



CITY OF CHICO
BIDWELL PARK AND PLAYGROUND COMMISSION (BPPC)

Regular Meeting Agenda
January 29, 2018, 6:30 pm
Old Municipal Building - 435 Main Street, Second Floor

Materials related to an item on this Agenda are available for public inspection in the Park Division Office at 411 Main Street during normal business hours or online at <http://www.chico.ca.us/>.

1. REGULAR COMMISSION MEETING

1.1. Call to Order

1.2. Roll Call

1.3. Special Recognition and Presentation – Alliance for Work Force Development

2. CONSENT AGENDA - NONE

3. ITEMS REMOVED FROM CONSENT – IF ANY

4. NOTICED PUBLIC HEARINGS - NONE

5. REGULAR AGENDA

5.1. CONSIDERATION OF THE 2016- 2017 MONITORING REPORT FOR THE PEREGRINE POINT DISC GOLF COURSE.

Staff will present a review of the 2016-2017 Monitoring Report which provides recommendations for the disc golf course and the Peregrine Point area based on the past 6-years of use and monitoring. Staff will incorporate the recommendations into a revised 5-year Monitoring Plan that the BPPC will consider for adoption at a future meeting.

Recommendation: Review and accept the Monitoring Report.

5.2. REPORT ON THE BPPC POLICY ADVISORY COMMITTEE MEETING HELD ON 1/17/18

The Policy Advisory Committee met on 1/17/18 to continue its review of possibly charging a parking fee in Upper Bidwell Park. The BPPC requested that the Committee further review the costs, potential revenues, and enforcement capabilities of this concept and report back to the Commission. The Committee also reviewed the concept of possibly closing Lower Bidwell Park earlier than midnight.

Recommendation: None at this time. The Committee continued discussion of the parking fee to a future meeting after the public survey is distributed, and the earlier Lower Park closing item to their February meeting.

5.3. REPORT ON THE BPPC TREE COMMITTEE MEETING HELD ON 1/22/18

The Tree Committee met on 1/22/18 to continue its review of Chico Municipal Code (CMC) Section 16.68 regarding the Heritage Tree Program, and a proposed Department of Forestry (CAL-FIRE) grant application to seek funding to update the City's street tree inventory and prepare an Urban Forest Management Plan.

Recommendation: None at this time. The Committee requested additional information from Staff and continued discussion of the Heritage Tree Program to their February meeting.

6. BUSINESS FROM THE FLOOR

Members of 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 cannot take any action at this meeting on requests made under this section of the agenda.

7. REPORTS

Items provided for the Commission's information and discussion. No action can be taken on any of the items unless the Commission agrees to include them to a subsequent posted agenda.

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

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

7.3. Park & Natural Resource Manager Report (**Verbal Report**), if applicable

8. ADJOURNMENT

Adjourn to the next regular meeting on February 26, 2018 at 6:30 p.m. in the Council Chamber of the Chico Municipal Center building (421 Main Street, Chico, California).



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 three working days prior to the meeting.

2016/2017 Monitoring Report for the Peregrine Point Disc Golf Course

Upper Bidwell Park, Chico, California

January 29, 2018



City of Chico

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I. Introduction

As part of the update of the Bidwell Park Master Management Plan (BPMMP) prepared by the City of Chico's consultant EDAW, a Disc Golf/Trailhead Area (which was later named the Peregrine Point Disc Golf/Trailhead Area) Concept Plan was developed for the pre-existing disc golf course and trails located on the south side of Upper Bidwell Park off of Highway 32. This Concept Plan, included a disc golf beginner short course, a more advanced long course, restrooms, a developed parking lot, and shaded and unshaded picnic areas. The area serves as trailheads to many Upper Bidwell Park trails. In addition to disc golf, the area is a popular destination for hikers, mountain bikers, and nature enthusiasts. During the environmental review process for the BPMMP, a Master Mitigation and Monitoring Program (MMMP) was developed in 2008 for the Disc Golf/Trailhead Area, a copy of which is attached in Appendix "A".

In 2009, the Bidwell Park and Playground Commission (BPPC) and Chico City Council directed Staff to work with Outdoor Recreation Advocacy, Inc. (ORAI) to establish an agreement for the closure and relocation of the disc golf short course (9-holes), construction of improvements to the long course (18 holes), the installation of mitigation measures, and ongoing monitoring. Monitoring is to occur within the defined area of the Peregrine Point Disc Golf course. Monitoring of other areas of the site is beyond the scope of this report.

A. Review of Operating Agreement

An operating agreement between the City and ORAI was executed on 6/18/10, which governs the disc golf course development, operation, and mitigation measures. Under the agreement, ORAI is to complete maintenance and repairs to the course as needed. ORAI began developing the long course on September 1, 2010 and it opened on February 12, 2011.

The 2014 monitoring report summarized the ORAI agreement and compliance, noting that ORAI had met the majority of the conditions of the agreement. The agreement has an automatic 5-year extension and the City will conduct the next 5-year review in 2019, with the last five-year extension beginning in 2020.

B. Monitoring Requirements

Approximately 79 mitigation measures were identified in the MMMP, which addressed impacts on Air Quality, Biological Resources, Cultural Resources, Hydrology, Noise, and Traffic. Most of the mitigation and monitoring measures were required as part of the construction of the disc golf course, and have been completed or are no longer applicable. However some remaining biological measures are subject to annual monitoring and thereby are the focus of this Monitoring Report. The list of these remaining measures and the status of implementation are depicted in Appendix B.

C. Monitoring Plan

As part of the disc golf improvement project, the City developed the Peregrine Point Monitoring Plan in 2011 (Plan). After construction of the course, the Plan became the primary document for assessing performance and environmental compliance. Monitoring provides the basis for assessing impacts associated with implementation and operation of the project and for developing remedies to minimize those impacts.

The Plan also articulates the adaptive management approach, and outlines the monitoring framework to evaluate the operation of the Peregrine Point Disc Golf Course. As part of the adaptive management approach, the City anticipates that as use by all types of park visitors increase, the monitoring approach and remedies will evolve over time. An example of this adaptive approach is monitoring now occurs within the defined area of the Peregrine Point Disc Golf Course and not in the other areas of the site.

This report provides a fifth and sixth year review of the monitoring program and will assess the progress of implementing measures to protect resources. The report also notes modification of data collection frequencies, intensity, and protocols that may change with the Bidwell Park and Playground review and acceptance of this report.

Key functions of this 2016-2017 monitoring report are to:

- Communicate implementation activities,
- Review monitoring results and project activities,
- Document the completion of project milestones,
- Identify potential challenges or objectives for the upcoming year, and
- Recommend specific actions (adaptive management recommendations) on any aspect of the program for the following year.

II. SUMMARY OF ACTIVITIES AND MONITORING

This report is based on the following reports related to monitoring at the site for 2016 and 2017:

- 2015 Botanical Survey Results by Northern CA Regional Land Trust (NCRLT) attached as Appendix C.
- 2015 Oak Survey Results (NCRLT) in Appendix D.
- 2016 Knotweed Survey Data and Maps (NCRLT see Table 1).
- Site evaluations and observations by City staff and ORAI)
- ORAI 2016 and 2017 Annual Reports.

A. ORAI Activities

1. ORAI provided annual reports for 2016 and 2017 summarizing activities at the course including usage, course maintenance and improvements, proposed activities, finances, advertising, and a conclusion. Copies of these reports are attached as Appendix E and F.
2. ORAI held 10 exclusive use days for events and tournaments each year in 2016 and 2017.
3. Maintenance activities reported: unwanted trail abatement, litter removal, tee pad maintenance, cleaning graffiti, and working on course improvements.
4. ORAI continued installing the new wider tree guard system using wood frames and plastic mesh fencing to provide better protection. Field observations indicate that the screens work when up, but can be easily knocked over or vandalized.
5. In 2016, ORAI contributed \$7,603 toward the 2016 environmental studies, insurance and operation costs. This does not include the 800 hours of volunteer time spent on the course, at an estimated in-kind value of \$12,000 (800 hours x standard \$15/hour volunteer rate).
6. In 2017, ORAI contributed approximately \$2,500 for insurance and operating costs, and contributed 600 hours of volunteer time spent on the course (estimated in-kind value of \$9,000).
7. ORAI met with the City several times to review the condition of the course and review the tone pole placement for the alternative holes. It was agreed that the City would drill holes for new alternative targets and ORAI would install them.

8. In December 2016, ORAI submitted a written request inquiring about the possibility of installing a recycling bin and/or donation box that they would install and collect for fundraising.

B. Site Evaluation and Usage

Staff remains concerned about the amount of bare ground caused from a variety of park visitors (disc golf players, bikers, hikers, and other uses) and the potential for direct damage to vegetation and subsequent soil erosion. Staff will work with ORAI to better delineate trails and may consider placement of native grass straw in erosion prone areas.

C. Checkerbloom

1. Objective BIO-1b-(g) of the MMMP indicates an action trigger of “Long term maintenance of the same number and approximate extent of Butte County Checkerbloom as the 2005 survey.” In 2005, EDAW conducted a checkerbloom survey in March and May 2005 and found “12 Butte County checkerbloom populations.” The subsequent monitoring surveys reveal that the number of individuals and locations are substantially greater than the 2005 survey.
2. While it is possible that the 2005 survey missed some of these areas, observations on the surveys indicate that potential obvious threats are related to rogue mountain bike trails and not disc golf impacts. These observations support the idea that the course alignment, out of bound features, and fencing has been successful in avoiding impacts from disc golf.

D. Bidwell’s Knotweed Surveys

1. The knotweed survey method was changed in 2012 to include grouping the Knotweed appearances into polygons. The polygons provide a good approximation of the range of knotweed on the site and serve as surrogates for the “wildflower fields”.
2. The course was designed to avoid most of the areas that contain Knotweed. Part of Holes 2, 12, 14, and 17 have knotweed patches. Holes 8 and 9 have small slivers of larger patches potentially along their edges.
3. The area of knotweed previously monitored was quite larger than the disc golf course footprint. In 2016, the sampling area was limited to Knotweed located within the disc golf course area only (see Figure 1 on page 6).

4. In 2016, The Northern California Regional Land Trust (NCRLT) surveyed the extent and distribution of Bidwell's Knotweed within the disc golf course sample area only. Due to limited funding, NCRLT only provided data shape files and field notes and did not prepare a full report. NCRLT's field notes are summarized in the following Table 1:

Table 1. Summary of Knotweed Group (KG) Observations (NCRLT 2016).

| Hole # | KG Group | Patch ID | Individuals in patch | | | | | Mapped Before? | Notes |
|--------|----------|----------|----------------------|------|--------|---------|------|----------------|--|
| | | | <5 | 6-50 | 51-100 | 101-250 | >250 | | |
| na | 1 | x1 | 1 | | | | | Y | Outside DG area; reference |
| na | 1 | x2 | | | x | | | Y | Outside DG area; photo ref. |
| 14 | 3 | 130 | 1 | | | | | Y | Trail edge, btwn #14 basket & #17 tee. |
| 14 | 3 | 131 | 4 | | | | | Y | Edge of AVBA; NAVAR |
| 14 | 3 | 132 | | x | | | | Y | Plants trampled by pedestrian |
| 14 | 3 | 134 | 5 | | | | | Y | Trail edge |
| na | na | 135 | | | x | | | N | Rock outcrop between trails. |
| na | 5 | 136 | | x | | | | Y | Rock outcrop in vicinity of #5 fairway. |
| na | 5 | 137 | | x | | | | Y | Rock outcrop in vicinity of #5 fairway. |
| na | 5 | 138 | | x | | | | Y | Rock outcrop in vicinity of #5 fairway. |
| na | 5 | 139 | x | | | | | Y | Rock outcrop in vicinity of #5 fairway. |
| na | 4 | 140 | | | x | | | Y | Along minor trail; #11 basket to #12 tee. |
| na | 4 | 141 | | | | x | | Y | Along minor trail; #11 basket to #12 tee. |
| 12 | 4 | 142 | | x | | | | Y | ~25' south of #12 tee. |
| 12 | 5 | 143 | | x | | | | Y | In fairway; trampled area. |
| na | 5 | 144 | | | x | | | Y | Rock outcrop that extends btw fairway #5 & 12. |
| na | 5 | 147 | | | x | | | Y | Rock outcrop that extends btw fairway #5 & 12. |

5. While the design has been effective in avoiding impacts to most of the Knotweed areas, Knotweed Group 3 (KG3), which stretches from near the middle of Holes 2 and 14 and south, is the most impacted group. A comparison of Knotweed groups surveyed and found in 2011 through 2016 is depicted in Figure 2.

Figure 1. 2016 Peregrine Point Disc Golf Course Bidwell Knotweed Survey Path.

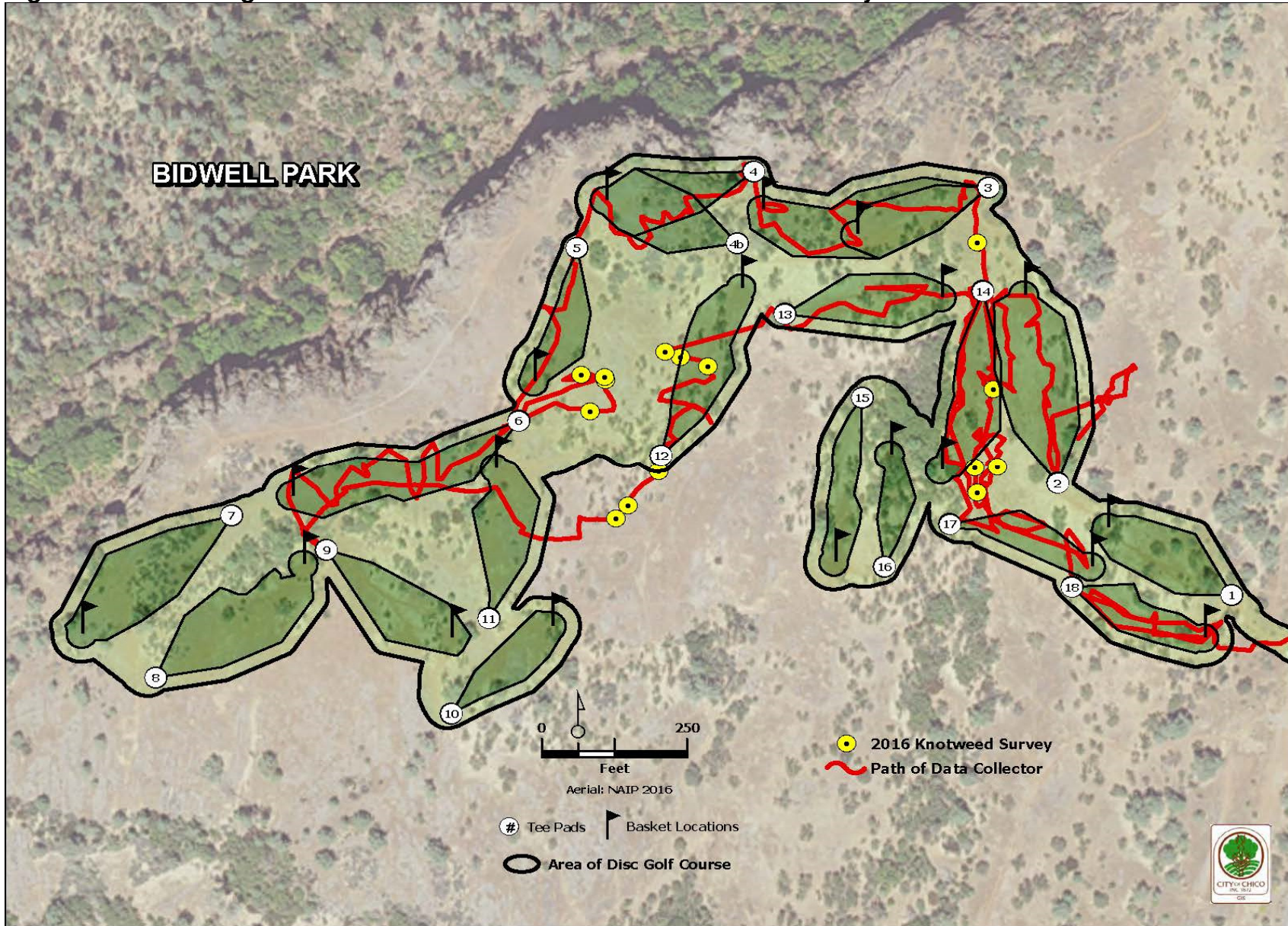
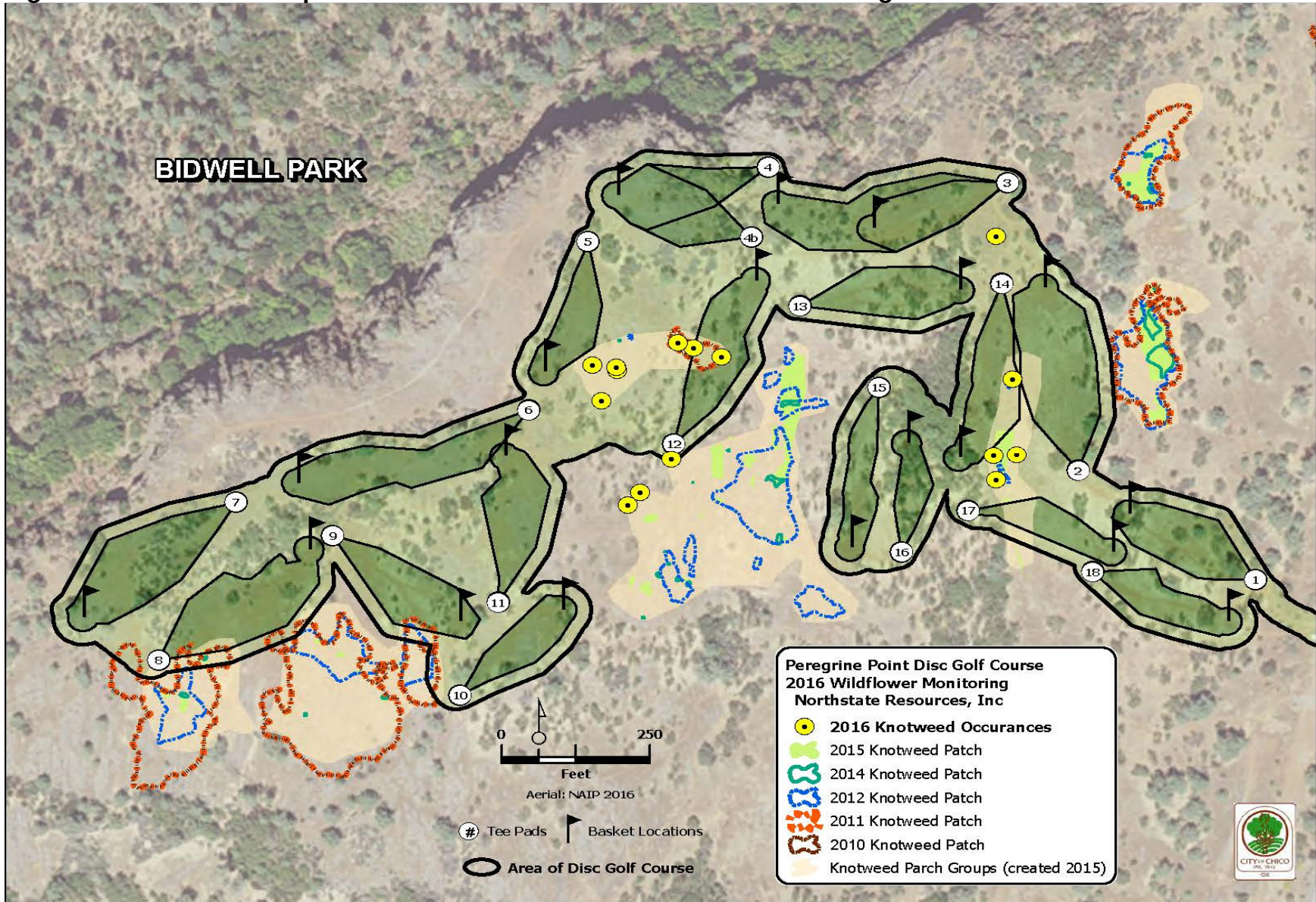


