for monitoring,
- ◆ Implementation and Monitoring Frequency.

This Mitigation Monitoring and Reporting Program shall be maintained in the City’s files for use in implementing mitigation measures adopted as part of the Bidwell Park Master Management Plan Update including the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area Concept Plan projects.

TABLE 1-1: MASTER MITIGATION MONITORING PROGRAM FOR THE BIDWELL PARK ENVIRONMENTAL IMPACT REPORT

Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
AIR QUALITY					
Mitigation Measure AQ-2: Control Short-term Construction Emissions	City of Chico	City of Chico	During construction activities	City of Chico	Monitor weekly during construction
<p>Consistent with BCAQMD guidelines, the following measures shall be implemented to reduce potentially significant effects on air quality resulting from construction related to the BPMMP Update including the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area Concept Plan Projects:</p> <ul style="list-style-type: none"> ◆ Alternatives to open burning of vegetative material removed from a project site shall be used unless otherwise deemed infeasible by the AQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel; ◆ Adequate and applicable dust control measures (identified in detail below) shall be implemented during all phases of project development and construction as outlined below: <ul style="list-style-type: none"> • All active construction sites shall be watered at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure. • Chemical soil stabilizers shall be applied to inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days). 					
					Monitor weekly during construction
					Monitor weekly during construction
					Implement daily; monitor weekly during construction
					Implement as needed, monitor weekly during construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> On-site vehicles speeds shall be limited to a speed of 15 mph on unpaved roads. 					Implement daily; monitor weekly during construction
<ul style="list-style-type: none"> Land clearing, grading, earth moving or excavation activities shall be suspended when winds exceed 20 miles per hour. 					Implement and monitor as needed
<ul style="list-style-type: none"> Non-toxic binders (e.g., latex acrylic copolymer) shall be applied to exposed areas after cut and fill operations and the area shall be hydroseeded. 					Monitor weekly during construction
<ul style="list-style-type: none"> Vegetative ground cover shall be planted in disturbed areas as soon as possible after disturbance. 					Implement and monitor one time after construction
<ul style="list-style-type: none"> Inactive storage piles shall be covered. 					Monitor weekly during construction
<ul style="list-style-type: none"> ◆ Paved streets adjacent to each project site shall be swept or washed at the end of each day as necessary to remove excessive accumulations of silt and/or mud which may have accumulated as a result of activities on the project site. 					Implement daily; monitor weekly during construction
<ul style="list-style-type: none"> ◆ A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours if a complaint is received. The telephone number of the BCAQMD shall also be visible to ensure compliance with BCAQMD Rule 201 & 207 (Nuisance and Fugitive Dust Emissions). 					Monitor weekly during construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
BIOLOGY					
<p>Mitigation Measure BIO-1c: Implement Measures to Protect Known Occurrences of Butte County Checkerbloom in the Trails Plan and Horseshoe Lake Area Concept Plan Areas</p> <p>To mitigate the potential direct and indirect effects on known occurrences of Butte County checkerbloom during implementation of the Trails Plan and Horseshoe Lake Area Concept Plan areas, the following measures shall be implemented:</p> <ul style="list-style-type: none"> ◆ Before the start of any ground-disturbing activities, the City shall retain a qualified botanist to identify the locations of previously documented occurrences of Butte County checkerbloom in the Trails Plan and Horseshoe Lake Area Concept Plan Areas. The locations shall be clearly flagged or otherwise marked for avoidance during construction. ◆ The flagged occurrences shall be avoided and a buffer of at least 25 feet shall be established. 	City of Chico	City of Chico	Before ground-disturbing activities and during ongoing operation	City of Chico	See below
					Implement prior to construction
					Implement prior to and during construction; monitor monthly

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ If complete avoidance of known occurrences of Butte County checkerbloom is infeasible due to other environmental constraints (e.g. vernal pools) or due to Park Improvement Project goals, then such impacts shall be minimized. In those instances, any loss of Butte County checkerbloom shall be mitigated through preservation and enhancement of remaining occurrences and preservation and enhancement of suitable habitat on-site. As a performance standard, mitigation shall ensure no-net loss of the number of Butte County checkerbloom populations/and or habitat within the Park or region. Such measures shall include transplanting and monitoring plans that cannot be avoided. The City shall consult with DFG with respect to such preservation and enhancement measures. This mitigation shall be implemented as part of project implementation, and any monitoring and remedial action requirements specified as part of the consultation shall be implemented by the City</p>					<p>Implement prior to, during and after construction; monitor as determined necessary during consultation</p>
<p>Mitigation Measure BIO-1e: Implement Measures to Protect Unknown Occurrences of Butte County Checkerbloom, Bidwell’s Knotweed, and Other Special-status Plant Species</p>	City of Chico	City of Chico	Prior to any ground-disturbing activities	City of Chico	See below
<p>The following measures shall be applied to mitigate potential direct and indirect impacts on as-yet-unknown occurrences of Butte County checkerbloom, Bidwell’s knotweed, and other special-status plant species as a result of implementation of the Cedar Grove Area Concept Plan, Trails Plan, and Horseshoe Lake Area Concept Plan:</p>					

