

## APPENDIX A

### COMMUNICATIONS RECEIVED CONCERNING THE DRAFT ECR

Several communications were received that address the Draft Little Chico Creek Existing Conditions Report. In the spaces below the authors of the document address the comments received in *italics*. Where appropriate, changes were made and appear in this final document

**From Dan Breedon, Senior Planner, Planning Division, County of Butte.**

November 1, 2002

Mr. David L. Brown  
Department of Geosciences  
California State University, Chico  
Chico, CA 95929-0205

**RE: Little Chico Creek Existing Conditions Report**

Dear Mr. Brown:

Planning Division staff has reviewed a copy of the Little Chico Creek Existing Conditions Report and offers the following comments:

Although project timing probably prohibited referencing the new September 2002 EIR for the M&T Chico Ranch Mine project, the new September 2002 Draft EIR was completed on October 10, 2002. The 2002 Draft EIR does find that significant and unavoidable impacts are indicated in the areas of traffic and air quality, in contrast to the information presented on Page 58, Section 4.6.3 of the Report, which was based upon the earlier 1998 EIR. The 2002 Draft EIR also includes an extensive reassessment of the project's impact to water quality and flooding impacts, which may be of some use in your final report. The draft EIR for the M&T project has not been certified at this time. Staff estimates that the Planning Commission will be considering certification of this document sometime in January. This document is available for review on the County's website at: [www.buttecounty.net/ddc](http://www.buttecounty.net/ddc).

*The above information was summarized in Section 4 of the Final Report (The document at hand).*

Section 2.6.2 of the Report should describe that the Little Chico Creek Watershed encompasses an area of Critical Deer Wintering Range according to mapping provided to the County by the Department of Fish and Game. The Report should reference the County's policy of implementing measures to protect local deer herds. These measures include limiting parcel sizes to 40 acres in most of the areas within the watershed, and limiting fencing for areas other than residential (maximum of 5 wire strands with the lower being at least 16" above the ground and the upper strand being no higher than 48" above the ground).

*This information was incorporated into Section 2 of the Final Report.*

On page 50 of the Report there is a reference to a Chapter regarding Issues and Concerns. While page 3 of the Report includes a list of issues of concerns, staff could not locate a chapter dealing with Issues and Concerns.

Staff would also like to point out that a small 5-acre gravel mining operation was approved for Deer Creek Rock on December 11, 2001, within the Little Chico Creek Watershed on assessor parcel numbers 63-290-056 and 63-290-057, on Canyon Shadows Road. This project has not been implemented at this time.

*The authors decided to not include this information in this document because they would then have had to undertake the task of summarizing other approved projects, a task best left to County planning staff.*

While the Report includes considerable detail on fish and wildlife resources located within the watershed, it should also include some information relative to various cultural influences on the watershed, such as population and growth trends, parcelization, and road development. These are important factors in the development of future management strategies for the watershed.

*While the authors agree with this observation, time and budget did not allow for such an analysis. It is hoped that the next revision of the County General Plan will include this kind of information for all of the watersheds in the County.*

Thank you for the opportunity to review the Existing Conditions Report for the Little Chico Creek Watershed. I hope that the information presented here will assist you in the preparation of the Final Report.

Sincerely,

Daniel C. Breedon  
Senior Planner

**From Rob Hill, Deputy Agricultural Commissioner, Butte County**

**Little Chico Crk. Watershed Existing Conditions Rpt.**

This Draft document has its structural problems I.E. type-O's, data organization issues, but it appears to fulfill its intention: to adequately and generally assess and describe the existing condition of the water shed.

*These “structural problems” have been addressed.*

The following is a list of suggestions to address problem areas found in a cursory review of this document by the Recourse Deputy Ag Comm.

- 🔔 The document could use a statement of purpose in the front mater; the copy I received was lacking the cover letter that had accompanied it.

*See section 1.6 in this document.*

- 🔔 A table of aquatic plants would have been helpful to me, particularly any aquatic weeds. If for no other reason but to rule out their existence in the water shed, but I realize it's not the intent of the document to do that in every case, just a suggestion.

*Aquatic plants (and weeds and particular) have been observed in Teichert Ponds by P. Maslin in the past. However, aquatic plants were not surveyed during this project.*

- 🔔 A number of the references could use further source location info. (Email addresses and Web sites)

*More specific comments as to which references are needed to address this request.*

- 🔔 Table 2.13 (Invasive exotic plants) is not ref. In any of the “Plant communities” section for each zone.