Figure 2. 2010-2016 Comparison of Bidwell Knotweed locations at the Peregrine Point Disc Golf Course.



E. Blue Oak Woodlands

1. Blue oaks were not surveyed during 2016 and 2017. The 2015 annual report compared “priority” and “reference” blue oak trees. As in 2013 and 2014, three variables were statistically significant: trunk quad impacts (#), damaged bark patches (#), and broken branches (#). In 2015, the difference in condition between reference (3.27) and priority (3.69) trees became significant ($p = 0.004$), albeit a small significance.
2. The 2015 monitoring report also noted that 5 Blue Oak trees appeared dead (3 Priority Trees, and 2 Reference Trees). However, the report should have noted that 2 Priority Trees as dead (11-001 already reported in 2013, and tree stem 14-001a reported as dead in 2014). One of the trees (11-001) had 2 trunks and was mistakenly counted as 2 trees. Similarly, monitors reported 14-001(a) dead, while the other stem (b) was still alive. Reference trees RO8-001 and R09-001 outside of the disc golf sample area were already reported as dead in 2014.
3. The loss of the two priority trees or stems (11-001 and 14-001a) triggered mitigation measure BIO-3c.l (and subsequent measures m, n, o, p), indicating that new Blue Oak trees need to be replanted at a 5:1 replacement/establishment ratio. The following measures were implemented in 2016 and 2017 to mitigate the loss of the two trees:
 - a) In 2016, Staff contacted BEC (Butte Environmental Council) to help ORAI with the stewardship of blue oaks. BEC provided training to ORAI on the planting of Blue Oak acorns.
 - b) In 2016 and 2017, ORAI planted three bags of Blue Oak acorns in the following new areas at a rate of 3 acorns per planting location:
 - Entrance area
 - North of Hole 3 tee area
 - West side of Hole 5
 - Area between Holes 5 and 12
 - North side of Hole 8
 - Area south of Hole 17
4. The following Table 2, which is based on the 2015 data, lists the “at risk” trees that meet the following criteria (>5 broken branches, >2 damaged bark patches, >4 condition level).

Table 2. At Risk Trees Based on 2015 Blue Oak Data

| Tree_ID | ▲ Hole | Damaged_bark_ptchs... | Broken_branches_(0->10) | Cond_no |
|---------|--------|-----------------------|-------------------------|---------|
| 01-001 | 1 | 6 | 7 | 4 |
| 01-004 | 1 | 2 | 6 | 4 |
| 10-001a | 10 | 3 | 9 | 4 |
| 11-001a | 11 | 3 | 9 | 5 |
| 11-001b | 11 | 3 | 9 | 5 |
| 11-004 | 11 | 6 | 5 | 4 |
| 12-001 | 12 | 6 | 10 | 4 |
| 12-003 | 12 | 2 | 9 | 4 |
| 14-001a | 14 | 2 | 10 | 4 |
| 14-001b | 14 | 2 | 10 | 4 |
| 18-001 | 18 | 2 | 9 | 4 |

While some differences may be small and confounding factors may be at play (i.e. the course was not set up randomly and years of drought), factors suggest that disc golf has had an increasing negative, but not substantially significant, effect on the 307 Blue Oaks located within the disc golf survey area.

III. RECOMMENDATIONS

Over the past 6 years, there have been a number of refinements proposed for the course management. Some have been completed as part of course maintenance. Others will be reviewed and potentially incorporated into a revised Monitoring Plan for the site.

The following list contains some of the most important recommendations and course of actions identified based on the findings from this report.

A. Course Features

1. Recycling and Donation Containers

- a) ORAI requested the installation of a recycling bin at the entrance to the Peregrine Point trailhead in Upper Park. Once installed, they would assume duties of emptying the recycling bin in an as needed or weekly capacity.
- b) ORAI also wished to discuss the options on adding a “donation box” to the site near the Peregrine Point Disc Golf information Kiosks.

B. Alternative Hole Placement

1. The 2014 Monitoring Report recommended consideration of alternative hole/target placements to be used on a rotating basis to lessen disc golf impacts and provide recovery time for Blue Oaks and Knotweed. Staff and ORAI recommended alternative hole placement options at holes: 1*, 2*, 4, 6, 7, 8, 9*, 10*, 11, 12*, 13*, 14*, 17, and 18 (* indicating priority holes). A map of the alternative hole/targets is attached as Appendix G.
2. The City and ORAI planned to complete the hole placements in fall 2015. However, the 2016 fires, heavy rains in 2017, and the need for mechanical means, such as a jack hammer, to dig the alternative holes, and changes in Park Staff delayed the alternate target placements.

C. Hole/Tee Signs

1. The 2015 report proposed hole signs that will depict hazards, resource issues, stewardship reminders, and a hole sponsor. These signs will help reinforce protection of sensitive resource areas, by encouraging users to stay on fairway paths and identify hazards.
2. It was agreed that the City would provide the holes (2 inch wide by 12 inch deep hole, typically within 4 feet of the right side of the tee pad), and ORAI would purchase, install, and maintain the signs.
3. The tee signs were purchased by ORAI. However wet weather and the delay in the City drilling the holes for the signs put this task on hold.

D. Out of Bounds (OB) Areas

1. Signage and additional fencing will be considered at Hole 3 to reduce traffic thru the off-limits area and along the northern OB fence line.
2. Other ideas in past years include planting plants as a living screen and improved signage. Staff would consider other ideas ORAI may have in reducing game play in sensitive areas.

E. Invasive Plants

As course improvements proceed, Staff recommends ORAI increase attention to minimize the infestation of invasive plants, such as barbed goat grass (*Aegilops triuncialis*), yellow star thistle (*Centaurea solstitialis*), and other plants that may be moved on site from visitors.

F. Trails and Fairway Paths

1. ORAI Responsibility - Complete past recommended measures (Improve path alignments, clear rocks and define trail edges (embed rocks),

improve signage) to better define designated paths and minimize the number and width of multiple threaded trails and fairway paths. This can also include additional snake rail fencing at the T-pad to keep visitors on the trail (for example, for Holes 2, 3, 5, 7, 14, etc.).

2. City of Chico Responsibility: Peregrine Point would benefit from a variety of trail improvements, such as rerouted or more defined trails, signage, a loop trail back to the parking lot, and improved trail tread. Although this will be difficult without additional resources, the City should undertake measures to develop a trail system on site, minimize rogue bike trails, educate users, and enforce trail restrictions on impacts of off-trail uses especially in winter and spring. Because of limited funding, this may take place as incremental measures over the next few years and the forthcoming Trails Plan will provide additional details.

G. Bidwell's Knotweed

1. Staff recommends that monitoring with the current knotweed polygon approach occur **every other year** and concentrate only on impacted groups (most notably Knotweed Group 3) and possibly potentially impacted groups (KG 5, 6, 7).
2. Staff also recommends that the most pertinent monitoring include an assessment of bare ground (especially in spring) on the course with the goal to remove rogue trails and minimize foot traffic in targeted areas (i.e. the area between Holes 2 and 14). Staff will explore utilizing aerial photographs and GIS techniques to evaluate bare ground changes on site.
3. Trampling in certain areas from disc golf and other users, such as bikers and hikers, continued as the biggest threat to knotweed growth in certain areas. Staff proposes to install a barrier, such as split rail fencing or other means, to protect the Knotweed Group 3 habitat area near Hole 14 target and the Hole 17 tee pad.

H. Butte County Checkerbloom

1. Over the past 5 years, checkerbloom numbers compare favorably to the 2005 benchmark, suggesting that the course alignment and measures (i.e. fencing) appears adequate to reduce impacts to this plant.
2. Therefore, Staff recommends that future monitoring for checkerbloom use the following approach:
 - a) Checkbloom monitoring be simplified to include an annual visual inspection of Checkerbloom areas, with a focus on evidence of damage or trampling or course changes (no detailed sampling).

- b) If damage to more than one group is evident and consistent with disc golf use, then the annual report may recommend additional sampling.
- c) During the each 5-year sampling period, one (1) detailed sample will occur **in years 3 or 4 (2018 or 2019 for this reporting period)**, using sampling methods comparable to the methods previously used.

I. Blue Oaks

1. The Monitoring Program and Plan calls for the evaluation of tree protection measures and make recommendations in next monitoring plan on whether to expand that approach.
2. Staff researched tree protection measures used in other disc golf courses and it was noted that impacts to the trunks of the trees will cause more damage and stress than discs hitting branches. The most successful and cost effective method used is to wrap plastic or wire mesh (e.g. garden fencing) around the tree trunks. The mesh still allows air flow, birds to access and eat harmful insects, and does not trap moisture (see below).



3. Consider caging sapling blue oaks on fairways to provide protection.
4. Document and monitor the survivorship of blue oaks planted as replacements.

5. The current protocol is to split blue oaks into groups based on the likelihood of potential disc golf impacts (primary, secondary, and tertiary) or if unlikely, reference trees. With actual evidence of impacts, the status of these trees should be evaluated and reassigned if appropriate.
6. Trees not included in previous sampling, but strongly impacted from disc golf play should be added. This provides more of a census approach of impacted trees rather than a sample. Mean values for reference trees variables may be helpful as criteria for inclusion/exclusion. Similarly, trees with minimal damage on bark patches and few broken branches and on the edge of the fairway, could be removed from the sampling.
7. If the measures implemented for tree protection reverse the negative trends in oaks, then future monitoring reports may consider revising the monitoring approach to focus on the most impacted trees (see below) and potentially reduce the frequency of sampling. In other words, the priority trees may be reassigned if impacts lessen.

J. Mulch

1. Tees at seven (7) holes (Holes 9, 11, 12, 13, 15, 16 and 17) and six (6) targets (Targets 1, 9, 10, 13, 14, and 16) located within the drip line of oak trees have been identified as needing mulch (see Table 5 below). It is recommended that mulch be distributed on the six easily accessible holes (+) first.

Table 5. Tees and Targets within Oak Tree Drip-lines.

| Hole Number | Required Tee | Recommended Target | Easy Access | Added Mulch |
|-------------|--------------|--------------------|-------------|-------------|
| 1 | - | + | + | |
| 9 | + | + | - | |
| 10 | - | + | - | |
| 11 | + | - | - | |
| 12 | + | - | - | |
| 13 | + | + | - | |
| 14 | - | + | + | |
| 15 | + | - | + | |
| 16 | + | + | + | |
| 17 | + | - | + | |
| Total | 7 | 6 | 6 | |

Notes: No (-). Yes (+). Bold indicates more than 3 yards required

2. For areas that are more difficult to access (-), the use of fencing, rocks, brush, or other methods could be used to reduce the impact area and thereby the amount of mulch needed.

3. Obtaining clean mulch that did not have nonnative wood chips in the quantity needed at the course has been difficult since the City no longer have tree crews. The City is stock piling chips from trees that are currently being removed by the City's contractor for use at Peregrine Point.
4. The City will work with ORAI to develop staging areas to locate wood chips for distribution, and also discuss potential options to define and contain the chips into the tee areas once spread. In addition, other users of the site, such as Chico Velo's Trailworks crews, have offered to help ORAI spread mulch.

K. Monitoring Plan Update

This report and previous annual reports list recommendations and the need for a revised Monitoring Plan. If the BPPC adopts the recommendations in this report or adds additional ones, Staff will develop a revised Monitoring Plan for the protocol for the site for the next 5 years.

IV. SUMMARY

This monitoring report summarizes the first six (6) years of monitoring for the Peregrine Point Disc Golf Course. While Checkbloom protections seem adequate, Knotweed is mixed, and the data suggests some damage to Blue Oaks. Despite not being the only users of the area, ORAI continues to comply with the Agreement by being good stewards, providing financial support (nearly \$50,000 from 2011 to 2017) for the environmental studies, by maintaining the disc golf course, and helping monitor their group and educate the public of the sensitive nature of the site.

The new monitoring schedule for Checkerbloom and Knotweed will also allow ORAI to shift resources to maintaining the course by improving mulch, fencing, tree protection, and disc golf user education, and the City to shift efforts toward conducting the biological studies, improving trails, signage, public education, and enforcement. The City may also consider using CSU, Chico classes, or citizen groups versus paid consultants for the monitoring.

Therefore, Staff is recommending that the City play a larger role in managing the Peregrine Point area by working with ORAI and other partners to complete the following outstanding items over the next 5-year review period:

- Installation of mulch, starting with the 13 priority tees and targets
- Installation of the new tree protection measures
- Alternative hole/target placement for priority holes, as funding allows
- Trail decommissioning, delineation, and identification
- Installation of barriers (e.g. split rail fencing) of sensitive Knotweed areas
- Informative and interpretive signage

BIDWELL PARK



BIDWELL PARK DISC GOLF/TRAILHEAD AREA CONCEPT PLAN ENVIRONMENTAL IMPACT REPORT MASTER MITIGATION MONITORING PROGRAM



AUGUST 2008

EDAW

BIDWELL PARK



BIDWELL PARK DISC GOLF/TRAILHEAD AREA CONCEPT PLAN ENVIRONMENTAL IMPACT REPORT MASTER MITIGATION MONITORING PROGRAM



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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 Disc Golf/Trailhead Area Concept Plan 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 Disc Golf/Trailhead Area Concept Plan project. 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 City’s files for use in implementing mitigation measures adopted as part of the Bidwell Park Disc Golf/Trailhead Area Concept Plan project.