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> ◆ Before the start of any ground-disturbing activities, the City shall retain a qualified botanist to conduct protocol-level special-status plant surveys in areas that have the potential to be disturbed by implementation of the Cedar Grove Concept Plan, Trails Plan, and Horseshoe Lake Concept Plan. These surveys shall be conducted during the appropriate time of year when the potentially occurring species would be present and clearly identifiable (i.e., the blooming period as identified in Table 2.3.2-2 in the BPMMP) and shall focus on those areas supporting suitable habitat for the target species. Survey protocols outlined by DFG shall be followed. CNPS List 4 species with potential to occur in the project sites shall be included in the surveys whenever feasible, so data on their distribution can be taken into consideration during project planning and design. 					Implement prior to construction
<ul style="list-style-type: none"> ◆ For the Trails Plan, special-status plant surveys may be conducted on a segment by segment basis, as specific trail segments are proposed for development. 					Implement prior to construction
<ul style="list-style-type: none"> ◆ If no special-status plant occurrences are found in the areas that would be affected by the site-specific projects, then the results of the surveys shall be documented in a letter report to the City and no further mitigation shall be required. 					Implement prior to construction
<ul style="list-style-type: none"> ◆ If any special-status plant species are identified in the site-specific project areas, the location and extent of each occurrence shall be inventoried and these occurrences shall be avoided, to the maximum extent feasible, while still accomplishing the goals of the four Park Improvement Projects. 					Implement prior to, during and after construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> ◆ If impacts on special-status plants cannot be avoided while accomplishing the Park Improvement Project goals, every effort shall be made to minimize impacts on special-status plants (including CNPS List 4 plants) through design planning. 					Implement during construction
<ul style="list-style-type: none"> ◆ If federally or state listed plant species are identified in the site-specific project areas and it is determined that occurrences of these species would be directly or indirectly affected by the site-specific projects, then appropriate mitigation shall be developed through consultation with USFWS or DFG, depending on the listing status of the plant. Any loss of special-status plants (except CNPS List 4 plants) shall be mitigated through preservation and enhancement of remaining occurrences and preservation and enhancement of suitable habitat on-site. Mitigation shall aim to ensure a no-net loss in special-status plant populations/and or habitat within the Park or region. Impacts to CNPS list 4 plants shall be avoided to the greatest extent possible. If complete avoidance it not feasible, impacts to CNPS plants shall be minimized. 					Implement prior to, during and after construction; monitor annually as applicable
<ul style="list-style-type: none"> ◆ Any mitigation developed through consultation with the regulatory agencies shall be implemented as part of project implementation, and any monitoring and remedial action requirements specified as part of the consultation shall be implemented by the City. 					Implement during and following construction; monitor as determined during consultation

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>Mitigation Measure BIO-2b: Implement Measures to Protect Elderberry Shrubs, the Host Plant for the Valley Elderberry Longhorn Beetle</p> <p>The City shall ensure that the following measures are implemented to minimize potential project effects on elderberry shrubs, the host plant for valley elderberry longhorn beetles.</p> <p>Areas that support elderberry shrubs shall be identified and, to the extent feasible and practicable, project elements shall be designed to avoid direct effects on these areas. Before beginning any ground-disturbing project activities, a qualified biologist shall identify areas that support elderberry shrubs and that could be affected by the given project. The City shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid disturbance of potential habitat to the extent feasible and practicable.</p> <p>If impacts to areas supporting elderberry shrubs cannot be avoided, focused surveys shall be conducted. Before the initiation of any ground-disturbing activities, a qualified biologist shall conduct surveys for elderberry shrubs within 100 feet of the impact area, in accordance with USFWS guidelines. All elderberry shrubs with potential to be affected by project activities shall be mapped and the number of stems greater than 1 inch in diameter on each shrub that may require removal shall be counted. If no elderberry shrubs are found during focused surveys, no further action shall be required.</p>	City of Chico	City of Chico	<p>Work near elderberry shrubs</p> <p>Before and during construction activities</p>	City of Chico	<p>See below</p> <p>Implement prior to and during construction</p> <p>Implement prior to construction</p>

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>If potential effects to valley elderberry longhorn beetle cannot be avoided, measures shall be implemented to minimize and mitigate unavoidable effects. Before the initiation of any ground-disturbing project activities within 100 feet of elderberry shrubs that are suitable for use by valley elderberry longhorn beetles, USFWS shall be consulted to develop appropriate measures. Such measures shall include those described in Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999) and the VELB Programmatic Consultation (USFWS 1996). Minimization measures shall include implementation of buffers around shrubs that would not be removed, transplanting shrubs to a conservation area, conducting worker awareness training, and periodic biological monitoring. Compensation shall include planting of elderberry seedling or cuttings and associate native species.</p>					<p>Implement prior to and during construction; monitor as determined during consultation</p>
<p>Authorization for take of valley elderberry longhorn beetle under ESA shall be obtained if it is determined that implementation of a program component is likely to result in take, despite implementation of avoidance and minimization measures.</p>					<p>Implement prior to construction</p>
<ul style="list-style-type: none"> ◆ All measures developed through informal consultation with USFWS shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable. 					<p>Implement prior to, during and after construction</p>

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>Mitigation Measure BIO-2c: Implement Measures to Protect and Compensate for Loss of Vernal Pool Invertebrate and Western Spadefoot Habitat</p> <p>The City shall ensure that the following measures are implemented to avoid, minimize, and mitigate potential project effects on vernal pool invertebrates and western spadefoot:</p> <ul style="list-style-type: none"> ◆ Before any ground-disturbing project activities begin, the City shall retain a qualified biologist to identify and map potential habitat in areas that could be affected by the given project. The City shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid direct or indirect effects on suitable habitat for vernal pool invertebrates and western spadefoot to the extent feasible and practicable. In addition to vernal pools, suitable habitat for western spadefoot includes the surrounding grassland matrix. 	City of Chico	City of Chico	Before and during construction in and near vernal pool habitats and Western spadefoot habitats.	City of Chico	Implement prior to and during construction; monitor as indicated below
					See below