*Please see new Table 2.3 and relevant text sections.*

- 🔔 Table 2.6 List Taricha.torosa as a Plethodon I'm sure it's in the family Salamandridae.
- 🔔

*This error has been corrected.*

**From: Guy Chetelat; Regional Water Quality Control Board**

Hi Dave,

Here are my comments on the Draft Existing Conditions Report you sent us.

Figure 1.2 Titles of "Watershed Zones" mixes land uses with land forms. Perhaps the watershed zones should be land forms only (Mountain, Canyon, and Valley) and areas with dominate land uses (irrigated Ag, grazing, forestry, urban etc....)should be labeled in a different manner.

*It was decided to comment on land use within the text and keep the landform names for tables, maps, figures. The mix of terms currently in use is intuitive. Perhaps an alternative for a later edition would be "Rural Mountain" and "Rural Canyon."*

Is there a soil or rock unit that is especially susceptible to erosion or slope failures? Some erosion problems were noted in the Valley zone but it was unclear if the cause was debris accumulation, water conveyance design, channel meander bank erosion or something else.

*It was not in the purview of this report to determine 'cause of erosion—although it does say "estimation of ...bank stability" pg 4 of SOW. We believe that water conveyance design could easily contribute in the valley zones—constrained streams (i.e. where the floodplain has been removed) have greater potential for erosion. Our understanding is that the canyon and mountain zones are generally not prone to mass failures, except for occasional slow rotational slumps and small bank failures, often in response to disturbance. The Tuscan soil associations are pretty stable.*

Does the Chico Formation have saltwater seeps in this watershed as it does in other watersheds?

*Such seeps are very likely but none were observed in the reaches surveyed. We are unaware of any—but the survey was restricted to riparian corridor.*

Is there any gold mining era legacy wastes such as dredge tailings, in the watershed?

*There are no tailings. One mine tunnel was observed. Our understanding is there was a mine on one of the tributaries coming down from Doe Mill ridge as well as opportunistic tunnels along the creek in the upper watershed.*

Do we know enough to say the mountain zone is a gaining reach, the canyon zone a wet season (?) gaining reach, and the valley zone a losing reach? If so maybe it should be said.

*This is logically a true statement, based on water permanence but we have no measurements to verify it. All we have is a preliminary study in Big Chico Creek showing gains at the contact between the Lovejoy and Chico formations and losses with distance onto the alluvial fan. The authors added a statement in the Surface hydrology section of Chapter 2 (p. 8).*

A sub chapter dedicated to water use/diversions would be informative. Surface and groundwater, known diversion points, extent of riparian rights pumping, known Ag return points, septic, etc.

*This topic is outside the scope of work for the document.*

Spring Run were the only salmon species listed as using LCC.

*Steelhead have been observed, but were not distinguished from resident rainbow trout in the study.*

Is this correct? Smallmouth bass also weren't listed. I thought smallmouth were in all the east side tribs. Smallmouth are absent in LCC.

*Possibly because of the long reach of warm, still water (largemouth habitat) between the Sacramento River and suitable smallmouth habitat, smallmouth have not colonized LCC.*

Perhaps more discussion of riparian habitat condition and the associated issues is warranted: invasives, development, channelization, grazing, etc. Also, Is the habitat healthy for fish or is it lacking structure, flushing flows etc.

*Structure and flushing flows are suitable throughout the creek. Water availability is a problem downstream of the canyon zone. See inserted text on "condition" of Riparian vegetation. I did this evaluation from an ecological viewpoint of composition and function. The more natives composing the vegetation the better. Function—structural diversity for wildlife habitat, closed canopy for shading for fish, stable banks for water quality, floodplain still connected to main channel.*

3.4.3 Urban Effects on the Creek. 3rd pph Metals discussion. Metals concentration is typically linked with TSS. I couldn't find any turbidity or TSS data for the samples. Event comparison needs to incorporate TSS, turbidity results.

*This is correct, but we didn't do turbidity with each sampling event. Samples were analyzed for total metals which would include both dissolved and sorbed metals.*

#### 3.4.4 Summary of Current Water Conditions

Ist sentence: LCC "...does not seem to be seriously impaired...." Perhaps this could be stated more clearly. Are there impairments or not?

*The word "seriously" was deleted from this statement.*

3.4.4.4, 2nd pph "...remediation efforts at the Humboldt Road Burn Dump may liberate sediments observed to contain metals...." Is there some reason to think remediation work and erosion control at the dump would be done improperly? Is faulty erosion control at the dump more likely than sediment discharges from grading, grazing, or forestry?