TABLE 1-1: MASTER MITIGATION MONITORING PROGRAM FOR THE BIDWELL PARK DISC GOLF/TRAILHEAD AREA CONCEPT PLAN 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 Disc Golf/Trailhead Area Concept Plan Project:</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). • On-site vehicles speeds shall be limited to a speed of 15 mph on unpaved roads. | | | | | |
| | | | | | Monitor weekly during construction |
| | | | | | Monitor weekly during construction |
| | | | | | Implement daily; monitor weekly during construction |
| | | | | | Implement as needed, monitor weekly during construction |
| | | | | | Implement daily; monitor weekly during construction |

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| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
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| <ul style="list-style-type: none"> Land clearing, grading, earth moving or excavation activities shall be suspended when winds exceed 20 miles per hour. 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. Vegetative ground cover shall be planted in disturbed areas as soon as possible after disturbance. Inactive storage piles shall be covered. | | | | | <p>Implement and monitor as needed</p> <p>Monitor weekly during construction</p> <p>Implement and monitor one time after construction</p> <p>Monitor weekly during construction</p> |
| <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. ◆ 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). | | | | | <p>Implement daily; monitor weekly during construction</p> <p>Monitor weekly during construction</p> |

BIOLOGY

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| <p>Mitigation Measure BIO-1b: Implement Measures to Protect Butte County Checkerbloom in the Disc Golf/Trailhead Concept Plan Area</p> <p>The following measures shall be implemented to mitigate potential direct and indirect effects on populations of Butte County checkerbloom from implementation of the Disc Golf/Trailhead Area</p> | City of Chico | City of Chico | Before ground-disturbing activities and during ongoing operation | City of Chico | See below |
| | | | | | See below |

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| Concept Plan: | | | | | |
| <ul style="list-style-type: none"> ◆ As provided in Appendix H of the BPMMP, the Disc Golf/Trailhead Area Concept Plan shall be implemented to avoid direct and indirect impacts on known locations of Butte County checkerbloom on the site. All disc golf structures (e.g., tees, targets, fairways) and trails shall be placed a minimum of 50 feet from locations that currently support Butte County checkerbloom wherever possible. Where this cannot be accomplished due to physical site constraints, the buffer may be reduced, but shall remain at a minimum of 25 feet. | | | | | Implement during construction; monitor monthly |
| <ul style="list-style-type: none"> ◆ Before construction of any facility at the Disc Golf/ Trailhead area in the vicinity of known locations of Butte County checkerbloom, exclusionary fencing shall be installed along a 25-foot buffer around the outer perimeter of the occurrence. Exclusionary fencing shall be installed under the guidance of a qualified botanist before commencement of construction to keep workers and equipment from disturbing existing Butte County checkerbloom plants. The fencing shall be kept in place and periodically inspected and repaired, if necessary, for the duration of construction. | | | | | Implement prior to construction; monitor monthly during construction |
| <ul style="list-style-type: none"> ◆ The Disc Golf/Trailhead Area Concept Plan shall restrict foot traffic to clearly defined trails and disc golf features. Trails shall be constructed as narrow as possible to avoid degradation of suitable habitat for Butte County checkerbloom (and other special status plant species). Where existing disc golf structures and trails in the vicinity of existing locations of Butte County checkerbloom will be decommissioned, barriers (such as boulders) shall be placed to discourage use of these trails and structures. | | | | | Implement during construction, monitor monthly during construction |
| <ul style="list-style-type: none"> ◆ Permanent signage at the trailhead/rest area shall be installed to inform Park users of the presence and sensitivity of Butte County | | | | | Install after construction; monitor |

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| checkerbloom (and other sensitive resources) on the site. | | | | | signage annually |
| <ul style="list-style-type: none"> ◆ As provided in Appendix H of the BPMMP, alternate pin locations for Holes 3 and 4 of the long course shall be used from March 1 through July 1 to provide further assurance that potential disturbance of nearby checkerbloom plants during the active growth and blooming period of the plants is minimized. | | | | | Implement and monitor annually |
| <ul style="list-style-type: none"> ◆ Per Plant Objective O. P-8 of the BPMMP, an adaptive management program shall be implemented that relies on periodic data collection on the distribution of Butte County checkerbloom at the Disc Golf/ Trailhead site. The goal of this adaptive management program shall be to document and monitor changes in the existing population of Butte County checkerbloom over time. The adaptive management plan is intended to address the fact that, notwithstanding the buffers and signage, the City cannot guarantee that the use of the park will not disturb Butte County checkerbloom | | | | | Monitor annually |
| <ul style="list-style-type: none"> ◆ If data collection indicates a decline in existing populations after implementation of the Disc Golf/Trailhead Area Concept Plan and Plant Objective O. P-8 of the BPMMP, relocation of trails or disc golf structures in the vicinity of these populations, or other management strategies that would benefit the plants based on the data collected, shall be implemented. This strategy would implement Plant Objective O. P-7 and Plant Implementation Strategies and Guidelines I. P-3 and I. P-4 of the BPMMP. The overall goal of the adaptive management strategy shall be the long-term maintenance of the same number and approximate extent of occurrences of Butte County checkerbloom as documented during the 2005 surveys. | | | | | Monitor annually; develop program as needed |

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| <p>Mitigation Measure BIO-1d: Implement Measures to Protect Bidwell’s Knotweed at the Disc Golf/Trailhead Area</p> <p>The following measures shall be implemented to mitigate for potential direct and indirect effect to Bidwell’s knotweed at the Disc Golf/Trailhead Concept Plan area:</p> <ul style="list-style-type: none"> ◆ The Disc Golf/Trailhead Area Concept Plan shall be implemented to minimize direct and indirect impacts on Bidwell’s knotweed habitat on the site. Because Bidwell’s knotweed is an annual plant species, population sizes may fluctuate greatly from year to year. Therefore, simply avoiding plants that are present in a given year would not ensure that great numbers of individuals would not be affected in subsequent years. Therefore, a habitat approach shall be taken to minimize impacts on this species. This approach would entail minimizing impacts to wildflower fields, the native plant community that supports Bidwell’s knotweed. ◆ Consistent with the Disc Golf/Trailhead Area Concept Plan, trails shall generally be placed outside of wildflower fields. The Disc Golf/Trailhead Area Concept Plan shall be implemented to restrict foot traffic to clearly defined trails and disc golf structures. The number of trails dissecting wildflower fields shall be minimized to the fewest number necessary to facilitate reasonable access to the disc golf course and scenic viewpoints, and trails shall be as narrow as possible and have clearly marked edges to reduce widening and discourage users from wandering off the path. Existing trails through wildflower fields that will not be retained as part of the Disc Golf/Trailhead Area Concept Plan shall be decommissioned, and barriers (such as boulders) shall be placed just outside any points where trails enter the wildflower field community to discourage use of these trails. | City of Chico | City of Chico | During construction of Disc Golf/Trailhead Area Plans and during ongoing operation | City of Chico | See below |

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|--|--------------------------------------|------------------------|---|-----------------------------------|--|
| <ul style="list-style-type: none"> ◆ 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 for preservation. High priority shall be given to preserving those wildflower field communities that contained Bidwell's knotweed during surveys conducted in 2005. | | | | | Implement prior to construction; monitor monthly during construction |
| <ul style="list-style-type: none"> ◆ Permanent signage at the trailhead/rest area shall be installed to inform Park users of the presence and sensitivity of Bidwell's knotweed and wildflower field habitat and to deter users from disturbing the species. | | | | | Implement following construction; monitor signage annually |
| <ul style="list-style-type: none"> ◆ Per Plant Objective O. P-8 of the BPMMP, an adaptive management program shall be implemented that relies on periodic data collection on the distribution of Bidwell's knotweed at the Disc Golf/ Trailhead site. The goal of this adaptive management program shall be to document and monitor changes in the existing population of Bidwell's knotweed over time. | | | | | Monitor annually |
| <ul style="list-style-type: none"> ◆ If data collection indicates a decline in the number or extent (i.e. square feet) of existing populations after implementation of the Disc Golf/Trailhead Area Concept Plan, relocation of trails or disc golf structures in the vicinity of these populations, or other management strategies that would benefit the plants based on the data collected, shall be implemented. Seasonal and annual variation of the plants in response to environmental conditions such as rainfall shall be taken into consideration when determining if a decline is occurring. This strategy would implement Plant Objective O. P-7 and Plant Implementation Strategies and Guidelines I. P-3 and I. P-4 of the BPMMP. | | | | | Monitor annually; develop program as needed |
| Mitigation Measure BIO-2c: Implement Measures to Protect and Compensate for Loss of Vernal Pool Invertebrate and Western Spadefoot Habitat | 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 |

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| 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: | | | | | below |
| <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. | | | | | Implement prior to construction; monitor monthly during construction |
| <ul style="list-style-type: none"> ◆ 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 | | | | | Implement prior to construction |

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| special-status invertebrate and/or spadefoot populations. | | | | | |
| <ul style="list-style-type: none"> ◆ 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. ◆ 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> <p>Implement prior to, during and after construction; monitor as required</p> |
| Measures to Protect Nesting Raptors and Burrowing Owls | | | | | See below |
| The following measures shall be implemented to minimize and mitigate the potential disturbance of nesting raptors and burrowing owls. | | | | | |
| <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 | <p>Implement prior to construction</p> <p>Implement prior to construction</p> |

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| 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 guidelines 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. | | | | | Implement during construction |
| Mitigation Measure BIO-2d(2): Protect Peregrine Falcon If construction at the Disc Golf/Trailhead Area Concept Plan site is to occur during the peregrine falcon breeding period (generally February 1 to June 30), an appropriate buffer around the southern cliff edge shall be determined by a qualified biologist and construction activities shall be avoided within the buffer zone unless a qualified biologist confirms there is no active nest on the cliff. If construction commences between June 30 and February 1, no buffer will be necessary. | City of Chico | City of Chico | Before and during construction during the breeding season of peregrine falcons known to nest below the South Rim | City of Chico | Implement during construction Implement during construction |
| Mitigation Measure BIO-2f: Implement Measures to Protect Other Special-status Nesting Birds The following measures shall be implemented to minimize and mitigate the potential disturbance of nesting special-status birds (February to August). | 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 |

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|---|--------------------------------------|------------------------|--|-----------------------------------|---|
| <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. ◆ 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. | | | | | <p>Implement during construction</p> <p>Implement prior to construction</p> |
| <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 Disc Golf/Trailhead Area Concept Plan:</p> <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. | City of Chico | City of Chico | Before and during construction activities within or in the immediate vicinity of oak woodland habitat; ongoing for site management of the Disc Golf/ Trailhead Area Concept Plan site. | City of Chico | <p>See below</p> <p>Implement during construction</p> |

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| ◆ 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 |
| ◆ 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, except where deemed necessary to reduce the footprint size of tees as part of the proposed Disc Golf/Trailhead Concept Plan and to reduce soil compaction. | | | | | Implement during and following construction; monitor monthly during construction |
| ◆ 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. | | | | | Implement prior to and during construction; monitor monthly during 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. | | | | | During and following construction |

| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
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| In addition to the measures outlined above, the following additional measures shall be implemented in connection with development and ongoing maintenance of the proposed Disc Golf/Trailhead Concept Plan to protect oaks and to mitigate for any unavoidable loss resulting from mortality over time. These measures are based on site observations, oak woodland management guidelines provided by DFG, and measure recommended in the tree assessment (Appendix E4): | | | | | Implement during and following construction |
| <ul style="list-style-type: none"> ◆ Any modification to the proposed design and layout of the site shall be subject to the same impact avoidance and minimization criteria as the initial design; | | | | | Implement during and following construction |
| <ul style="list-style-type: none"> ◆ Information describing the value of native oak trees and the importance of the preservation and protection of oak woodland for wildlife habitat and the aesthetic values of Bidwell Park shall be provided at the informational kiosk at the Disc Golf/Trailhead area site. The information shall discuss the importance of avoiding direct impacts resulting from bark and limb damage as well as indirect effects such as soil compaction/root damage and shall encourage site users to act responsibly and prevent adverse effects. | | | | | Implement following construction; inspect signage annually |
| <ul style="list-style-type: none"> ◆ In cases where disc golf pins are located within groves of oak trees or oak trees are within fairways, measures to protect the tree trunks such as the installation of shielding pole structures shall be implemented. Installation shall be implemented without damage to the root zone, and in a manner that preserves the visual character of the site. | | | | | Implement during and following construction; monitor annually |
| <ul style="list-style-type: none"> ◆ In cases where tees or trails are located within driplines of oaks or in the immediate vicinity of driplines, a 6 inch layer of woodchip mulch shall be applied to a 20' radius around the tees and on the trails to minimize soil compaction; this layer shall be maintained on a ongoing basis, as needed, to ensure continued protection of the root zones. | | | | | Implement during and following construction; monitor annually |

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| <ul style="list-style-type: none"> ◆ Periodic monitoring of the oaks at the site shall be conducted to determine if any unavoidable impacts are occurring as a result of site use, in spite of the impact minimization measures. | | | | | Monitor at least twice yearly following construction |
| <ul style="list-style-type: none"> ◆ Any unavoidable impacts to oaks resulting from construction, or tree mortality resulting from ongoing use of the site shall be mitigated by replanting oak woodland habitat at the Disc Golf/Trailhead site in areas located outside of the footprint of facilities and trails in areas not currently occupied by other sensitive resources and suitable to support blue oak woodland. | | | | | Implement as needed after construction |
| <ul style="list-style-type: none"> • Oak planting should be from seeds (acorns) or seedlings that are obtained from the local genetic stock and should be of the same species as those targeted for replacement. Replacement ratios shall be at least 5:1 for trees lost/replaced that are greater than 5 inches diameter at breast height. | | | | | Implement and monitor as needed after construction |
| <ul style="list-style-type: none"> • Oak plantings shall be protected from browsing, planted on the north and east side of existing trees, and irrigated during the first few years as outlined in the oak assessment (Appendix E4) to enhance their chance of survival. | | | | | Implement and monitor as needed after construction |
| <ul style="list-style-type: none"> • Replacement plantings shall be monitored for their success for a period of five years or until the desired performance criterion of 5:1 is achieved, whichever is longer. If planting does not succeed, remedial actions such as replanting shall be implemented. | | | | | Monitor yearly after planting for five years or until success criteria are achieved |
| <ul style="list-style-type: none"> • If requested, community/user group stewardship of the plantings shall be allowed to contribute to restoration/revegetation efforts under guidance and supervision by City staff. | | | | | Implement after construction |

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| <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 Disc Golf/Trailhead Area Concept Plan:</p> <ul style="list-style-type: none"> ◆ Mitigation Measure BIO-1d shall be implemented to minimize adverse effects on wildflower fields resulting from implementation of the Disc Golf/Trailhead Area Concept Plan. ◆ Whenever possible, trail segments, site improvements, facilities and other design features shall be located to minimize impacts to wildflower fields. ◆ 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). ◆ 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. ◆ 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. | City of Chico | City of Chico | Before and during construction of components of the Disc Golf/ Trailhead Area Concept Plan that occur within the immediate vicinity of wildflower fields | City of Chico | See below |
| | | | | | Implement during construction; monitor as indicated above |
| | | | | | Implement prior to and during construction; inspect monthly during construction |
| | | | | | Implement prior to and during construction; inspect monthly during construction |
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| <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. Permanent signage shall be installed at kiosks located at the Disc Golf/Trailhead 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. | | | | | <p>Prior to, during and after construction; monitor annually</p> <p>Install after construction; monitor annually</p> |
| <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 Disc Golf/Trailhead 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. 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. | City of Chico | City of Chico | Before and concurrent with any component of the Disc Golf/Trailhead Area Concept Plan that involve ground-disturbing activities in or near jurisdictional wetlands and/or waters of the state | City of Chico | <p>Implement prior to construction</p> <p>Implement prior to construction</p> |

| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
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| <ul style="list-style-type: none"> ◆ 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 |
| <ul style="list-style-type: none"> ◆ Purchasing credits at a mitigation bank is the City’s preferred method of mitigation. | | | | | Implement prior to construction |
| <ul style="list-style-type: none"> ◆ 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 |
| <ul style="list-style-type: none"> ◆ 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 |