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ If vernal pool invertebrate and western spadefoot habitat cannot be avoided, measures shall be implemented to minimize and mitigate unavoidable effects. Before beginning any ground-disturbing project activities in such habitat, USFWS shall be consulted to identify appropriate measures to minimize and compensate for adverse effects on special-status vernal pool invertebrates; DFG shall be consulted to identify measures to minimize and compensate for adverse effects on western spadefoot. Avoidance and minimization measures shall include those described in USFWS's vernal pool crustacean Programmatic Consultation (USFWS 1996a). Minimization measures for vernal pool invertebrates shall include, but would not be limited to, fencing of habitat to be avoided, timing of ground disturbance to correspond with the dry season, conducting worker awareness training, and periodic biological monitoring. Compensation shall include preservation, enhancement, and/or creation of suitable habitat in areas that currently, or could in the future, support special-status invertebrate and/or spadefoot populations.</p>					<p>Implement prior to construction; monitor monthly during construction</p>
<p>◆ Authorization for take of vernal pool invertebrates under ESA shall be obtained if it is determined that implementation of a program component is likely to result in take, despite implementation of avoidance and minimization measures.</p>					<p>Implement prior to construction</p>

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ All other measures developed through informal consultation with USFWS and DFG shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable.</p>					Implement prior to construction
<p>Measures to Protect Nesting Raptors and Burrowing Owls</p> <p>The following measures shall be implemented to minimize and mitigate the potential disturbance of nesting raptors and burrowing owls.</p>					
<p>Mitigation Measure BIO-2d(1): Protect Tree-Nesting Raptors</p> <p>Before project construction, it shall be determined whether any construction or tree removal is proposed during the raptor nesting season (February 1 to August 31). If no construction or tree removal will occur during the raptor nesting season, no further mitigation shall be necessary.</p> <p>If construction or tree removal is proposed during the raptor nesting season, a focused survey for special-status and common raptor nests shall be conducted by a qualified biologist during the nesting season to identify active nests within 500 feet of the project area. The survey shall be conducted no less than 14 days and no more than 30 days before the beginning of construction or tree removal.</p>	City of Chico	City of Chico	Before and during construction during the breeding season of tree-nesting raptors	City of Chico	See below
					Implement prior to construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>If nesting raptors are found during the focused survey, impacts shall be avoided by establishment of appropriate buffers. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The DFG guideline for a 500 foot buffer will be implemented, but the size of the buffer may be adjusted if a qualified biologist determines a greater or lesser buffer would be appropriate and DFG concurs with any determination for a lesser buffer. The City shall coordinate with DFG on the appropriate buffer width for each species documented. Monitoring of the nest by a qualified biologist may be required if the activity has potential to adversely affect the nest or disturb the birds using the nest to the point of causing nest failure.</p>					Implement prior to construction
<p>Mitigation Measure BIO-2d(3): Protect Burrowing Owl</p> <p>Grassland habitat in Middle and Upper Park provides potentially suitable habitat for burrowing owls. The following mitigation measure shall be implemented to identify suitable habitat and protect burrowing owl from adverse effects of the Park Improvement Projects:</p>	City of Chico	City of Chico	Before and during construction	City of Chico	See below

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ Before any ground disturbance related to the Park Improvement Projects that occur within or adjacent to grassland habitat, a qualified biologist shall conduct a preconstruction survey to assess habitat suitability for burrowing owl (e.g., based on grassland structure and presence of burrows) and, in areas determined to be suitable, evaluate use by burrowing owls in accordance with current DFG survey guidelines (CDFG 1995). Surveys shall be conducted within 30 days prior to beginning construction activities and shall include the disturbance footprint and a 500-foot radius of the disturbance footprint perimeter. For construction activities occurring during the burrowing owl breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. Survey results shall be valid only for the season during which the survey is conducted. If no burrowing owls are documented during the surveys, no further mitigation shall be required.</p>					Implement prior to construction
<p>If burrowing owls are found, the following additional measures shall be implemented:</p>					See below

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ Project construction shall avoid all burrowing owl nest sites that could otherwise be disturbed by project construction during the breeding season (February 1–August 31) or while the nest is occupied by adults or young. Avoidance shall include establishment of a nondisturbance buffer zone of at least 250 feet around each nest site. The buffer zone shall be delineated by highly visible temporary construction fencing. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the nest site is no longer used by burrowing owls.</p>					Implement during construction; monitor monthly
<p>◆ Any artificial burrows created shall be placed in locations with minimal public access and thus will be protected from disturbances. If burrowing owls are found during the nonbreeding season (September 1–January 31), project construction shall avoid the owls and the burrows they are using. Avoidance shall include the establishment of at least a 160-foot nondisturbance buffer zone around each burrow being used. The buffer shall be delineated by highly visible temporary construction fencing. If burrowing owls cannot be avoided, the City shall conduct passive relocation by installing one-way doors in suitable burrow entrances that are used or may be used by the owls and that would be collapsed or degraded by construction activities. This measure is described below. Artificial burrows shall be created in an area of the Park determined suitable by a qualified biologist in coordination with Fish and Game staff. The burrows shall be created according to the conservation measures established for this species.</p>					Implement during construction; monitor monthly