*No, but proposed grading and movement of waste materials may be in progress as early as this coming Spring. We have serious doubts that the contractors can completely eliminate the risk of erosion during a storm if one occurs at an inopportune time.*

#### 3.5 Future Needs and Monitoring

I suggest changing the title of this discussion and expand it and raise it to full chapter level. Monitoring is a future need so it could be a sub heading in a chapter that covers questions raised by the existing assessment.

Some questions this chapter might address are:

What habitat and water quality concerns were identified? Maybe all the major issues: erosion, riparian habitat, invasive species, urban runoff, litter, development, diversions, ag return, flood plain function, bacteria could be covered in this chapter. What issues/problems are likely to demand more attention in the future? Why are these issues important? Were any problems identified that could be addressed through education, outreach, or cooperation? What additional information/understanding is needed to develop technically sound projects? Bacteria

for example: source ID, regrowth, monitoring needs, etc. What obstacles are there to development and implementation of good projects? Are there approaches/opportunities to prevent habitat loss or water quality impairment?

I think putting effort in this chapter will make the report more useful for a watershed group, for development of good projects, and for successful grant writing.

*The text revisions throughout this document reflect many of the above suggestions but the suggested new chapter was not written.*

You've put together a lot of interesting info. It's going to be a useful document.

-Guy

From: Rich Reiner, PhD., Ecologist

Hi Dave,

The report is weak on information that could direct restoration activities. Exotic plant control will require better mapping. Potential restoration of riparian forest in the flood plain will require an existing riparian vegetation map, a soils map, a floodplain map, and a parcel map. I was hoping that the report could have gone to this level of specificity.

*We didn't map exotic plant control because of ownership issues and the ubiquity of the problems. Nearly every part of the creek has one to many exotic invaders. A riparian vegetation map can only occur with aerial photos, which thus far we have not had access to—should they become accessible our field data can act as the ground truth for these maps. Maybe this could happen for the next update of this document. A soils map is awaiting the new Butte County Soil Survey. A floodplain map would be a good addition.*

The report seems weak on issues of fragmentation. It would be useful for any future conservation planning to have a parcel map included showing parcel patterns. Some basic questions are not answered, for example, is much of the canyon section already broken into 20's or 40's. If so where? The large land owners are listed in a table but the report does not give any idea of where they are located and there is no discussion of the conservation implications of the current ownership pattern.

*This concern has been clarified in Section 4 of this document.*

The report would be more readable if the longer tables were moved to the back.

*Selected tables were moved to the appropriate appendix.*

Combine the individual chapter Table of Contents to the front of the report.

*Done.*

Some specific edits;

Page 1-1. Section 1-1. line 5 "topography over" should read "topography of"?

*Done.*

Page 1-1. Section 1-1 this section should include some general comments about the area the report covers. I was not sure regarding the coverage until I read the section on soils. This introduction section would be a good place to introduce how the report divides the watershed into reaches. I would also include a very brief discussion of the general character of each reaches at this forward point.

*Done*

Figure 1.1 There is no key to tell me what the large purple, blue and pink areas are?

*Completely redone.*

Page 2-1 The title of this section should be expanded. Perhaps " Riparian Habitat, Birds, Mammals, and Fish of the LCCW

*Done*

Page 2-4 The discussion of where the creek becomes intermittent is clumsy and spread across 2 paragraphs. Put into a single paragraph. Pick a point and stick to it though the whole report. ( 1/2 mile up from Stilson Bridge?)

*Addressed in this document.*

Page 2-9 Second paragraph line 1. reads " Notable species not listed" should read "Notable species not listed as rare?"

*Corrected*

Page 2-12 Paragraph 1 It would be good to include a short discussion of which exotic plants are found in this zone and what are the conservation implications of each species.

*It is noted in this document that Mediterranean grasses, yellow-star thistle, many other weeds have completely changed the ecology of this area.*

Page 2-13 section 2.3.5 I have heard talk of steel head in the creek. This is not mentioned.

*Steelhead, like Chinook salmon, have been observed in high flow years. Neither currently maintain populations in the creek. (See p 2-13, line 13.)*

Page 2-13 section 2.3.7 This section should list our exotic crawdads as well as bull frogs. Also the proper name is the "western pond turtle"

*This is correct for the western pond turtle. Exotic bull frogs and two species of exotic crayfish (Orconectes virilis and Procambarus clarkii) are found in the lower canyon and permanent water areas of the urban zone.*

Page 2-15 section 2.4.2 Privet is not mentioned. I have this on my property and I think it is invading elsewhere.