CULTURAL RESOURCES

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| <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> | City of Chico | City of Chico | During final design of projects and during construction activities | City of Chico | See below |
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CITY OF CHICAGO
 BIDWELL PARK DISC GOLF/TRAILHEAD AREA CONCEPT PLAN ENVIRONMENTAL IMPACT REPORT
 MASTER MITIGATION MONITORING PROGRAM

| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
|---|--------------------------------------|------------------------|-------------------------------|-----------------------------------|--|
| <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. | | | | | This part of the measure has been completed |
| <ul style="list-style-type: none"> ◆ If cultural resources are documented in the planning area, they shall be evaluated for their significance. | | | | | This part of the measure has been completed |
| <ul style="list-style-type: none"> ◆ 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. | | | | | This part of the measure has been completed |
| <ul style="list-style-type: none"> ◆ If avoidance of significant sites is not feasible, mitigation in the form of data recovery shall be applied to archaeological sites. | | | | | Implement during construction; monitor monthly |
| <ul style="list-style-type: none"> ◆ For portions of the Humboldt Wagon Road that cannot be avoided during implementation of the Disc Golf/ Trailhead Concept Plan, impacts would result in destruction of a portion of the route and intrusion of newer elements that would alter the immediate surroundings. As outlined in the management plan (see Jensen, et al. 1996; Table 2), this segment of the road appears significant based upon the associated archaeological deposit (NRHP Criterion D/CRHR Criterion 4), which will not be impacted by construction, and the association of the wagon road with John Bidwell. As currently designed, neither Alternative A nor Alternative B will result in destruction or alteration of the surroundings of the archeological deposit, and would impact only a percentage of the route associated with the original person responsible for its construction, John Bidwell. The surrounding environment of this segment of the route has been previously | | | | | Implement during construction; monitor monthly |

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|---|--------------------------------------|------------------------|--------------------------------|-----------------------------------|--|
| <p>impacted by construction of a more recent dirt road that parallels the contemporary route of Highway 32, such that the immediate surroundings have been altered from what was present during the historic period. Therefore, because neither alternative would impact the archaeological deposit or substantially impair the significance of the resource as it relates to its association with a person of historic importance (NRHP Criterion B/CRHR Criterion 2), both alternatives would result in less-than-substantial adverse changes in the significance of this resource.</p> <p>◆ Mitigation of any adverse changes resulting from direct impacts caused by implementation of the Disc Golf/Trailhead Area Concept Plan shall take the form of interpretive signage presenting an historic overview and the historic importance of the Humboldt route.</p> | | | | | Install signage after construction; monitor annually |
| <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 Disc Golf/Trailhead Area Concept Plan Project, 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</p> | City of Chico | City of Chico | During construction activities | City of Chico | Implement during construction |

| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
|---|--------------------------------------|------------------------|-------------------------------|-----------------------------------|-----------|
| 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. | | | | | |

HYDROLOGY

| | | | | | |
|---|---------------|---------------|--|---------------|---|
| Mitigation Measure HYDRO-1b: Comply with Water Quality Standards and Waste Discharge Requirements | City of Chico | City of Chico | Before commencement of construction activities | City of Chico | Implement and monitor as indicated in SWPPP |
| <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> | | | | | |

NOISE

| | | | | | |
|--|---------------|---------------|--|---------------|-----|
| Mitigation Measure Noise-1: Construction Related Noise | City of Chico | City of Chico | During construction of Park Improvement Projects | City of Chico | N/A |
| <p>The following measures shall be implemented to mitigate for construction noise control associated with the Disc Golf Trailhead Area Concept Plan Project:</p> | | | | | |

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| Mitigation Measure | Party Responsible for Implementation | Funding Responsibility | Implementation Trigger/Timing | Agency Responsible for Monitoring | Frequency |
|---|--------------------------------------|------------------------|-------------------------------|-----------------------------------|-----------|
| ◆ Construction equipment shall be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications | | | | | N/A |
| ◆ 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 |

TRAFFIC

| | | | | | |
|---|---------------|---------------|--|---------------|-----|
| Mitigation Measure Traffic-4: Coordinate with Caltrans | City of Chico | City of Chico | Prior to construction of the Disc Golf/Trailhead Area Concept Plan | City of Chico | N/A |
| <p>To address the potential increase in traffic hazards resulting from implementation of the Disc Golf/Trailhead Area Concept Plan, the City shall coordinate with Caltrans to obtain an encroachment permit for construction of the site access and parking lot for the Disc Golf/Trailhead area. As part of the consultation with Caltrans, the City shall address the potential need for additional signage and/or a left turning lane to address traffic safety along SR 32. The City shall implement any measures deemed necessary by Caltrans as a condition of the encroachment permit or as a result of the consultation on safety.</p> | | | | | |

APPENDIX B - Summary and Status of Mitigation and Monitoring Measures

| Topic | Mitigation # | Description/Goal | Trigger | Remedy | Status |
|--------------------------------|--------------------------------------|--|---|---|---|
| Butte County Checkbloom | BIO-1b-(f) | Adopt an Adaptive Management program to document changes over time. | Start of project. | Role and adaptive management program developed in this document. | Checkerbloom was monitored from 2011 to 2015 |
| | BIO-1b-(g) | Long term maintenance of the same number and approximate extent of Butte County Checkerbloom as the 2005 survey. | Data indicates a decline in existing populations after implementation. | Relocation of trails or disc golf structures. | Surveys documented a fluctuating increase in plant numbers since the 2005 survey, so Checkerbloom was not monitored in 2016 or 2017. Next survey is recommended in 2018 or 2019 to be paid by City. |
| Bidwell's knotweed | BIO-1d-(a) | Use a habitat approach to minimize impacts on wildflower fields. | High fluctuation in annual population makes tracking difficult. | Minimize impacts to wildflower fields. | Impact noticed due to drought, rogue trails, and trampling, not necessarily caused by disc golf. Staff recommends installing split rail fencing around most impacted KG 3. |
| | BIO-1d-(e) BIO-1d-(f) (remedy) | Document and monitor changes in existing population. | Monitor annually. Decline in number or extent of existing populations. | Implement Plant Objective O.P-7 Plant implementation strategies and guidelines I.P-3 and I.P-4 of the BPMMP. Relocation of trails or disc golf structures in vicinity of populations or other management strategies to benefit the plant. | Knotweed was surveyed within disc golf area only in 2016, but not in 2017. 2015 annual report recommended survey every other year. |
| Oak Woodland | BIO-3c-(b) | Decommission trails in oak woodlands that are part of a site-specific Park Improvement project. | Monitor annually | Reclaim using barriers. Decommission unused trails, identify needs annually. | Despite efforts by ORAI to provide barriers, rogue trails have emerged between Target 14 and Tee Pad 16, and between Tee Pads 16 and 17. |

| Topic | Mitigation # | Description/Goal | Trigger | Remedy | Status |
|-------------------------|---------------------|---|------------------|---|---|
| Oak Woodland | BIO-3c-(h) | Protect tree trunks without damage to the root zone and preserves visual character of the site. | Monitor annually | Install barrier protection measures and consider alternative holes. | ORAI constructed a new sturdier barrier design that included the use of wood frames with mesh netting placed in concrete bases. However the screens are easily knocked down and vandalized. Staff is considering using plastic or wire mesh that is wrapped around the trees as an alternative protection measure. Alternative pole locations have been identified but not yet installed due to weather and limited Park resources. |
| | BIO-3c-(i) | Minimize soil compaction around tee pads and on trails under oak driplines. | Monitor annually | Apply layer of woodchip mulch around the tees and narrow foot traffic with barriers. | Keeping mulch on tee pads, baskets and trails is an arduous ongoing task. City is stock piling mulch from its tree removal contractor to be spread by ORAI and potentially other community partners. The use of native straw on trails is also being considered |
| | BIO-3c-(k) | Determine if any unavoidable impacts are occurring as a result of site use. | Twice annually | Replant oak woodland habitat in suitable areas (l) according to conditions outlined in BIO-3c: l, m, n, o, p for a period of 5 years. | Since 2010, Four Blue Oaks have died, 2 Reference Trees and 2 Priority Trees. The death of the 2 priority trees required the planting of 10 trees. |

| Topic | Mitigation # | Description/Goal | Trigger | Remedy | Status |
|--------------------------|--|---|---------------------|--|---|
| | BIO-3c-(l) | Oak planting from seeds (acorns) or seedlings that are obtained from the local genetic stock (Replacement ratios of 5:1 for trees lost greater than 5 inches dbh. | Death of Blue Oaks. | Plant 5:1 ratio and establish for a period of 5 years. If Planting occurs in 2015, planting will be monitored in 2020. | Over the past years ORAI has planted bags of acorns in Out-of-Bounds area along Fairway 3, adjacent to Fairway 14, near the entrance area, north of Hole 3 tee area, west side of Hole 5, Area between Holes 5 and 12, North side of hole 8, and in the area south of Hole 17. Butte Environmental Council provided oak planting training to ORAI in 2016 |
| | BIO-3c-(m) | Oak planting protection, location, and irrigation. | | | |
| | BIO-3c-(n) | Replacement plantings monitoring (five years or until performance criterion 5:1 is achieved). | | | |
| | BIO-3c-(o) | If requested, allow community/user group stewardship of plantings under guidance and supervision by CITY staff. | | | |
| Wildflower Fields | BIO-3d-(f) | Reclaim existing trails not retained as part of site-specific Park Improvement Projects. | Monitor annually | Reclaim using barriers to discourage use of abandoned trails. Reseeding may be considered over time. | Use of branches and rocks as trail barriers have been problematic for ORAI. Staff is considering the use of native grass straw wattles as barriers. Reseeding will be considered. If needed. |
| Signage | BIO-1b-(d) BIO-1d-(b) BIO-3c-(h) BIO-3d-(g) | Maintain permanent signage to inform users of the presence and sensitivity of 1) Butte County Checkerbloom, 2) Bidwell's knotweed and wildflower field, 3) value of native oak trees and woodland, and 4) presence and sensitivity of the wildflower field community, discourage off trail use. | Monitor annually | Repair or replace signs. | Professional kiosk signs were installed at course entrance with this information but need updated and refreshed. ORAI has purchased tee signs to inform users of rules and sensitive species, but have not yet been installed. City will install trail signage, |

Note: that BIO-3c (m,n,o,p) have been made active due to the loss of Priority Trees 11-001 and one stem of 14.001a.

Technical Memorandum



Date: November 16, 2015
To: Dan Efseaff, Park and Natural Resource Manager, City of Chico
From: Paul Kirk, Programs Manager, Northern California Regional Land Trust
Project: Peregrine Point Disc Golf Course Botanical Monitoring
Subject: 2015 Botanical Survey Results

I. INTRODUCTION

On behalf of the City of Chico (City) and Outdoor Recreation Advocacy, Inc., the Northern California Regional Land Trust (Land Trust) conducted a botanical survey on and around the site of the Peregrine Point Disc Golf Course, hereinafter referred to as the “study area.” This memorandum summarizes the results of the findings regarding the botanical resources detected and mapped within the study area in 2015.

II. PROJECT LOCATION

The approximately 70-acre study area is located along State Route 32 approximately 7 miles east of the city of Chico. The study area occurs in the eastern portion of Bidwell Park on the south rim of the ridge overlooking Big Chico Creek at an elevation range of 1,050 to 1,300 feet above mean sea level. Barbed-wire fence encloses the study area on the southern and western edges.

III. PHYSICAL AND BIOLOGICAL SETTING

The study area is sited upon volcanic mudflow breccia that is part of the Tuscan Formation. These hard mudflows form the rocky outcrops covered with thin soils that support the vegetated areas identified as “wildflower fields” in previous surveys of the study area (City of Chico and EDAW 2008). Blue oak occurs on the deeper soils formed on volcanic conglomerate (U.S. Department of Agriculture and Natural Resources Conservation Service 2006).

The site has been used historically by hikers and naturalists and, currently, by disc golfers and mountain bikers. Footpaths and bike trails, eroded soils, trampled plants, and damaged trees are some examples of disturbances at this site that reflect its historical and current use.

Vegetation on the site is a mix of blue oak (*Quercus douglasii*) savannah with sparse, scattered tree cover and blue oak/foothill woodland with foothill pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizenii*), interspersed with annual grassland elements and exposed volcanic mudflow. Understory shrubs and vines occurring within the woodland are manzanita (*Arctostaphylos manzanita*), redberry (*Rhamnus ilicifolia*), buck brush (*Ceanothus cuneatus*), poison oak (*Toxicodendron diversilobum*), and honeysuckle (*Lonicera interrupta*). Grassland within the study area is dominated by non-native annual grasses including wild oats (*Avena barbata*), Italian wildrye (*Festuca perennis*), soft chess (*Bromus hordeaceus*), annual fescues

(*Festuca* spp.), false brome (*Brachypodium distachyon*), dogtail (*Cynosurus echinatus*) and medusahead (*Elymus caput-medusae*). Non-grass species flowering at the time of survey include twining brodiaea (*Dichelostemma volubile*), soap plant (*Chlorogalum pomeridianum*), purple clarkia (*Clarkia purpurea*), Hansen's larkspur (*Delphinium hansenii*) and Butte County checkerbloom (*Sidalcea robusta*).

Thinner soils associated with the edges of the exposed volcanic mudflow support a few annual grasses, mostly annual fescues and soft chess, as well as needle-leaved navarretia (*Navarretia intertexta*), Douglas' sandwort (*Minuartia douglasii*), dwarf stonecrop (*Sedella pumila*), Hansen's spike-moss (*Selaginella hansenii*) and Bidwell's knotweed (*Polygonum bidwelliae*).

IV. SURVEY METHODOLOGY

Land Trust botanists, John Hunt and Paul Kirk, conducted a targeted survey on May 9 and 23, 2015 to relocate and map previously recorded occurrences of the Butte County endemics, Butte County Checkerbloom (hereinafter "checkerbloom") and Bidwell's knotweed (hereinafter "knotweed"). A map of checkerbloom occurrences from botanical surveys conducted in 2014 was used to relocate known checkerbloom plants. Survey effort was limited to the portion of the study area encompassing the Peregrine Point Disc Golf Course area and the northeastern end of the study area where checkerbloom has been documented in previous years; depicted on the 2014 map as checkerbloom groups. Wildflower fields within the main area of play that were known from previous surveys to contain knotweed (i.e., knotweed groups) were surveyed and knotweed occurrences mapped; other wildflower fields were scanned for presence of knotweed as time permitted. Incidental observations of noxious weeds were also recorded. Although associated species and general vegetation attributes were noted with regard to checkerbloom and knotweed occurrences, a full floristic survey was not conducted. Taxonomic nomenclature for plant species is in accordance with *The Jepson manual: vascular plants of California, 2nd edition* (Baldwin et al. 2012).

Being that multiple checkerbloom meristems can sprout from the same colonial root mass, the concept of checkerbloom units was used as detailed in the *2011 Botanical Monitoring Results Technical Memorandum* (North State Resources 2011). Specifically, a checkerbloom unit consisted of single meristem or a clump of meristems with each being less than 50 cm from an adjacent meristem. The location of each checkerbloom occurrence, or closely adjacent occurrences, was mapped as point data using a Trimble™ Pathfinder Pro XH Global Positioning System capable of sub-meter accuracy (Trimble GPS).

Bidwell's knotweed is a small annual species that occurs on the exposed volcanic mudflow and thin soils of the wildflower fields in the study area. Because knotweed plants can occur close together and in great numbers (often 100 or more), the boundaries of knotweed occurrences (i.e., patches) were mapped as polygon data using the Trimble GPS.

For each checkerbloom and knotweed occurrence the following data were recorded:

- Species
- Unique ID #
- Total number of checkerbloom units or knotweed individuals
- Plant vigor

- Phenology (% vegetative or reproductive)
- UTM coordinates and datum
- General composition of adjacent vegetation
- Overall site quality (excellent, good, fair, poor)
- General characteristics of notable visible disturbances..

V. RESULTS

Checkerbloom

A total of 96 checkerbloom units were observed (45 data points) during the 2015 survey (Figure 1). Approximately 90 percent of the units were vegetative, that is, they produced no flowering stems (racemes). The remainder (10 percent) bore one or more flowering stems (racemes) in various stages of development. Phenologically, the checkerbloom population at the study area was flowering and fruiting.

Table 1. Summary of field data for Butte County Checkerbloom occurrences at Peregrine Point Disc Golf Course collected May 9, 2015.

| Checkerbloom Occurrence Attribute | Count | % of total |
|-----------------------------------|-----------|-------------|
| # units reproductive | 10 | 10% |
| # units vegetative | 86 | 90% |
| Total # units | 96 | 100% |

Checkerbloom units were observed in all eight checkerbloom groups that were depicted in the 2014 report (North State Resources 2014). Most of the checkerbloom units occurred within blue oak woodland paralleling the 14th, 15th, and 16th fairways or were associated with individual oak trees or the drip line of shrubs at the ecotone of woodland and grassland (CG-3, CG-4, and CG-5). Another cluster of points was located along the edge of woodland east of the 2nd fairway (CG-6). The out-of-bounds areas between the two baskets on the 3rd fairway and bounded by rail fence was another area where checkerbloom was relatively abundant. Additional checkerbloom units were mapped in the northeastern portion of the study area, outside the general area of disc golf play (CG-7 and CG-8).