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>◆ To displace burrowing owls without destroying eggs, young, or adults, one-way doors shall be installed on owl burrows before February 1 prior to disturbance, and each burrow shall be monitored following DFG’s protocol (California Department of Fish and Game 1995). This measure includes monitoring the burrow for a 48-hour period after the one-way doors are installed. The doors shall be checked every 24 hours following installation to determine whether they are still intact. If the one-way door is still correctly installed after a continuous 48-hour period (i.e., no animals have dug up the door and rendered it useless), then the one-way door shall be removed and the burrows shall be excavated using hand tools and plastic tubing to maintain an escape route for any animals still inside the burrow.</p>					Implement during construction; monitor as indicated
<p>Mitigation Measure BIO-2e: Protect Northwestern Pond Turtle: Identify Habitat, Minimize Potential Impacts, and Mitigate in Consultation with DFG as Needed</p> <p>Before any ground-disturbing project activities begin, a qualified biologist shall confirm potential aquatic and nesting habitat in areas that could be altered or impacted by the Park Improvement Project. The City shall ensure, through coordination of the potential project design with the biologist, that the footprint of project features and construction zones, staging areas, and access routes avoid direct alteration of or indirect effects on suitable habitat for northwestern pond turtle to the extent feasible and practicable.</p>	City of Chico	City of Chico	Prior to construction	City of Chico	Implement prior to construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
If effects to pond turtle habitat cannot be avoided, measures shall be implemented to minimize unavoidable effects and the amount of habitat affected shall be minimized. Before beginning any project activities in such habitat, DFG shall be consulted to confirm that all feasible measures have been identified and implemented to avoid loss of pond turtles. Such measures shall include, but would not be limited to, relocating turtles to appropriate areas, installing fencing to exclude turtles from nesting in areas where ground disturbance would occur, conducting worker awareness training, and periodic biological monitoring. All measures deemed appropriate and feasible during this consultation with DFG shall be implemented.			Prior to construction		Implement and monitor monthly during construction
Mitigation Measure BIO-2f: Implement Measures to Protect Other Special-status Nesting Birds	City of Chico	City of Chico	Before and during construction during the breeding season of yellow warbler, yellow-breasted chat, and loggerhead shrike.	City of Chico	See below
The following measures shall be implemented to minimize and mitigate the potential disturbance of nesting special-status birds (February to August).					
<ul style="list-style-type: none"> ◆ The City shall design Park Improvement Projects to minimize disturbance and removal of nesting habitat for special-status nesting birds to the extent feasible and practicable. Nesting habitat that cannot be avoided shall be removed during the non-nesting season, to the extent feasible and practicable. 					Implement during construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> To avoid potential impacts to active nests of special-status birds, a qualified biologist shall conduct preconstruction surveys to identify active special-status bird nests within 500 feet of construction areas. The survey shall be conducted no more than 10 days before project activities begin. If an active nest is found, an appropriate buffer to minimize impacts shall be determined by a qualified biologist in coordination with DFG. No project activities shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active or the birds are not dependent upon it. The size of the buffer may vary, depending on the nest location, nest stage, and construction activity. 					Implement prior to construction
<p>Mitigation Measure BIO-3b: Implement Measures to Protect Riparian Forest</p> <p>The following measures shall be implemented to mitigate potential impacts on riparian forest associated with implementation of the Trails Plan and Cedar Grove Area Concept Plan:</p> <p>Trails Plan</p> <ul style="list-style-type: none"> The amount of riparian forest affected by construction of new bridges or other activities occurring in or near riparian forest during implementation of the Trails Plan shall be limited to the minimum necessary. Any areas that require removal of riparian vegetation shall be restored with native riparian plant species. 	City of Chico	City of Chico	Before and during construction of a new bridge crossing over Big Chico Creek associated with implementation of the Trails Plan; before and during the construction of any components of the Cedar Grove Area Concept Plan located immediately adjacent to riparian forest.	City of Chico	Implement monthly during construction
					Implement once during construction
					Implement once following construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> ◆ The City shall consult with DFG regarding the need for a Streambed Alteration Agreement before construction of any of the proposed bridges over Big Chico Creek. ◆ If a Streambed Alteration Agreement is deemed necessary for Big Chico Creek crossings, the City shall obtain the agreement before the start of any construction affecting the bed or bank of Big Chico Creek and shall implement all measures that are conditions of the agreement. 					<p>Implement prior to construction</p> <p>Implement prior to construction; monitor as indicated in agreement</p>
Cedar Grove Area Concept Plan					
<ul style="list-style-type: none"> ◆ The Cedar Grove Area Concept Plan shall be implemented to avoid or minimize degradation of areas supporting riparian forest vegetation. High priority shall be given to protecting riparian communities from activities that cause compaction, erosion, vegetation removal, or other degradation according to Natural Community Implementation Strategy I. NC-1. ◆ Where ground-disturbing activities occur in the immediate vicinity of riparian forest, exclusionary fencing shall be installed under the guidance of a qualified botanist along the outside edge of the riparian forest canopy before commencement of construction, to prevent workers and equipment from entering this sensitive habitat. 					<p>Implement prior to, during and after construction</p> <p>Implement prior to and during construction; monitor monthly during construction</p>

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> ◆ If removal of riparian habitat is required for implementation of the concept plan, the amount shall be limited to the minimum necessary to achieve concept plan objectives. 					Implement during construction
<ul style="list-style-type: none"> ◆ Any areas that require removal of riparian vegetation shall be restored with native riparian plant species. 					Implement following construction
<p>Mitigation Measure BIO-3c: Implement Measures to Protect Oak Woodland</p> <p>The following measures shall be implemented to mitigate potential impacts on oak woodlands resulting from implementation of the Trails Plan and Horseshoe Lake Area Concept Plan:</p>	City of Chico	City of Chico	Before and during construction activities within or in the immediate vicinity of oak woodland habitat	City of Chico	See below
<ul style="list-style-type: none"> ◆ Where possible, trails, improvements, and facilities shall be constructed outside of oak woodlands. The number of trails dissecting oak woodlands shall be minimized to the fewest number necessary to accomplish the goals of the site-specific Park Improvement Projects. The width of trails through oak woodlands shall be minimized and trails shall have clearly marked edges that discourage trail widening and deter users from straying off the designated trail. 					Implement during construction
<ul style="list-style-type: none"> ◆ Trails through oak woodlands that are decommissioned as part of a site-specific Park Improvement Project shall be reclaimed using barriers (such as boulders) to discourage continued use of these trails. 					Implement during and following construction; monitor annually

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> ◆ Grading, trenching, equipment storage, and other soil-disturbing or compacting activities shall not occur within the driplines of oak trees. New structures and impervious-surface materials shall not be placed in the driplines of oaks. ◆ To ensure that the driplines of oaks are not disturbed during construction, protective fencing shall be installed, under the guidance of a qualified botanist, certified arborist, or Registered Professional Forester, at least 1 foot beyond the outer edge of the driplines of all oaks that grow within the construction zones of the site-specific Park Improvement Projects, and no project activities shall be allowed within these exclusion zones, unless specifically required as part of project construction. ◆ The oak woodland management guidelines contained in Section 3 of the NRMP (Appendix C of the BPMMP) shall be implemented. These guidelines include recommendations for sustaining oak woodlands, initiating a burning program, and maintaining the oak landscape. 					<p>Implement during and following construction; monitor monthly during construction</p> <p>Implement prior to and during construction; monitor monthly during construction</p> <p>During and following construction</p>
<p>Mitigation Measure BIO-3d: Implement Measures to Protect Wildflower Fields</p> <p>The following measures shall be implemented to minimize potential disturbances to wildflower field communities resulting from implementation of the Trails Plan and Horseshoe Lake Area Concept Plan:</p>	City of Chico	City of Chico	Before and during construction of components of the Trails Plan and Horseshoe Lake Area Concept Plan that occur within the immediate vicinity of wildflower fields	City of Chico	See below

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
◆ Before the start of construction activities associated with implementation of specific trail sections identified in the Trails Plan and the Horseshoe Lake Area Concept Plan, the City shall retain a qualified botanist to map the location and extent of wildflower fields in specific areas proposed for construction.					Implement during construction; monitor as indicated above
◆ Whenever possible, trail segments, site improvements, facilities and other design features shall be located to minimize impacts to wildflower fields.					Implement prior to and during construction; inspect monthly during construction
◆ Exclusionary fencing shall be installed under the guidance of a qualified botanist before commencement of construction to keep workers and equipment from disturbing wildflower field habitat intended to be preserved on the project sites (some areas may be lost, consistent with site design).					Implement prior to and during construction; inspect monthly during construction
◆ The number of trails dissecting wildflower fields shall be minimized to the fewest number necessary to accomplish the goals of the site-specific Park Improvement Projects.					Implement prior to and during construction
◆ Trails through wildflower fields shall be as narrow as possible and shall have clearly marked edges that discourage trail widening and deter users from straying off the designated trail.					Implement prior to and during construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<ul style="list-style-type: none"> Existing trails through wildflower fields that will not be retained as part of the site-specific Park Improvement Projects shall be reclaimed using barriers (such as boulders) to discourage use of these trails. If these reclaimed trails fail to revegetate on their own over time, re-seeding may be considered. 					Prior to, during and after construction; monitor annually
<ul style="list-style-type: none"> Permanent signage shall be installed at kiosks located at the Horseshoe Lake Area Concept Plan site to inform Park users of the presence and sensitivity of the wildflower field community and discourage visitors from off-trail use and trampling of vegetation. 					Install after construction; monitor annually
<p>Mitigation Measure BIO-4: Implement Measures to Protect Jurisdictional Wetlands</p> <p>The following measures shall be implemented to mitigate impacts on waters of the United States:</p> <ul style="list-style-type: none"> Before the implementation of specific components of the Trails Plan and Horseshoe Lake Area Concept Plan that occur in the immediate vicinity of wetlands or other waters of the United States, a delineation of waters of the United States, including wetlands, that would be affected by the proposed projects shall be made by qualified biologists through the formal Section 404 wetland delineation process. The delineation shall be submitted to and verified by USACE. 	City of Chico	City of Chico	Before and concurrent with any component of the Trails Plan and Horseshoe Lake Area Concept Plan that involve ground-disturbing activities in or near jurisdictional wetlands and/or waters of the state	City of Chico	Implement prior to construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
◆ If, based on the verified delineation, it is determined that fill of waters of the United States would result from implementation of any of the site-specific Park Improvement Projects, authorization for such fill shall be secured from USACE through the Section 404 permitting process.					Implement prior to construction
◆ The acreage of waters of the United States, including wetlands, that would be adversely affected by project construction shall be replaced or restored/enhanced on a “no net loss” basis in accordance with USACE regulations and City General Plan Policy OS. G-9. Habitat restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE, as determined during the Section 404 permitting process.					Implement prior to construction
◆ Purchasing credits at a mitigation bank is the City’s preferred method of mitigation.					Implement prior to construction
◆ Concurrently with the CWA Section 404 permit, the City shall obtain CWA Section 401 Clean Water Certification from the Central Valley RWQCB before project implementation.					Implement prior to construction
◆ The City shall also coordinate with the Central Valley RWQCB regarding any wetland features that are not subject to USACE jurisdiction under Section 404 of the CWA, but may be subject to State regulation under the Porter Cologne Act. All conditions required by the RWQCB as part of the Section 401 Water Quality Certification process or Porter Cologne permitting process shall be implemented.					Implement prior to construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
CULTURAL RESOURCES					
<p>Mitigation Measure CUL-1: Protect Historic and Unique Archaeological Resources from Impacts</p> <p>The City shall implement the following mitigation to reduce potential direct impacts on historic and unique archaeological resources:</p> <ul style="list-style-type: none"> ◆ Consistent with the policies of the BPMMP, a qualified archaeologist shall conduct a cultural resources assessment of the proposed project site during project planning and design. For the Trails Plan, this can be accomplished on a segment by segment basis. ◆ If cultural resources are documented in the planning area, they shall be evaluated for their significance. ◆ If it has been determined by a qualified archaeologist that a cultural resource is significant, the project shall be designed or redesigned to avoid these cultural resources to the greatest extent feasible. ◆ If avoidance of significant sites is not feasible, mitigation in the form of data recovery shall be applied to archaeological sites. 	City of Chico	City of Chico	During final design of projects and during construction activities	City of Chico	See below
					Implement prior to construction
					Implement prior to construction
					Implement prior to construction
					Implement during construction
<p>Mitigation Measure CUL-2b: Protect Human Remains from Vandalism and Inadvertent Destruction</p> <p>In accordance with the California Health and Safety Code, if human remains are uncovered during ground- disturbing activities related to implementation of the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area</p>	City of Chico	City of Chico	During construction activities	City of Chico	Implement during construction