The 2015 survey was conducted approximately one month later than in 2014; theoretically a later stage in the checkerbloom flowering and fruiting period. Both the total number of occurrences and the percentage of reproductive occurrences were less than in 2014.

Mountain bike trails established in 2013 and 2014 are still present and being used in 2015. The perimeter fence immediately south of CG-5 was cut and pulled aside in 2013; that opening has been widened. The approximate locations of these bicycle-related disturbances are noted on Figure 1 with an “X.”

Knotweed

Knotweed was detected in all of the knotweed groups, except for KG-5, and 34 knotweed patches were mapped (Figure 1). Approximately 90 percent of the plants were in flower, and consequently were relatively easy to detect. The number of individuals within an occurrence ranged from 3 to 170, and the total count of the number of individuals was approximately 840.

Table 2 provides a summary of the number of individuals and observed threats in each of the knotweed groups.

KG-3 is adjacent to fairways and baskets that receive heavy foot traffic resulting in large areas of bare soil and exposed substrate. Mountain bike tire tracks and a bike trail were also observed in this part of the study area. Four knotweed patches were observed in KG-3; none were observed 2014.

The knotweed survey was conducted four weeks later in 2015 than in 2014, and nearly all knotweed plants were flowering or in bud. Similar to 2014, the plants were small in stature and sparsely distributed. Trampling and associated erosion was observed along both designated fairways and undesignated trails within proximity of a majority of the knotweed patches.

Table 2. Summary of field data for Bidwell’s Knotweed patches at Peregrine Point Disc Golf Course collected May 23, 2015.

| Knotweed Group ID¹ | # patches | # plants | Observed Threats |
|--------------------------------------|------------------|-----------------|---|
| KG-1 | 3 | 230 | No obvious threats |
| KG-2 | 1 | 110 | No obvious threats |
| KG-3 | 4 | 65 | Trampling/erosion. Potential mountain bike impacts |
| KG-4 | 16 | 318 | Mountain bike impacts along southern edge. Trampling from multiple foot trails. |
| KG-5 | | None observed | No obvious threats |
| KG-6 | 7 | 62 | Trampling/erosion. Potential mountain bike impacts |
| KG-7 | 3 | 55 | Trampling/erosion. Potential mountain bike impacts |

¹ Knotweed group identification numbers (i.e., KG-x) correspond to those shown on the 2014 map.

VI. DISCUSSION

Butte County checkerbloom and Bidwell’s knotweed plants were relocated and mapped at most of the known locations in the study area, including all those within the main disc golf course area. Checkerbloom plants appear to be affected by the ongoing drought. We mapped 96 checkerbloom units in 2015—less than half of those mapped in 2014—and the percentage of reproductive plants was also less than in 2014. Total number of knotweed plants within the study area was greater in 2015 than in 2014, but still much less than in 2012–2014. Knotweed patches were very small and sparsely distributed in the knotweed groups, and individual plants were short statured with little branching. Drought conditions and heavy foot traffic appear to have a continuing negative impact on the extent of the knotweed population.

The noxious weed barbed goat grass population observed in 2011–2013 was not observed in 2015, although it may still be present on site as part of the soil seed bank. Long-term threats to checkerbloom and knotweed continue to be trampling, soil erosion, herbivory, and competition by exotic grasses. Both checkerbloom and knotweed populations are additionally threatened by the immediate impacts of mountain bike activity within the study area.

VII. REFERENCES

- Baldwin, B., D. H. Goldman, K. D. J., R. Patterson, T. J. Rosatti, and D. H. Wilken, eds. 2012. *The Jepson manual: vascular plants of California, 2nd edition*. Berkeley: University of California Press.
- City of Chico and EDAW. 2008. *Final Bidwell Park Master Management Plan Update*.
- North State Resources 2011 Peregrine Point Disc Golf Course Botanical Monitoring Technical Memorandum – 2011 Survey Results.
- North State Resources 2014. NSR No. 51325 - Peregrine Point Disc Golf Course Botanical Monitoring Technical Memorandum – 2014 Survey Results.
- U.S. Department of Agriculture and Natural Resources Conservation Service. 2006. *Soil survey of Butte area, California, parts of Butte and Plumas counties*. Washington, D.C.: U.S. Government Printing Office.

Technical Memorandum



Date: November 18, 2015
To: Dan Efseaff, Park and Natural Resource Manager, City of Chico
From: Paul Kirk, Programs Manager, Northern California Regional Land Trust
Project: Peregrine Point Disc Golf Course Oak Tree Assessment and Monitoring
Subject: 2015 Oak Survey Results

I. INTRODUCTION

On behalf of the City of Chico (City) and Outdoor Recreation Advocacy, Inc., the Northern California Regional Land Trust conducted an arborist survey of the Peregrine Point Disc Golf Course, hereinafter referred to as the “study area.” This memorandum summarizes the findings of the 2015 arborist survey which is the fifth year of assessment and monitoring for two groups of native oak trees (*Quercus* spp.) in the study area.

II. PROJECT LOCATION

The approximately 70-acre study area is located along State Route 32 approximately 7 miles east of the city of Chico. The study area occurs in the eastern portion of Bidwell Park on the south rim of the ridge overlooking Big Chico Creek at an elevation range of 1,050 to 1,300 feet above mean sea level. Barbed-wire fence encloses the study area on the southern and western edges.

III. PHYSICAL AND BIOLOGICAL SETTING

The study area is sited upon volcanic mudflow breccia that is part of the Tuscan Formation, with thin soils that are low in organic matter. The study area is frequently used by disc golf enthusiasts, hikers, and cyclists. Footpaths and trails, eroded soils, trampled plants, and impacted trees are some examples of disturbances at the study area that reflect its current and historic use.

Vegetation within the study area is a mix of blue oak (*Quercus douglasii*) savannah with sparse, scattered tree cover and blue oak/foothill woodland with foothill pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizenii*), interspersed with understory shrubs and vines, annual grasses and forbs, and exposed volcanic mudflow.

IV. SURVEY METHODOLOGY

Oak trees within the study area were surveyed on foot by Scott Gregory, International Society of Arboriculture (ISA) Certified Arborist WE-9041A on July 10, 2015. Oaks located in an area of influence of disc golf activity with a high potential for impacts by discs were identified by the City Department of Parks and Natural Resources in 2011 as Priority 1 oaks. A random sample of oaks within outer bounds of the disc golf course, but outside the field of play of individual fairway boundaries, was designated by the City Department of Parks and Natural Resources in

2011 as a reference population for monitoring and comparison to Priority 1 oak data. Priority 1 oaks and Reference oaks were located in the field using existing Geographic Information Systems (GIS) coordinate data provided by the City.

Year 5 oak tree data were collected in the field using a hardcopy of the oak data spreadsheet prepared jointly by the City and Scott Gregory in 2012. The boundaries of the study area and the location of the 68 surveyed trees, representing 34 “Priority 1” oaks and 34 “Reference” oaks, are illustrated on the map provided in Attachment A.

Each surveyed oak was measured and assessed for diameter at breast height (DBH), height class, tree condition class, proportion of the tree exhibiting impact marks, number of areas on the tree exhibiting deep wounding of the bark to the cork cambium depth, proportion of the canopy exhibiting dead wood, total number of broken branches in the canopy, tree species, growth form, and width of tree crown along the north–south bearing. Where surveyed oaks had multiple dominant stems originating below breast height, DBH was measured for each stem. All other attributes were assessed for the entire tree.

The presence of mistletoe was noted anecdotally in 2013, and in 2014 presence/absence of mistletoe was noted for all 68 trees in the survey. Presence/absence of mistletoe was noted again in 2015.

V. RESULTS

Priority 1 oaks are represented by 33 blue oaks and one interior live oak, with a total of 39 stems. This count includes the former Reference oak reclassified as a Priority tree (12-008) in 2014. Mistletoe was present in 26 percent of the Priority 1 oaks. Summaries of all other 2015 Priority 1 oak metrics are presented in Tables 1–7 in Attachment B.

Reference oaks are represented by 31 blue oaks and three interior live oaks, with a total of 51 stems. Mistletoe was present in 18 percent of the Reference oaks. Summaries of all other 2015 Reference oak metrics are presented in Tables 1–7 in Attachment B.

VI. DISCUSSION

This report presents results from the fifth annual assessment of 68 oak trees (90 stems) within the bounds of the study area. The two established groups of survey trees (Priority 1 and Reference oaks) should continue to be evaluated annually to monitor the possible effects of disc golf activities on oak trees in the study area and observe where impact avoidance measures (e.g., wood chip mulch, vertical poles to block disc impacts) can be effectively installed.

The drought from 2013 and 2014 has continued into 2015. Drought stress remained evident in nearly all of the observed oaks in the two study populations, as well as oaks in the area not associated with the study. Observed symptoms of drought stress included premature leaf browning, sparse leaves in the canopy due to premature leaf drop, arrested acorn development, and increased mortality. Some oaks exhibited significantly more pronounced symptoms of drought stress than others.

ATTACHMENT A

Location of Surveyed Oak Trees Map

ATTACHMENT B

Summary Data

Table 1 - Percent Composition of Diameter Classes

| DBH (inches) | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|--------------|--------------------------------------|-------------------------------------|
| 0-5 | 13.2 | 19.2 |
| 6-11 | 65.8 | 57.7 |
| 12-17 | 7.9 | 11.5 |
| 18-23 | 7.9 | 9.6 |
| 24-29 | 2.6 | 1.9 |
| ≥30 | 2.6 | 0.0 |

Table 2 - Percent Composition of Height Classes

| Height (feet) | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|---------------|--------------------------------------|-------------------------------------|
| 0-5 | 0.0 | 0.0 |
| 6-10 | 5.3 | 1.9 |
| 11-15 | 13.2 | 28.8 |
| >15 | 81.6 | 69.2 |

Table 3 - Percent Composition of Condition Classes

| Condition | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|-----------|--------------------------------------|-------------------------------------|
| Excellent | 0.0 | 0.0 |
| Good | 2.6 | 7.7 |
| Fair | 34.2 | 59.6 |
| Poor | 55.3 | 28.8 |
| Dead | 7.9 | 3.8 |

Table 4 - Percent Composition of Trunk Impacts Classes

| Percent Trunk Impacted | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|------------------------|--------------------------------------|-------------------------------------|
| 0 | 0.0 | 59.6 |
| 1-25 | 2.6 | 28.8 |
| 26-50 | 23.7 | 9.6 |
| 51-75 | 52.6 | 1.9 |
| >75 | 21.1 | 0.0 |

Table 5 - Percent Composition of Dead Canopy Classes

| Percent Dead Canopy | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|---------------------|--------------------------------------|-------------------------------------|
| 0 | 0.0 | 0 |
| 1-25 | 71.1 | 75.0 |
| 26-50 | 18.4 | 17.3 |
| 51-75 | 2.6 | 3.8 |
| >75 | 7.9 | 3.8 |

Table 6 - Percent Composition of Broken Branch Count

| Number of Broken Branches | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|---------------------------|--------------------------------------|-------------------------------------|
| 0 | 0.0 | 9.6 |
| 1 | 0.0 | 0.0 |
| 2 | 2.6 | 19.2 |
| 3 | 2.6 | 9.6 |
| 4 | 0.0 | 9.6 |
| 5 | 5.3 | 23.1 |
| 6 | 13.2 | 3.8 |
| 7 | 5.3 | 5.8 |
| 8 | 5.3 | 3.8 |
| 9 | 7.9 | 1.9 |
| ≥10 | 57.9 | 13.5 |

Table 7 - Percent Composition of Damaged Bark Patch Count

| Number of Damaged Bark Patches | Percent of Priority 1 Population (%) | Percent of Reference Population (%) |
|--------------------------------|--------------------------------------|-------------------------------------|
| 0 | 28.9 | 78.8 |
| 1 | 13.2 | 7.7 |
| 2 | 21.0 | 3.8 |
| 3 | 13.2 | 1.9 |
| 4 | 5.3 | 0.0 |
| 5 | 5.3 | 1.9 |
| 6 | 5.3 | 3.8 |
| 7 | 0.0 | 0.0 |
| 8 | 2.6 | 1.9 |
| 9 | 0.0 | 0.0 |
| ≥10 | 5.3 | 0.0 |

January 1st 2017

City of Chico
965 Fir St.
Chico Ca, 95926



Subject: 2016 Annual Report

Et Al:

The following is the annual report for the Peregrine Point Disc golf course for the year 2016.

Background: The operating agreement signed by Outside Recreation Advocacy Inc requires an annual report on Peregrine Point be made to the City of Chico. This report covers all happenings and business to do with the course within the time frame of January 1st 2016 to December 31st 2016.

Usage: ORAI had 10 exclusive use days in 2016 and were able to sell fundraising items one Saturday per month. We held organized events on several of the exclusive use days. Many events were rescheduled or moved to alternative venues due to rain closures. Events included the annual Bidwell Cliffs Pro/Am, Trilogy Challenge, and our annual bag tag events. At each events we took the time to educate people on the preservation of the course, and how they can leave a minimal impact.

Course Maintenance: Members worked together to clean as they play, and committed volunteer hours for larger projects. We had over 800 hours of volunteer time this year. Maintenance included: unwanted trail abatement, litter removal, tee pad maintenance, cleaning graffiti, and working on course improvement projects. Time was also spent working with CARD to maintain the Sherwood Forest disc golf course located at Hooker Oak park. Members and non members worked together to spread mulch and clean up the area. Members also used their time to educate fellow users of the course on how to leave a minimal impact while enjoying their day at the course.

Course Improvements: We continued our roll out of the new wider tree guards. As funds continue to come in, we are gathering material and building. We have again planted blue oak acorns in different locations throughout the site. 2016 was a investigative year. Acorns were planted in very small batches in 5 new locations on the course area. (Entrance area, North of hole 3 tee area, West side of hole 5, area between hole 5 and 12, North side of hole 8) We will be observing these locations going into future to see if any will make viable future blue oak nurseries. We have identified one area for a new nursery just South of the hole 17 teeing area. This was discussed during a course walk with the Parks Department and is viewed as a no/low traffic area with good soil. During our course walks it has been discussed how to lower the amount of rogue bike and hiker trails cutting through the protected area's. The current plan is to work with the Parks department to install better signage for official park trails and to remove unsanctioned trails.

Proposed Activities: In 2017 we are looking at adding some more events to the roster. The annual Bidwell Cliffs Pro/Am will be held again, along with the Awesome Blossom Tossem' children's event that we hold each year with CARD. Along with several manufacture sponsored events aimed at new players. All these events will be open to the general public on our "Exclusive Use Days" to help reach as many people as possible. We have also started an off site putting league this year that is played in different locations throughout Chico. Some of the smaller parks and some public venues.

Finances: In 2016 ORAI paid \$7603 toward environment studies, insurance, and operating costs. Our income was generated by the selling of fundraising items, fundraising events, grants from local groups, and donations from the public.

Advertising: ORAI is building on our use of social media and has again been producing our monthly newsletter. New adverts are going into local businesses that support the organization. Our presence is again being seen in the community.

Conclusion: 2016 as a whole was a fairly dormant year for us. Mulch not being able to be delivered to the course, or the drilling for new sleeves being stalled by mother nature stalled two major projects another year. Maintenance was performed and head way was made on some projects and outlining what other projects we should be considering. As is, the desire to get the new sleeves and tee signs in the ground is a pressing concern and we are very much wanting to address this ASAP. Weather has been a real issue for both ORAI and the Parks Department in getting equipment out on the course.

ORAI's plans moving forward into 2017:

- Continue replacing tree protectors with the improved models (as funds permit).
- When the weather permits, installing the alternate pin sleeves and tee signs. We will also be looking to see what locations may allow us to install some of these without the need of drilling. This project is now extremely overdue.
- We will be starting to break ground on the new blue oak nursery off of hole 17. Along with installing seedling protection on any new found blue oak seedlings (and a few manzanita) that we find on the course as a whole. The 2-3 minutes worth of work to apply a carton protector to a blue oak sprout should not be limited to just small marked areas.
- Hopefully we will have enough funds to replace a few of the stolen benches.

As always a high priority will be placed on open communications with the Parks Department to keep everything moving in a forward direction.

Phil Brock – Secretary
Outsider Recreation Advocacy, Inc.
A California 501(c)3

January 1st 2018

City of Chico
965 Fir St.
Chico Ca, 95926



Subject: 2017 Annual Report

Et Al:

The following is the annual report for the Peregrine Point Disc golf course for the year 2017.

Background: The operating agreement signed by Outside Recreation Advocacy Inc requires an annual report on Peregrine Point be made to the City of Chico. This report covers all happenings and business to do with the course within the time frame of January 1st 2017 to December 31st 2017.