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
<p>Concept Plan Projects, all such activities in the vicinity of the find shall be halted immediately and the City or the City's designated representative shall be notified. The City shall immediately notify the county coroner and a qualified professional archaeologist. The coroner shall examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in detail in the California Public Resources Code Section 5097.9. The City or its appointed representative (Park Director) and the professional archaeologist shall consult with a Most Likely Descendant (MLD) determined by the NAHC regarding the removal or preservation and avoidance of the remains and determine whether additional burials could be present in the vicinity.</p>					

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HYDROLOGY					
<p>Mitigation Measure HYDRO-1b: Comply with Water Quality Standards and Waste Discharge Requirements</p> <p>When required, the City shall obtain a General Permit for Discharges of Storm Water associated with Construction Activity (Construction General Permit), which pertains to water pollution resulting from project construction. In compliance with permit requirements, the City shall file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) before commencement of construction activities. The SWPPP will incorporate BMPs to prevent, or reduce to the greatest extent feasible, adverse effects on water quality from erosion and sedimentation. In addition, all new trails shall be designed, constructed, and maintained per the City's Trails Manual.</p>	City of Chico	City of Chico	Before commencement of construction activities	City of Chico	Implement and monitor as indicated in SWPPP
NOISE					
<p>Mitigation Measure Noise-1: Construction Related Noise</p> <p>The following measures shall be implemented to mitigate for construction noise control associated with the Trails Plan, Horseshoe Lake Area Concept Plan and Cedar Grove Area Concept Plan:</p> <ul style="list-style-type: none"> ◆ Construction equipment shall be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications 	City of Chico	City of Chico	During construction of Park Improvement Projects	City of Chico	N/A

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Mitigation Measure	Party Responsible for Implementation	Funding Responsibility	Implementation Trigger/Timing	Agency Responsible for Monitoring	Frequency
◆ Construction activities shall be limited to the hours of 7:00 a.m.–9:00 p.m., Monday through Saturday, and to 10:00 a.m.–6:00 p.m. on Sundays and holidays.					N/A
◆ Construction equipment shall be arranged to minimize travel adjacent to occupied residences and turned off during prolonged periods of non-use.					N/A



DATE: 11/20/19
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Linda Herman, Park and Natural Resource Manager
SUBJECT: Parks Report

NARRATIVE

1. Maintenance Program

Staff provides on a need and time basis the cleaning and safety inspections of all recreation areas including: grounds, playgrounds, picnic sites, roads and paths. Maintenance and repair of park fixtures, posting reservations, removal of graffiti from all park infrastructure

- a. Lower Park: Staff has been working on grading and repair of lots throughout lower park.
- b. Middle Park: Standard Maintenance procedures and reservation preparation.
- c. Upper Park: Routine maintenance.
- d. Upcoming projects: Repair Guardian trail bed under the peregrine cliffs, install par course equipment in lower park. Rebuilding and moving several picnic sites away from the creek in Lower Park.

2. Ranger Program

- a. Illegal Encampment cleanup– Rangers are working diligently with the Sherriff’s Alternative Custody Supervision (ACS) program and volunteers to perform multiple days of illegal encampment cleanup per week to remove as much debris as possible from parks and waterways before rain sets in.

3. Volunteer and Donor Program

- a. Make a Difference Day - Butte County – Over 100 volunteers from CSU, Chico, Butte College and the local community participated in cleanup and vegetation management projects at Comanche Creek Greenway and Lower Bidwell Park.
- b. Upcoming Volunteer Opportunities –
 - i. Volunteer Calendar – To find out about upcoming volunteer events please [CLICK HERE](#) or visit http://www.ci.chico.ca.us/general_services_department/park_division/volunteer_calendar.asp

MONTHLY SUMMARY TABLES

Table 1. Monthly Volunteer Hours

Parks and Greenway -PALS- (Partners, Ambassadors, Leaders & Stewards) Volunteer Activities, October 2019

Date	Location	Partner/Agency	# of Volunteers	Hrs Worked	# of Vols Xs Hrs = Total Hrs	Task
various	various	Parkwatch Ambassadors	130	various	944	Ambassadorship of Chico's parks & greenways
various	Comanche Creek	FOCCG	1	7	7	Gen. Cleanup
10/2/2019	Comanche Creek	FOCCG	6	3	18	Gen. Cleanup
10/4/2019	Comanche Creek	PALS	18	3	54	Gen. Cleanup
10/5/2019	Comanche Creek	FOCCG	5	3	15	Restoration
10/5/2019	Lower Park	CAVE	9	3	27	Veg. Mgmt.
10/9/2019	Comanche Creek	FOCCG	8	3	24	Gen. Cleanup
10/11/2019	Comanche Creek	FOCCG	4	3	12	Restoration
10/11/2019	Comanche Creek	PALS	13	3	39	Gen. Cleanup
10/12/2019	Lindo Channel	CCW	10	3	30	Gen. Cleanup
10/12/2019	Lower Park	CAVE	8	3	24	Veg. Mgmt.
10/16/2019	Comanche Creek	FOCCG	5	3	15	Gen. Cleanup
10/18/2019	Lower Park	PALS	6	3	18	Veg. Mgmt.
10/18/2019	Lower Park	PALS	15	3	45	Gen. Cleanup
10/19/2019	Lower Park	CAVE	8	3	24	Veg. Mgmt.
10/23/2019	Comanche Creek	FOCCG	5	3	15	Gen. Cleanup
10/24/2019	Comanche Creek	FOCCG	2	1	2	Restoration
10/25/2019	Lower Park	PALS	18	3	54	Gen. Cleanup
10/26/2019	Comanche Creek	PALS	53	3	159	Gen. Cleanup
10/26/2019	Lower Park	PALS	47	3	141	Veg. Mgmt.
10/26/2019	Lindo Channel	CCW	4	3	12	Gen. Cleanup
10/26/2019	Old Humboldt Rd	Respect the Walls	6	3	18	Gen. Cleanup
10/30/2019	Comanche Creek	FOCCG	6	3	18	Gen. Cleanup
10/31/2019	Lower Park	PALS	6	3	18	Veg. Mgmt.
			TOTAL HRS		1733	

Table 2. Monthly Illegal Encampment Cleanups

Date	Location	Coop. Org.	# Workers/ Vols.	# of Staff	Total People	Hours Worked	People Xs Hours Total	Total Debris Yrds	# of Camps
10/2/2019	Comanche Creek	FOCCG	6	1	7	3	21	5	4
10/4/2019	Comanche Creek	PALS	12	4	16	3	48	15	10
10/9/2019	Comanche Creek	FOCCG	8	1	9	3	27	8	5
10/10/2019	Little Chico Creek	ACS	12	5	17	4	68	40	15
10/11/2019	Comanche Creek	PALS	8	2	10	3	30	10	10
10/16/2019	Comanche Creek	FOCCG	5	1	6	3	18	4	3
10/18/2019	Bidwell Park	PALS	10	2	12	2	24	4	6
10/23/2019	Comanche Creek	FOCCG	5	1	6	3	18	5	4
10/30/2019	Comanche Creek	FOCCG	6	1	7	3	21	5	3
							TOTAL HRS	TOTAL DEBRIS YRDS	TOTAL CAMPS
							275	96	60

Table 3. Monthly Public and Private Permits

Monthly Public Permits - October				
Date	Location	Organization	Event	Participant #
10/5/2019	City Plaza	DCBA	Chico Parade of Lights	2,000
10/12/2019	One Mile Oak Grove A & B	Alzheimer's Association	Walk to End Alzheimers	1,100
10/15/2019	Bidwell Bowl Amphitheater	Catalyst Domestic Violence Services	Domestic Violence Awareness Day	75
10/17/19 -10/19/19	City Plaza	Butte County Prays	Worship/Prayer Tent (50 Hours)	200
10/19/2019	City Plaza	Chico Out of the Darkness	Fundraising Walk	400
10/26/2019	City Plaza	DCBA	Make a Difference Day	200
10/26/2019	One Mile Oak Grove A & B	Walk Woof Wag	Fundraiser Event & Walk for Chico Animal Shelter	450
10/31/2019	City Plaza	DCBA	Treat Street in City Plaza	250
8/31/2019	City Plaza	Nancy Wirtz	Ice Cream Social	150
Totals				4,825

Table 4. Monthly Private Permits

Monthly Private Permits - October		
Type	# Permits	# Participants
Private	9	563
Caper Acres	18	624
Totals	27	1187

Table 5. Monthly Maintenance Hours.

Category	Staff Hours	% of Total	% Change from Last Month
1. Safety	94.50	17.4%	47.7%
2. Infrastructure Maintenance	250.50	46.2%	193.4%
3. Vegetation Maintenance	60.00	11.1%	42.6%
4. Admin Time/Other	137.00	25.3%	70.8%
Monthly Totals	542.00	100%	81.9%

PHOTOGRAPHS



Figure 1 Fall at Teichert Ponds



Figure 2 MaDD volunteers



Figure 3 MaDD orientation

Attachments:

A.