Usage: ORAI had 10 exclusive use days in 2017 and were able to sell fundraising items one Saturday per month. We held organized events on several of the exclusive use days. Many events were rescheduled or moved to alternative venues due to amazing amount of rain this year. Events included the annual Bidwell Cliffs Pro/Am, Trilogy Challenge, Awesome Blossom Toss'em, and our annual bag tag events. We brought the North Valley tournament series into our organization as well this year. It is a financial wash for us, but it is also a platform to allow us to spread awareness of proper usage of our natural spaces. At each event we took the time to educate people on the preservation of the course, and how they can leave a minimal impact.

Course Maintenance: Members worked together to clean as they play, and committed volunteer hours for repair projects. We had over 600 hours of volunteer time this year. Maintenance included: unwanted trail abatement, litter removal, tee pad maintenance, cleaning graffiti, and working on course repair projects. Trail abatement is going very slow. The method of using deadfall is only really being reliable on a few of the holes. Users of the site will either move the material, or ride over it (in the case of bikers). Mulch was not delivered to the course this year, so none has been added. Members also used their time to educate fellow users of the course on how to leave a minimal impact while enjoying their day at the course.

Course Improvements: We spent two of our 5 work weekends repairing tree guards. We will continue deploying new ones once we have found a way to strengthen the ones we have. They are more fragile than is practical. Our last work day we added some additional structure to them and so far they are holding up very well. We will see how the first storms treat them. We have again planted blue oak acorns in different locations throughout the site. In 2016 we planted 5 new areas (Entrance area, North of hole 3 tee area, West side of hole 5, area between hole 5 and 12, North side of hole 8) and a few small sprouts have started. We are not expecting much for results until after the 2018 rain season. We planted the area south of hole 17 this year. There are already many small sprouts and tree's in the area. The only concerning factor for this new nursery is the rogue bike trail and walking path used to access hidden gate.

We were unable to make further improvements this year since drilling for alternate pins / tee signs has yet to be started.

Finances: In 2017 ORAI paid ~\$2500 towards insurance and operating costs. Our income was generated by the selling of fundraising items, fundraising events, grants from local groups, and donations from the public. In the past the city has facilitated the contracts with the studies groups. At this time we still have yet to receive any bills for studies.

Proposed Activities: In 2018 we are maintaining our annual events. The annual Bidwell Cliffs will be held again, along with the Awesome Blossom Tossem' children's event. The Bidwell Cliffs event will continue to be a part of the North Valley tournament series. Again we will be hosting several manufacture sponsored events aimed at new players. All these events will be open to the general public on our "Exclusive Use Days" to help reach as many people as possible. We have continued our putting league and are seeing higher attendance annually. We are proposing 6 scheduled work days (pending weather). These days will be used for our annual acorn gather, mulch, repairs, and planting activities.

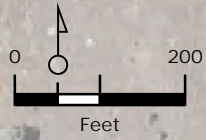
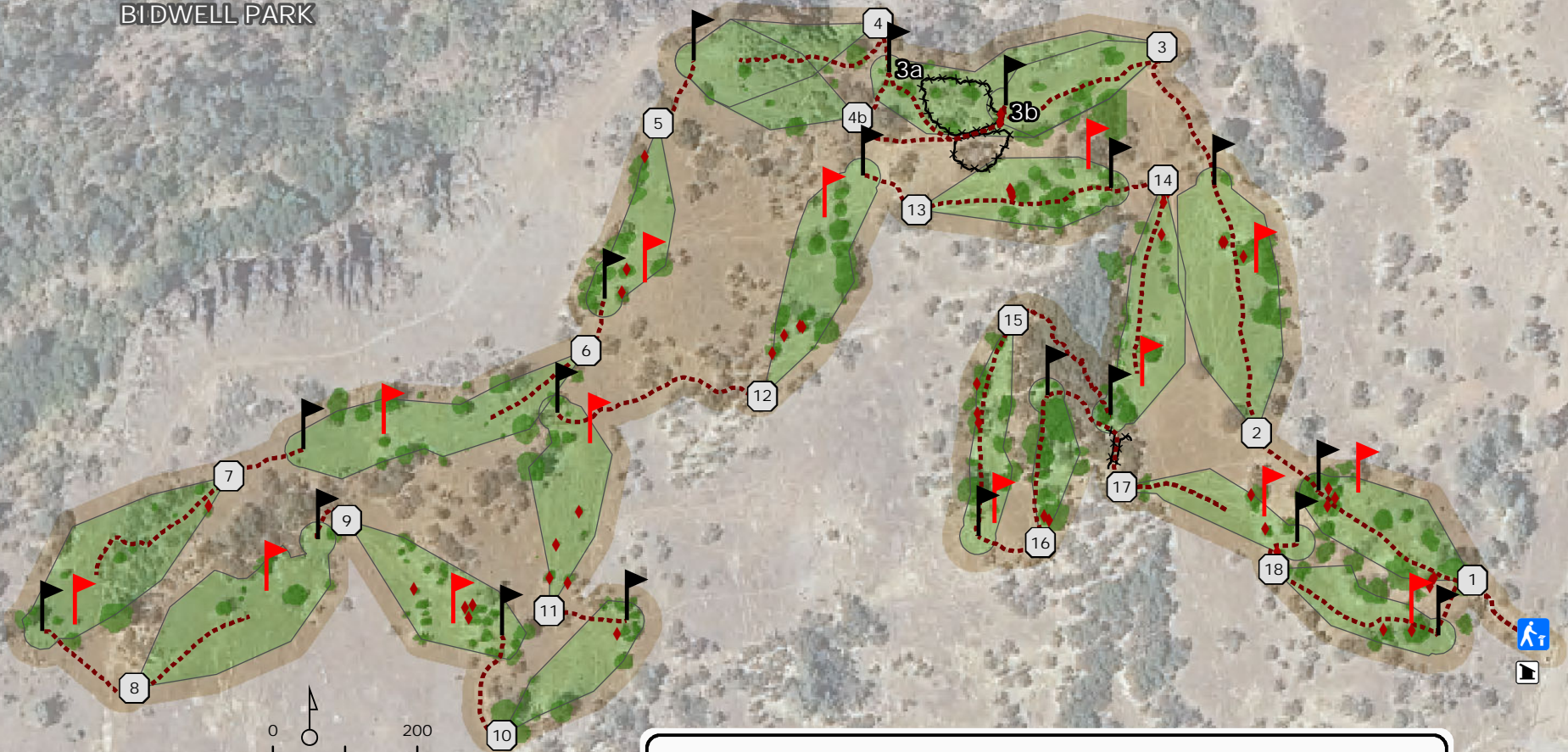
Observations: In 2017 we have observed another increase in overall use. More disc golfers, bike use and hikers are at the site. Fire departments have been to the site and use it for S&R training (appears to be annual). We have found marking arrows and marking tape throughout the course creating rogue trails. These were not placed there by either ORAI or the parks department, nor do they usually abide by any of the current trail system. Bike use is becoming a concern to us. They use the site in wet weather leaving an impact on the site. This concerns the disc golf community in that we are the ones who are being held accountable for this location.

Conclusion: 2017 was a very busy year for us. We have worked many days on our course, assisted with other courses in the local area, and ran events to attract new memberships. We have membership up, but donations are still lower than we would feel comfortable with. We are keeping the course as maintained as we can with what we have to work with. As much as it is a high priority for us, mulching or drilling for new sleeves remains incomplete. We have tee signs and pin sleeves sitting in storage being unused. As is, the desire to get the new sleeves and tee signs in the ground is a pressing concern. Hopefully 2018 will see the pins and tee signs finally in the ground.

As always a high priority will be placed on open communications with the Parks Department to keep everything moving in a forward direction.


Phil Brock – Secretary
Outsider Recreation Advocacy, Inc.
A California 501(c)3

BIDWELL PARK



Peregrine Point Disc Golf Course Oak Tree Assessment and Monitoring
Base Map, 6/2014

| | | | | | |
|--|---------------------------|--|---------------|--|-------------------------|
| | Existing Basket Locations | | Course Trails | | Monitored Tree Canopies |
| | Proposed Basket Locations | | Snake Rails | | Fairways |
| | Tee Pads | | Tree Guards | | Golf Course Area |
| | | | Entrance | | |
| | | | Trash Can | | |



ST HWY 32



DATE: 1/24/18
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Policy Advisory Committee (PAC)
SUBJECT: REPORT ON POLICY ADVISORY COMMITTEE MEETING HELD ON 1/17/18.

RECOMMENDATION:

At its 12/18/17 meeting, the Bidwell Park and Playground Commission (BPPC) considered the Policy Advisory Committee's recommendations regarding possibly charging a parking fee in Upper Bidwell Park. The BPPC requested that the Committee further review the costs, potential revenues, and enforcement capabilities of this concept and report back to the Commission.

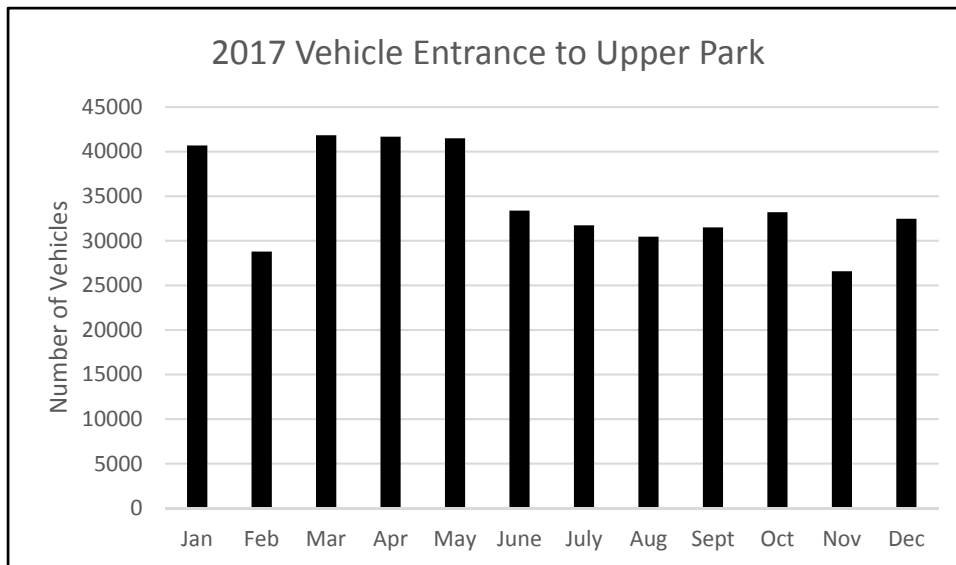
The Commission also approved the Committee's request to discuss the possibility of changing the closing time for Lower Bidwell park to an earlier time than midnight.

Recommendation: *None at this time. The Committee continued discussion of the parking fee to a future meeting after the public survey is distributed, and the earlier Lower Park closing item to their February meeting.*

2.1 CONSIDERATION OF POSSIBLE PARKING FEE FOR UPPER BIDWELL PARK.

Potential Revenue:

In March 2016, a permanent traffic counter was installed under the asphalt in the right lane on Wildwood Avenue, just past the main entrance gate to help determine the number of vehicles that enter Upper Bidwell Park every day. During the 2017 calendar year, 413,756 vehicles were detected as entering Upper Bidwell Park. The monthly breakdown of the 2017 vehicle use is depicted in the graph below.



Using this data, a \$1/vehicle fee could result in over \$400,000 in additional annual revenue that could be used to repair and maintain Upper Park Road, to add additional parking facilities, better signage, or for other Upper Park amenities. However, it is likely that this number would be less depending on the number of seniors and disabled users and the number of annual parking passes purchased.

Staff is recommending that parking passes be issued to entities that lease facilities in Upper Bidwell Park, such as the Bidwell Park Golf Course, the Observatory, the Chico Rod and Gun Club, and the Chico Equestrian Center, to distribute to their members to allow its members to park in their facility lots for free. This would also reduce the number of parking revenues generated. Free parking could also be made available at the parking lot on the south side of the creek at the Five Mile Recreation area.

Estimated Costs:

The estimated cost to install a kiosk similar to City's current parking kiosk design and contractor at the Wildwood Avenue entrance is approximately \$10,000. The annual maintenance costs are estimated at approximately \$0.13 per transaction, plus an 2.5% transaction fee if a credit card is used.

It is anticipated that Park Rangers would provide the initial enforcement of the parking as part of their normal patrols in Upper Park, but it is possible that the downtown parking attendants may also be available for enforcement. Additional staffing would be needed if there was a staffed booth instead of a kiosk, which would far exceed the cost of a kiosk since Upper Park is open from 5:30 a.m. to 9:00 p.m. in the winter, and until 11:00 p.m. during the summer months.

Public Survey:

In addition, Staff added a question regarding the parking fee to the Upper Park Road Survey to help garner the public's input on the proposed fee. The BPPC reviewed the draft survey questions and directed staff to enlist the help of CSU, Chico to review and provide recommendations on the survey questions and analyze the results. Staff worked with Dr. Diane Schmidt on the survey, who is a Professor and Senior Faculty member in Public Administration and Policy Analysis section of the Department of Political Science to help formulate the question.

Staff intends to conduct the survey online through Survey Monkey on the City's website. The survey will be announced by a press release and participants will have 30-days to respond. Staff will distribute the press release and website link to the various stakeholder groups, such as Chico Velo, Chico Equestrian Association, and the CA Native Plant Society, Mt. Lassen Chapter. requesting that they please share the information with their members. As directed by the BPPC, the survey will also be conducted in person by volunteers in Upper Bidwell Park, and Dr. Schmidt recommended that it be available during the Saturday Farmers Market.

Staff recommended that the discussion regarding whether to charge a vehicle fee in Upper Bidwell park be continued until after the public survey is disseminated and the analyzed.

2.2 CONSIDERATION OF REVISING THE CLOSING TIME FOR LOWER BIDWELL PARK

Although Lower Bidwell Park is closed to vehicles earlier, Section 12R.04.370 of the Chico Municipal Code (CMC) establishes closing times for all users for City Parks and greenways as follows:

"12R.04.370 Closure of parks.

- A. Unless authorized by permit issued by the city of Chico, it is unlawful for any person to be present in any of the parks set forth in subsection
- B. The following parks shall be closed between the hours of 12:00 a.m. (midnight) and 5:00 a.m., Pacific Time:
 1. Lower Bidwell Park;
 2. Children's Park;
 3. Bidwell Bowl Amphitheater;
 4. Depot Park;
 5. Ringel Park;

6. Wildwood Park
 7. All city-owned Greenways;
 8. All city-owned neighborhood parks.
- C. Middle and Upper Bidwell Park shall be closed between the hours of 11:00 p.m. and 5:00 a.m. of the following day, Pacific Time.
- D. City Plaza shall be closed between the hours of 2:00 a.m. and 5:00 a.m., Pacific Time.
- E. The following exceptions shall apply to this section, if the person is:
1. Directly and actively proceeding to a destination outside of the parks listed in subsection B, above; or
 2. A duly authorized city employee or persons participating in city activities or other activities for which the city has provided written permission to utilize a park beyond the closing time.
- F. The director may temporarily close any park or a portion of any park within the city whenever the director determines that such closure is necessary for the protection of public safety or public property. It is unlawful for any person to be present in any park or portion of any park within the city that has been temporarily closed by the director.”

The BPPC reviewed the closing of the One-Mile Recreation Area, primarily the Sycamore Pool area, in 2000, 2001, 2006 and again in 2008. Each time, the Commission voted to keep the closing times to between midnight to 5 am. The reasons stated at that time were that there were other ways to reduce noise and bad behavior than limiting access to everyone. The Committee is requested to revisit the closing times of Lower Bidwell Park and to make a recommendation on whether to recommend an earlier closing time.

The Committee discussed whether closing Lower Bidwell Park, particularly the One Mile Recreation Area, would provide for a safer environment for park users since it would give the Police an additional enforcement tool to address any bad behavior. Concerns were raised on whether the change would bring more problems since there would be less people in the park for longer periods of time. The Committee continued the discussion of this item to the next meeting so that a representative from the Police Department could be present and provide input on this topic.



DATE: 01/29/18
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Tree Committee
SUBJECT: Report on Tree Committee meeting 1/22/18

Committee members present:
Hernandez (Chair), Reddemann, Haar

REPORT IN BRIEF:

At its meeting on 1/22/18, the Bidwell Park and Playground Commission's (BPPC) Tree Committee discussed the following topics.