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11/22/2019



DATE: 11/25/19
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Richie Bamlet, Urban Forest Manager
SUBJECT: Street Trees Division Report

NARRATIVE

1. Updates

- a. A candidate for the F/T Maintenance Aide position is currently being processed. Interviews are currently being scheduled for Maintenance aide hourly position. The Senior Maintenance Worker is still open for applications.
- b. The Citywide tree inventory with Davey Resource Group has started.
- c. Calls for Summer branch drop declined in October. Of 102 calls for tree service received, 33 were for cracked, hanging or downed limbs. These numbers represent a 30% decline in total calls from the previous month. Branch drop calls declined from 50% of calls, down to 33% of calls. This trend is expected to continue into December.

2. Planning/Monitoring

- a. Damage Reports – UFM completed one damage report for Risk Management. The claim related to vehicle impact and cost recovery of landscaping costs.

3. Planning and Building Development

- a. UFM reviewed many plan reviews in the new Trakit permitting system. Comments included Tree Protection Zone enforcement of protected trees, preference of retention of trees instead of removal, species choice and submission of inventory data during plan review for Tree Preservation and use of 36" box specimen trees.
- b. UFM is assisting Code Enforcement with one case of improper tree pruning of street trees without a permit.

4. Miscellaneous

- a. Public Works received three calls from homeowners who had received notice of cancellation of homeowner insurance subject to tree trimming requirements. Tree Division is working with the homeowners to satisfy insurance requirements. It is anticipated that more notifications of cancellation will be served to homeowners as they approach renewal periods.
- b. Davey Resource Group tree inventory specialists started surveying all trees located in the City right-of-way. The City is anticipated to have 38,000 street trees. Additional trees will be surveyed near paved surfaces in park areas. Surveyors started in the Woodland Avenue area. Initial commentary from the surveyors includes observations on the large size of some of Chico's urban trees.

5. Maintenance

- a. UFM met with PG&E contractor to determine tree preservation measures of native oak trees during security fence installation at the sub-station adjacent to Comanche Creek. See photo 1 showing cut outs in the fence line in order to preserve volunteer oak trees.

6. Outreach, Training and Education






- a. 10/9/19 Tree Division took part in a Public Works demonstration to first graders at McManus elementary. The grapple truck was a huge hit with the students! See photo 2
- b. 10/16/19 UFM attended training on predicting tree mortality and hazard assessment in Paradise. See photo 3
- c. 10/18/19 Tree Division staff attended an ISA Chipper Safety Academy in the City of Sacramento
- d. 10/26/19 Tree Division took part in Make A Difference Day in Bidwell park. A group of volunteers planted five Valley oaks in the One Mile area of Vallombrosia Ave. See photo 4
- e. 10/30/19 UFM provided 811 Call USA safety training to all Public Works staff.

7. Street Tree Supervisor Report

The Street Tree Supervisors monthly summary data tables for October is included below:

MONTHLY SUMMARY TABLES

Table 1

Category	Staff Hours	% of Total	% Change from Last Month	Trend
Tree Crew Hours				
1. Safety	57	10.8%	73.1%	
2. Tree Work	455	86.2%	97.6%	
3. Special Projects	0	0.0%	0.0%	
4. Admin Time/Other	16	3.0%	18.2%	
Monthly Totals	528	100.0%	82.8%	

5. Productivity

Calls			
Call Outs	70	81.4%
Service Requests: Submitted	0	-
Service Requests: Completed	82	110.8%	
Sub Total	0	-	

Trees			
Planted: Trees	0	-
Pruned	79	232.4%	
Removed: Trees (smaller)	0	-	
Removed: Stumps	0	-	
Removed: Trees	12	300.0%
Sub Total	91	239.5%	

Tree Permits (#)			
Submitted	9	450.0%
Approved	8	-
Denied	0	-	
Total	17	850.0%	

6. Contracts

Expenditures (\$)	\$	-	-
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Trees (#)			
Planted	0	-	
Pruned	0	-	
Removed: Trees (smaller)	0	-	
Removed: Stumps	0	-	
Removed: Trees	0	-	
Routine Maintenance	0	-	
Total	0	-	

Table 2

8. Upcoming Issues/Miscellaneous:

- a. Recruitment and on-boarding are ongoing in tree crew division. The local job market is very competitive due to the great need for qualified personnel in the ongoing rehabilitation effort in the Town of Paradise.

- b. UFM is working to finalize the Scope of Works for a Tree maintenance contract. The initial focus will be on tree removals and pruning trees in the main right-of-way corridors.
- c. UFM is working on a new RFP for the grant funded Urban Forest Master Plan.
- d. UFM is tentatively planning tree planting initiatives for this coming Fall/Spring. Meetings have been held with GIC non-profits at CSU and other faculty staff as well as Chico Tree Advocates to explore tree giveaway and planting initiatives in partnership with the Arbor Day Foundation.

PHOTOGRAPHS



Figure 1. PG&E marked out boundary cutouts for new security fence to preserve oak trees

Figure 2 below: McManus elementary school enjoy a public Works demonstration day. Grapple truck on display.





Figure 3. training day in Paradise. Tree mortality and hazard assessment.



Figure 4. Volunteers on Make A Difference day. One Mile. Five 15 gallon Valley oaks were planted.