1. Consideration of Revision to Chico Municipal Code 16.68
2. Grant funding opportunity provided by the Greenhouse Gas Reduction Fund (GGRF) for California Climate Investments (CCI) administered by the California Department of Forestry and Fire Protection (CAL FIRE)

RECOMMENDATION

None at this time. The committee continued their discussion of these items to the January 22 meeting. This report is for information only.

| |
|--|
| Subject 1. Consideration of Revision to Chico Municipal Code 16.68 Heritage Trees |
|--|

Items for future discussion include:

*Finalize and disseminate a survey to gain citizen feedback on the program.
Questions will be designed to get feedback on fees and regulations as well as other program parameters.*

Determine administrative costs for processing an application.

Determine the number of additional trees to be inducted into the program in the first year following of the revised program.

Develop a criterion to help volunteers screen initial applications.

Develop a sponsorship strategy/pitch.

BACKGROUND

In February 2010, the Chico Municipal Code was amended to establish a Voluntary Heritage Tree Program (Section 16.68.010). Examination of the history of development of the Heritage tree ordinance shows that the application fee was once reduced. City Council Agenda Report 11/2/10 outlined a case to reduce the fee from \$307 to \$150. The reasons cited for the reduced fee were a) staff processing time was only approximately two to three hours. The \$307 fee was deemed to be needlessly high and was deterring potential applicants from submitting Heritage tree nominations. Since the time of the price reduction, there have been few applications. Many citizens have cited the cost to be prohibitive. The fee is currently \$168.

DISCUSSION

Committee members were unanimously agreed that there is a need to reinvigorate the voluntary Heritage tree program.

Heritage Tree application fee.

It is proposed to reduce the Heritage Tree application fee to zero. A survey of California cities revealed that no other city levies a fee for voluntary heritage tree nominations.

At the 1/22/18 meeting, staff and committee members discussed a way forward that could result in a cost-neutral Heritage tree program that is free to citizens. It is proposed to develop protocols that will allow Heritage tree applications to be initially assessed in collaboration with Chico Tree Advocates volunteers. This will drastically reduce the time spent by staff reviewing and screening applications for further consideration into the Heritage Tree Program. This will result in the "hard cost" of administering the program to be drastically reduced. Committee suggested exploring possible sponsorship options for Heritage tree nominations. Possible sponsorship donors could include local tree companies / businesses / service clubs. In some instances, applicants may also choose to still make a financial donation to the program. Sponsorship and volunteer time will offset administrative staff time. This will enable the program to be offered at no cost to applicants with no financial burden to the city.

As of 1/26/18 UFM has made inquiries with local tree and wood businesses. Potential sponsorship of the program has already been pledged up to \$750. This would cover the cost of five nominations.

Nominations

It is proposed that applications can be accepted year-round but will only be processed and submitted to BPPC committee for approval on an annual basis at a time to be determined.

An upper limit was suggested on the number of nominations that will be considered each year. Five or six applications to be considered by Tree Committee for final recommendation by BPPC was a suggested number that was well received by committee members and members of the public present. Keeping the number of annual inductees small will maintain an element of exclusivity and prestige to the program.

It is anticipated that the current practice of installing a plaque could be replaced by a simple tree tag nailed to the tree (using aluminum nails). Botanical plaques are currently \$18 and can be ordered online. Trees can also be recorded on an online map and listed in an inventory.

Highlighted findings from survey of heritage tree programs in other us cities

Twenty-four cities from across the US that have some form of voluntary heritage tree program were studied. The purpose of the study was to analyze how other cities administer, regulate and promote their respective heritage tree programs. The study also aimed to garner ideas for how to improve Chico's heritage tree program. The study revealed that there are a wide range of approaches used in running a program. The discussion and tables below highlight pertinent points relating to the various programs.

All cities studied require that the property owner gives consent to the tree being listed as a heritage tree.

None of the cities studied charge a fee for a heritage tree nomination.

City of Sandpoint states that all trees must be accessible to the public or be easily visible from public roads. City of Monmouth states that before any other consideration, the tree must be healthy. It must also be easily visible from public roads. City of Coronado states that tree must not only be healthy but must be able to reach mature size and form, considering location and structure of the tree.

The cities of Vancouver, Aurora, Benicia and Monmouth also consider groves of trees.

Regulation of trees accepted into the program

City of Tualatin has language in its Heritage tree ordinance that state that the program is not intended to interfere with use of property. It also states that no tree that may need to be removed as part of road, sewer or water improvements shall be entered into the program.

Sandpoint states that its program “is more honorary than regulatory.”

Coronado states that the program “is not intended to be a means to obstruct development of public or private property.”

City of Woodinville states that the program is solely for recognition, and does not attach additional preservation or retention requirements to the tree or to the property.

Monmouth offers an incentive of up to a 10% variance to subdivision applications to assist in the retention of one of more heritage trees.

Cities of Glenview, Sonoma and San Mateo states that all parties can be subject to a penalty, including contractors for working on a heritage tree without a permit.

Review periods of new nominations.

Some cities such as Coronado have a continuous review period whereby nominations are considered at regular public hearings, such as tree committee meetings. In Coronado all property owners within 75' are formally contacted. In Menlo Park all owners within 100' are contacted.

Some cities only review nominations at certain times of the year. Vancouver considers applications every six months in April and October. City of Tualatin considers applications annually, with a maximum of five trees per year. City of Aurora considers applications once per year in the fall. Selected trees are recognized during Arbor Day celebrations. This idea was well received by committee members.

Santa Monica only considers public trees and caps the number of nominations to five per year. Applications are accepted January to end of August. The review period is between September and December.

Glenview accepts nominations up to July 4 every year.

Sonoma has a waiting period of six months before a nomination for dedication will be considered.

In Madison Parks Each year up to 5 nominated trees are selected. Heritage Trees are announced during the Arbor Week celebration and posted on the website

Recording of heritage status on property deeds.

In Vancouver the tree is recorded on deeds and is binding to all successors to the property.

Sandpoint gives new owners the opportunity but not the obligation to continue the program.

Tigard has a “significant” tree classification for trees that do not meet requirement of heritage status or if the owner does not want to voluntarily enter into regulatory protection. The city prepares the necessary paperwork to record the designation on the property deeds.

Residents of Coronado can choose to have protection added to property deeds but there is no obligation.

City of Chico recording fees were researched and presented. Recording on property deeds is \$16 for a one-page document.

Committee and staff discussed the current requirement for Chico Heritage tree participants to follow CMC 16.66 Tree Preservation Regulations. Committee felt that the CMC 16.66 regulation may be a deterrent to potential applicants.

Staff will explore the idea of removing the requirement for CMC16.66 regulation on Heritage trees. Less burdensome voluntary guidelines can be introduced for participants to follow.

Committee were supportive of the idea of a voluntary deed/covenant program for those applicants that wanted to have heritage tree status noted on property deeds. Community input will be gathered in an upcoming online survey.

Permitting to do tree work on heritage trees:

Many cities allow tree work without the need for a permit. For example, Menlo Park permits routine pruning that does not remove more than 25% of live foliage. Many of the other cities surveyed have similar verbiage in their respective heritage tree ordinances.

Benefits and Incentives to participants:

Coronado offers many incentives to residents who successfully nominate heritage trees. Incentives include tree advice from a ISA certified arborist on staff, a free tree inspection every four year as well as a report to the property owner. The city will provide deed services to owners who wish to have their tree listed as a "protected" heritage tree. Owners are compensated \$300 for every year that the tree is maintained in a protected status.

Glenview calculates the corresponding big tree registry points as outlined in protocols by the American Forest Foundation.

City of Puyallup negotiates favorable rates from local tree companies for maintenance work on heritage trees and provides free tree advice. The city also pays for all voluntary covenants.

Benicia provides a resolution of appreciation to participants. Depending on budgets, the city provides funding for arborist consultations and tree maintenance assistance.

Subject to city funding availability, Tigard offers incentives to residents who nominates a Heritage tree. Incentives include a free plaque, free tree services and permanent financial support for ongoing tree protection. The city also prepares deed papers for residents who wish to record Heritage tree status against property. It is noted however that the City currently only has four trees in the program.

San Luis Obispo provides an estimate of the worth of the tree and is provided to the property owner. The city also protects and maintain all designated heritage trees. Heritage trees are pruned according to a schedule developed and approved by the public works director. All interim maintenance is the responsibility of the property owner.

Committee members asked if an estimate of worth was a service that could be offered as an incentive to Chico Heritage Tree participants, particularly for trees that are aesthetically part of the common streetscape. UFM stated that the Council for Tree and Landscape Appraisers (CTLA) guidelines could be followed to provide a dollar value of the tree. This service could act as a tangible incentive to be in the program. It would also create educational topics of interest for a wider audience.

A program of public education, outreach and promotion of the program would be developed. The Heritage Tree Program was already listed as an educational item to be promoted at 10/12/17 meeting.

Design of nomination forms

City of Encinitas asks for a copy of the grant deed to check property ownership.

Camden provides the option of the owner to maintain confidentiality.

San Luis Obispo provides a property owner agreement with the application form and also the option to not be listed in the self-guided tour map.

Tigard, Benicia, Vancouver and Glenview provide easy check boxes to quickly list which characteristics of the tree make it eligible for nomination.

Camden collects feedback on nominee demographics and how the nominee heard about the program.

San Luis Obispo provides an app showing tree locations, photos and information on the tree.

Most cities provide space for explanations as to why the tree should be nominated.

Attachments

A: Analysis tables of heritage Tree Program attributes from various US cities.

Subject 2: Grant funding opportunity provided by the Greenhouse Gas Reduction Fund (GGRF) for California Climate Investments (CCI) administered by the California Department of Forestry and Fire Protection (CAL FIRE)

BACKGROUND

A Cal-fire Urban and community forestry grant is currently soliciting proposals. The grants are part of California Climate Investments, a statewide program that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment — particularly in disadvantaged communities.

For local governments (cities, counties, districts) grants are available for improving long-term management of urban forests to reduce GHG emissions and improve urban forest performance over time. Projects may involve the establishment or updating of a jurisdiction-wide tree inventory, urban forest mapping and analysis, and/or long-term management plan. Proposals may include policy integration and ordinance development.

Amount of funding available per application: \$150,000 - \$1,500,000. Funding requires 25% match which can be from in-kind sources

Concept proposal submission date is February 26th, 2018, 3pm.

DISCUSSION

The purpose of this grant type is to fund the development and implementation of urban forest management activities to reduce GHG emissions and to be carried out by a local government jurisdiction to optimize the multiple benefits of its urban forest. Such activities will be comprehensive, long term, include the entire jurisdiction, take an ecosystem management approach and may include an inventory, analysis, training and/or educational component. A tree planting component is required during the grant performance period. Any management plan funded by this grant type must include the setting of a tree canopy cover goal for the jurisdiction. No other practices may be funded by this grant program.

UFM believes the City of Chico is a strong candidate for a GHGRF grant.

It is anticipated that funding will be sought for a comprehensive street tree inventory and long-term management plan. These databases and documents will guide urban forest policy and goals for the next forty to fifty years

Chico's current tree inventory has not been updated in ten years. Many streets and neighborhoods have not received accurate mapping of street trees in over ten years. New subdivisions created in the last decade and annexations have never been inventoried.

The current estimate of the number of public street trees in Chico is approximately 28000. The real number is likely to be much higher than this.

Of note from the grant application guidelines.:

The project must show that the community where the project will occur was, and will continue to be, authentically engaged about the project and/or will be involved in project implementation.

Street tree committee discussed local organizations that could be approached to obtain support for a grant proposal. Active community groups and businesses in the target tree planting area were listed as well as those serving the wider Chico community.

Another scoring criteria is the degree to which the project involves community residents in planting and/or maintenance of trees (stewardship).

Community buy-in, support and involvement is crucial to the success of the proposal.

Projects shall include an education and outreach component. Not more than 20% of grant funds may be used for this education and outreach component. The education and outreach component as part of the overall project can be shown as project match dollars by the applicant.

Link to grant guideline booklet:

http://www.fire.ca.gov/Grants/downloads/UrbanForestry/2017-2018/CAL%20FIRE_UCF_GRANT%20GUIDELINES_17_18_FINAL%2012_19_17.pdf

Fiscal impact:

Match funding in-kind for the education component and volunteer support for tree planting should result in zero or minimal fiscal impact.

| Heritage tree eligibility attributes | | | | | | | | | | | | | | |
|--------------------------------------|--------|--------|--------------|------------------------|---------|-----------|---------|-------------|-------------|----------------------|-----------------|---------------------|---------------|-------------------|
| City | State | Pop'n | years TC USA | Heritage Program since | # trees | voluntary | Age | Size | Unique form | Unique Species | Historical | Nighborhood Feature | Habitat/grove | Visible to public |
| Chico | CA | 89180 | 33 | 2010 | 10 | Y | Y | Y | Y | Y | Y | | Y | |
| San Luis Obispo | CA | 45802 | 34 | | 20 | Y | Y | Y | Y | Y | Y | | | Y |
| Encinitas | CA | 72000 | 6 | 2004 | 2 | Y | Y | Y | Y | Y | Y | Y | | |
| Menlo Park | CA | 33070 | 18 | | | | | >15" | | oak >15" | Y | Y | | |
| Santa Monica | CA | 92987 | 36 | | | Y | Y | Y | Y | rare spp | Y | | | |
| Pleasanton | Canada | 70285 | | 1971 | | N | | >55" or 35' | | any spp | Y | | Y | |
| Vancouver | WA | 2E+05 | 28 | | | | | >36" | Y | Y | Y | Y | Y | |
| Madison parks | WI | 3E+05 | 28 | 2012 | | | | | | | Arbor day | | | |
| Glenview | IL | 47475 | 32 | 2007 | 70 | Y | | Y | Y | | Y | | | |
| Puyallup | | 40640 | | 1987 | 122 | | Y | | Y | Y | Y | | | |
| Tigard | | 51902 | 16 | | | | Y | | Y | Y | Y | | | |
| Tualatin | | 27254 | 30 | | | Y | | | | | | | | |
| Sandpoint | ID | 7984 | 21 | | | | Y | | Y | Y | Y | | | |
| Aurora | CO | 4E+05 | 33 | 2015 | | Y | >50 yrs | Y | Y | Y | Arbor Day trees | Y | Y | |
| Lakeview | OR | 2321 | | | | | | | | | | | | |
| Arlington | WA | 19112 | 12 | | | | | >32" | | | documented | | | |
| Camden | NJ | 78000 | 27 | | | Y | Y | Y | Y | Y | Y | Y | Y | |
| Coronado | | 23511 | 32 | | | | Y | healthy | Y | native or non n >24" | Y | Y | | Y |
| Healdsburg | CA | 11827 | n/a | | | | | | | | | | | |
| San Antonio | TX | 1.493M | 1 | | | | | | | | | | | |
| Benicia | CA | 28174 | 8 | 2011 | | Y | Y | >30" | Y | Y | Y | | Y | |
| Woodinville | WA | 12000 | 22 | | | Y | | | | | | | | |
| San mateo | CA | 92987 | 36 | | | | | >10" | | specific list | | | | |
| Monmouth | IL | 9527 | 16 | | | | | Y | healthy | Y | | Y | Y | Y |
| Sonoma | CA | 11054 | | | | | | >50" | Y | Y | Y | | | |



DATE: 1/24/18
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Linda Herman, Park and Natural Resource Manager
SUBJECT: Parks and Street Trees and Public Landscapes Report

NARRATIVE

1. Updates

- a. Caper Acres - The Sunrise Rotary will be completing the entrance to Caper Acres over the next week and hope to officially open the main gate on Saturday February 3rd. CSU, Chico students are back and will commence work on the Swing Area.
- b. Big Chico Creek Debris – Staff met with representatives from the Department of Water Resources and Butte County Public Works to discuss removing debris in Big Chico Creek and the management of the Five Mile Diversion Dam system to help prevent future flooding.
- c. Chico/CARD MOU Ad-Hoc Committee– A report on the Ad-Hoc Committees recommendations regarding potential revisions to the Memorandum of Understanding between CARD and the City is tentatively scheduled for the City Council's 2/20/18 meeting.

2. Maintenance Program

Staff continues daily cleaning and safety inspections of all recreation areas including: grounds, playgrounds, picnic sites, roads and paths, coupled with daily cleaning and re-supplying of all open park restrooms. Maintenance and repair of park fixtures, daily opening of gates, posting reservations, unauthorized camp clean up and the constant removal of graffiti from all park infrastructure.

- a. Lower Park: Leaves, leaves and more leaves with a little vandalism mixed in, this has consumed staffs time for December. Staff has worked diligently to sweep all lawns and road ways and blow off all paths to reduce the slip hazard that come with leaf season.
- b. Middle Park: Staff removed the worn-out tables and barbeques and set 20 new picnic tables, 2 service tables, 13 small barbeques and 2 event size barbeques on the south side of Five Mile Recreation Area.
- c. Upper Park: Down tree clean up as time allows.
- d. Greenway Parks: Weekly clean and garbage removal.
- e. Upcoming projects: Trail markers and signs for Middle and Upper Park. Grade and surface parking lots. Split rail fence at Caper Acres. Repairs to Upper Park road at sites 27, 38 and 39.

3. Ranger and Lifeguard Programs

- a. Lifeguard Program– Park staff and CARD will commence talks for the upcoming swim season shortly. With budgetary considerations, discussions will include the minimum wage hikes, hours of operation and ranger availability during staffed pool hours. The park will only have two rangers on during the peak of summer as Ranger LeDonne will enter the Police Academy at Butte College to fulfill his requirements for the sworn ranger position.
- b. Camp Cleanup Blitz– Due to the unseasonably dry weather of late fall and early winter, the number of homeless camps along creeks and greenways were larger than any other year for the same time period. The first step in the process of eradicating camps falls on rangers and Target Team officers going into camps and providing resources

and 48 hour notices to vacate. With all the greenways in the City, this daunting task takes rangers away from tasks in the park they would otherwise be doing.

On January 3rd, rangers and the Alternative Custody Crew, (ACS) started a 6-day blitz of dismantling camps throughout the city. Camps the entire length of the Little Chico Creek Corridor were removed in addition to the Skyway Bridge near Potter, Eaton and Cohasset, North Lindo, Lindo @ Cussick, Midway Bridge and several park locations. Park partners such as Friends of Comanche Creek, Chico Community Watch, and BEC also worked at specific points cleaning greenways and creeks of trash and camps during this period. Over three 40-yard bins were filled in the back of the municipal yard during the six days.

- c. Motorhome Fire – In late December, a motorhome caught fire on parklands adjacent to Hwy 32 above the disc golf course. A CalTrans right of way runs along park property provides access. In many places along the access the barbed wire fence and boulders have been removed or trampled by visitors to allow vehicle access to some of the park's most spectacular views. Unfortunately, this is the 2nd motorhome fire in a year and illegal dumping is evident in the area. The cost to remove the remains of the vehicles are not insignificant. The Park Division is grateful to Code Enforcement Officer Charlene Durkin for spearheading the removal and the use of vehicle abatement funds. Sheriff's Department ACS crews worked to clean non-towable debris in the area after the tow.

4. Natural Resource Management

- a. Wildfire Management Plan – Staff met with the new CSU, Chico Ecological Preserve Manager and a representative from Terra Fuego to begin discussions on developing a joint Wildfire Management Plan for Bidwell Park, the Reserve, and possibly some of the City's greenways and preserves.
- b. Trails– Staff also met with Chico Velo Trailworks to talk about collaborative improvement projects on the Pine Trail and other trails in Upper Bidwell Park.

5. Outreach and Education

- a. Lyme Disease– Staff met in early January with members of the Lyme Center, an education and advocacy group dedicated to spreading the word about Lyme and other tick-borne illnesses. The group donated 15 large tick signs for posting in various parks and greenways. The Park Division will purchase smaller signs to add to this important signage for the parks. The Lyme Center has been invited to put up an informational booth at upcoming park sponsored activities. Lyme is prevalent in Butte County and the incidence (number of new cases) is on the rise. Ticks are especially active in the spring and fall, but one can contract Lyme at any time of the year in Butte County.

6. Volunteer and Donor Program

- a. Citizens Taking Action– More and more Chico citizens are getting involved with volunteer activities. The past months have seen citizen volunteer groups such as Chico Community Watch, Chico First and the Heritage Oak Neighborhood come together with the Parks Division and partners to make an amazing difference in the parks and greenways.
- b. Caper Acres– The donations for the Caper Acres Renovation Project continue. \$4,500.00 was received in December.
- c. Upcoming Volunteer Opportunities
- d.
 - i. PALS Volunteer Orientation– On March 22nd at 6:30 pm in the City of Chico Council Chambers, the Parks Division will host the Spring Volunteer Orientation. The orientation is conducted once per year and provides information about the PALS volunteer program and how to get involved.
 - ii. Volunteer Calendar– For upcoming volunteer opportunities please visit the [PALS Volunteer Calendar](#)

MONTHLY SUMMARY TABLES

Table 1. Monthly Volunteer Hours

| Parks and Greenway PALS (Partners, Ambassadors, Leaders & Stewards) Volunteer Activities, December 2017 | | | | | | |
|--|------------------------------------|-------------------|--------------------------------------|------------------------|--------------------|---------------|
| Date | Location | Agency | Task | # of Volunteers | Total Hours | Leader |
| All of Dec. | Bidwell Park | Parks Division | PW Ambassadors | 127 | 1670 | Shane Romain |
| various | CCG | FCCG | Planning | 1 | 35 | S. Mason |
| various | CCG | FCCG | Camp Cleanup | 1 | 5 | S. Mason |
| various | CCG | FCCG | Trash pickup | 1 | 5 | S. Mason |
| various | CCG | FCCG | Misc. | 1 | 10 | S. Mason |
| various | CCG | FCCG | Camp Cleanup; Gen. Cleanup; planning | 1 | 6 | Janet Ellner |
| various | CCG | FCCG | trash removal; Veg. Mgmt | 1 | 14 | Liz Stewart |
| various | Various | CCW | Cart roundup | 10 | 60 | Dan Bringolf |
| 12/1/2017 | CCG | FCCG | Planting | 5 | 15 | S. Mason |
| 12/2/2017 | Comanche Creek Greenway | Parks Dept; FCCG | Renovation; Veg. Mgmt. | 27 | 81 | Janet Ellner |
| 12/2/2017 | Site 39 | Tau Kappa Epsilon | Veg. Mgmt. | 10 | 30 | Shane Romain |
| 12/2/2017 | 1 Mile | Chico First | Gen. Cleanup | 9 | 27 | Nicole Nava |
| 12/9/17 | LCC-Cypress to Humboldt Skate Park | BEC | Gen. Cleanup | 71 | 224 | Angel Gomez |
| 12/9/17 | Lindo Channel | CCW | Gen. Cleanup | 15 | 45 | Dan Bringolf |
| 12/12/2017 | CCG | FCCG | Vegetation Mgmt., trash pickup | 2 | 6 | S. Mason |
| 12/14/2017 | CCG | FCCG | Vegetation Mgmt. | 4 | 11 | S. Mason |
| 12/15/2017 | CCG | FCCG | Misc. | 4 | 11 | S. Mason |
| 12/16/2017 | CCG | FCCG | Vegetation Mgmt. | 9 | 28 | S. Mason |
| 12/17/2017 | CCG | FCCG | Vegetation Mgmt., trash pickup | 10 | 31 | S. Mason |
| 12/18/2017 | CCG | FCCG | Misc. | 2 | 8 | S. Mason |
| 12/21/2017 | CCG | FCCG | Vegetation Mgmt. | 3 | 9 | S. Mason |
| 12/23/2017 | Lindo Channel | CCW | Gen. Cleanup | 12 | 36 | Dan Bringolf |
| 12/26/2017 | CCG | FCCG | Misc. | 2 | 6 | S. Mason |
| 12/30/2017 | CCG | FCCG | Veg. Mgmt; renovation; Planting | 6 | 20 | Janet Ellner |
| | | | | | | |
| | | | | TOTAL HRS | 2392 | |

Table 2. Monthly Public and Private Permits

| Monthly Public Permits - November | | | | |
|--|---------------------|-------------------------------------|--------------------------------|----------------------|
| Date | Location | Organization | Event | Participant # |
| 11/04/2017 | 1 Mile | Evangelical Free Church Chico | Run in the Park | 100 |
| 11/05/2017 | 1 Mile / Upper Park | Chico Running Club | Almond Bowl Races | 1,000 |
| 11/11/2017 | 1 Mile | Girls on the Run | Girls on the Run 5K Graduation | 1,300 |
| 11/23/2018 | 1 Mile | Run for Foo/Jesus Center/Fleet Feet | Run For Food | 5,000 |
| | | | | |
| | | | | |
| | | | | |
| Totals | | | 4 | 7,400 |

| Monthly Public Permits - December | | | | |
|--|-----------------|-------------------------------------|--------------------------------------|----------------------|
| Date | Location | Organization | Event | Participant # |
| 12/01/17 | City Plaza | DCBA | Community Tree Lighting | 500 |
| 12/09/17 | 1 Mile | Under the Sun Events/Salmation Army | Santa Shuffle 5K & 1 Mile Run | 300 |
| 12/09/18 | City Plaza | Lao Veterans Memorial Day | In Honor of Geneneral Vang Pao | 100 |
| 12/12/17 | City Plaza | Chabad Jewish Center | Chanukah Celebration/MenorahLighting | 75 |
| | | | | |
| | | | | |
| Totals | | | | 975 |

Table 3. Monthly Private Permits

| Monthly Private Permits - November | | |
|---|------------------|-----------------------|
| Type | # Permits | # Participants |
| Private | 3 | 248 |
| Caper Acres | 3 | 60 |
| Totals | 6 | 308 |

| Monthly Private Permits - December | | |
|---|------------------|-----------------------|
| Type | # Permits | # Participants |
| Private | 0 | 0 |
| Caper Acres | 1 | 20 |
| Totals | 1 | 20 |

Table 4. Monthly Maintenance Hours.

| Category | Staff Hours | % of Total | % Change from Last Month | 2017 Trend |
|-------------------------------|-------------|------------|--------------------------|------------|
| 1. Safety | 245 | 30.4% | 113.5% | |
| 2. Infrastructure Maintenance | 193 | 24.0% | 106.6% | |
| 3. Vegetation Maintenance | 112 | 13.9% | 365.6% | |
| 4. Admin Time/Other | 255 | 31.7% | 68.1% | |
| Monthly Totals | 803 | 100% | 100.4% | |

Table 5. Monthly Incidents

| | | | |
|------------|-------------|-------------|---------------|
| 12/19/2017 | Middle Park | Petty Theft | Cop Logic RPT |
|------------|-------------|-------------|---------------|

Table 6. Monthly Citations and Warnings

| Ranger Report - Citations December 2017 | | | | | | |
|---|-----------------|------|------|-----------------|------|------|
| | Monthly | | | Annual | | |
| Violation - Citations | Total Citations | % | Rank | Total Citations | % | Rank |
| Alcohol | 1 | 9% | 4 | 16 | 7% | 4 |
| Animal Control Violations | 2 | 18% | 3 | 12 | 5% | 6 |
| Bicycle Violation | 0 | 0% | 7 | 10 | 4% | 7 |
| Glass | 1 | 9% | 4 | 14 | 6% | 5 |
| Illegal Camping | 3 | 27% | 1 | 34 | 15% | 3 |
| Injury/Destruction City Property | 0 | 0% | 7 | 1 | 0% | 10 |
| Littering | 0 | 0% | 7 | 2 | 1% | 9 |
| Other Violations | 3 | 27% | 1 | 47 | 20% | 2 |
| Parking Violations | 1 | 9% | 4 | 90 | 39% | 1 |
| Resist/Delay Park Ranger | 0 | 0% | 7 | 1 | 0% | 10 |
| Smoking | 0 | 0% | 7 | 6 | 3% | 8 |
| Totals | 11 | 100% | | 233 | 100% | |

| Ranger Report - Warnings December 2017 | | | | | | |
|--|----------------|------|------|----------------|------|------|
| | Monthly | | | Annual | | |
| Violation - Warnings | Total Warnings | % | Rank | Total Warnings | % | Rank |
| Alcohol | 3 | 4% | 6 | 54 | 8% | 5 |
| Animal Control Violations | 7 | 10% | 5 | 104 | 15% | 3 |
| Bicycle Violation | 10 | 14% | 2 | 87 | 13% | 4 |
| Glass | 0 | 0% | 8 | 6 | 1% | 10 |
| Illegal Camping | 33 | 45% | 1 | 205 | 30% | 1 |
| Injury/Destruction City Property | 3 | 4% | 6 | 8 | 1% | 9 |
| Littering | 0 | 0% | 8 | 24 | 4% | 8 |
| Other Violations | 9 | 12% | 3 | 48 | 7% | 6 |
| Parking Violations | 0 | 0% | 8 | 34 | 5% | 7 |
| Resist/Delay Park Ranger | 0 | 0% | 8 | 2 | 0% | 11 |
| Smoking | 8 | 11% | 4 | 110 | 16% | 2 |
| Totals | 73 | 100% | | 682 | 100% | |

PHOTOGRAPHS



Figure 1 Mounds of refuse from illegal encampments



Figure 2 Burned out 27' motorhome



Figure 3 Pi Kappa Alpha cleaning under Cypress Bridge



Figure 4 Chico Community Watch collected over 100 abandoned shopping carts from parks, greenways and around the city

Attachments:

A.

S:\Admin\BPPC\BPPC_Meetings\2010\BPPC_2010_Templates\10_BPPC__meetings\BPPC_Manager_Report_template_10_1029.doc
1/26/2018



DATE: 1/29/18
TO: Bidwell Park and Playground Commission (BPPC)
FROM: Richie Bamlet, Urban Forest Manager
SUBJECT: Street Trees Report

NARRATIVE

1. Updates

- City Street Tree Division received ### calls for service in December.
- M&S Wesley Tree Services started priority tree removal and trimming requests throughout the city.
- Nearly thirty applications were reviewed for the Senior Tree trimmer position. Interviews are scheduled for late January.
- Volunteers reported a few cases of the cages around acorns planted last month being disturbed by animals or people. The cages were re-positioned. So far, no further disturbance has been noted.
- Chico Tree Advocates volunteers report that the 108 Valley oak acorns planted in the tree nursery have started to germinate.
- A firewood auction was successful. Four cords of wood were auctioned off. This helps defray haulage costs and keeps wood out of landfill.

2. Planning/Monitoring

UFM reviewed five planning applications in December.

Commentary included various aspects such as species choice, use of contiguous landscape strips in parking lots, the dis-allowance of neighboring trees in shading calculations and the use of palms in landscaping designs.

Four removal permits were received. Two were approved. Two were denied.

3. Maintenance Program

Tree Division contractors removed two dangerous California sycamores located around the perimeter of sycamore pool. It is anticipated that the vacant planting locations can eventually be replanted using Valley oaks from the tree nursery.

Tree Division contractors finished dangerous tree cleanup operations in Lost Park.

Staff continued prioritizing removals of dead / dying trees.

4. Outreach and Education

Development of a survey monkey to gather opinion on certain aspects of the Voluntary Heritage Tree program is being finalized. The current fee and the requirement to have Heritage trees listed on property deeds and other parameters will be investigated to determine if they are a barrier to public participation.

Aphid treatment door hangers are currently on order and should be delivered late January. Information will include the pesticide name and method of application. A statement that future aphid treatment is subject to funding

availability for tree maintenance operations is also included on the hanger.

UFM joined the National Plant Diagnostic Network (NPDN).

5. Street Trees

The Street Tree Supervisor’s monthly reports for December is included in the tables below

6. Upcoming Issues/Miscellaneous

The cities application for ongoing Tree City certification was submitted. The city should be informed in March as to the success of the application.

Public works is currently working on developing protocol to and policies to tackle the increasing number of service requests related to sidewalk / tree root conflicts.

MONTHLY SUMMARY TABLES

Table 1. August Monthly Street Tree Productivity











| Category | Staff Hours | % of Total | % Change from Last Month | Trend |
|---|-------------|---------------|--------------------------|---|
| Tree Crew Hours | | | | |
| 1. Safety | 46 | 11.8% | 112.2% |  |
| 2. Tree Work (Installation, Establishment, and Maintenance) | 192 | 49.2% | 167.0% |  |
| 3. Special Projects | 0 | 0.0% | 0.0% |  |
| 4. Admin Time/Other | 152 | 39.0% | 136.9% |  |
| Monthly Totals | 390 | 100.0% | 117.8% |  |

Table 2. August Monthly Production numbers

| Item | Values | % Change from Last Month | Trend |
|-----------------------------|-----------|--------------------------|--|
| 5. Productivity | | | |
| Calls | | | |
| Call Outs | 20 | 58.8% |  |
| Service Requests: Submitted | 0 | - |  |
| Service Requests: Completed | 16 | 41.0% |  |
| Sub Total | 36 | 49.3% |  |
| Trees | | | |
| Planted: Trees | 0 | - |  |

PHOTOGRAPHS



Figure 1. Traffic safety pruning on W Shasta Ave at Esplanade 12-7-17. BEFORE PRUNING.



Figure 2. W Shasta Ave at Esplanade 12-7-17. AFTER PRUNING.



Figure 3. Dead Camphor tree removal at 139 W Shasta Ave 12-7-17.



Figure 4. Homeless camp cleanup at Teichert Ponds 12-14-17.



Figure 5. Valley oak seedlings



Figure 6. Closeup of one nursery cell with nine seedlings.



Figure 7. 108 Valley oak acorns in the nursery.