*Privet and a shopping list of other invasive exotics are common in the urban zone. Some have colonized both above and below this zone.*

Page 2-16 Starlings are a major problem for cavity nesters in the lower canyon.

*True and also in the urban and agricultural areas.*

Page 2-22 line 9 The section above the bridge goes dry and does not support resident fish. Should read 1/2 mile above the bridge?

*Corrected to read roughly from Stilson Canyon Bridge to Headwaters Road.*

Table 2.6 My key shows *Ensatina platenis* as the local species not *escholzii* as listed. Also I am not sure if Tiger Salamander would be found here. I did find a sharp-tailed snake at my place this summer so I know that correct!

*Observation noted*

Figure 2.11 Other figures refer to a sample point at Crown Point Rd. (Figure.14) yet it is not located on this map.

*Crown Point is the same as Smith's.*

Figure 2.12 It would be nice to have more points of reference on this map. Perhaps a few major roads.

*Additions made*

Figure 2.17 I did not see this Figure referenced in the text. Maybe I missed it?

*Page 2-23 line 9*

Page 4-7 Land Use Section element CD-G-10 is listed twice

*Done.*

Page 4-11 There are a lot of un-explained acronyms here. What's a ROG?

*Done.*

4-12 There should be a discussion of where the land use data came from here.

*Done*

4-15 The table should be arranged by river reach.

*Done*

4-16 This table should be arranged by reach and perhaps combined into the previous table.

*Done*

Figure 4.1a I suspect the urban polygons came from Tiger Files. It shows a lot of the roadless area of the canyon as urban? A parcel density map would be much more useful for planning future conservation projects.

*After discussing this issue, we decided to provide Butte County with parcel maps along the creek. A short section of text will be added to Chapter 2 directing people to this resource. Landowner attitudes are such that including these maps in our document would likely create more friction for the watershed group efforts.*

Thanks for letting me look this over. Rich Reiner

**From Loyd Heidinger and Ron Cinquini; Property Owners**

October 30, 2002

TO: DAVID L. BROWN  
DEPT. OF GEOSCIENCES  
CALIF. STATE UNIV. CLCO

The LCC Draft Existing Conditions Report begins in the Section 1. On p.4 it states there are 8000 landowners in the LCC watershed. A survey was formed from responses of 69 landowners. This is exemplary of the lack of consensus LCC W Group has failed to build.

In Section 2 the underlying theme of restoration of LCC to pre-western european habitations, leaves little to accept or respect. This section stands on its own assumptions, expectations, and exclusions. One has to wonder why every day species would be excluded. Page 20 paragraph 2 (sentences 1, 2, & 3) are particularly in conflict with property owner statements made at the March 28, 2002 meeting.

Section 3 is a science report on the water quality of LCC. It seems accurate, with conclusions explained. A problem is Figure 3.2 which is quite inaccurate.

Section 4 says its purpose is to inform. It then proceeds to restate what is already public information. LCC ECR doesn't benefit from plagiarism or redundancy.

Except for Section 3, LCC ECR can be characterized as a '92 Comet being purchased at a 2003 Cadillac price. There is certainly little or no justification for any commissions on such a sale.

Sincerely,

Loyd Heidinger

Ron Cinquini

The comments made in the letter dated 10-30-02 reflect the opinions of the writers and are noted and acknowledged here. The storm drain map on Figure 3.2 was corrected based the observation made above. We are working with Mr. Heidinger to improve the interpretation of the erosion problem referred to above (page 20, paragraph 2 in the public review draft). No other revisions to this document are seen to be necessary in response to the opinions given in the letter. **[NOTE: as of December 22, 2002, we have not received the requested follow-up information from Mr. Heidinger. We will attempt to create an addendum to the final report if possible.]**

I have requested an electronic version of the Nov. 19 comments from the County. I hope to get them tomorrow.

December 16, 2002

Dr. Dave L. Brown PhD  
Department of Geosciences  
California State University, Chico  
Chico, CA 95929-0205

**RE: Little Chico Creek Existing Conditions Report**

Dear Dr. Brown:

The Department of Water and Resource Conservation has reviewed the most recent edition of the Draft Little Chico Creek Existing Conditions Report (ECR). Our department has compiled additional comments submitted by the Butte County Agricultural Commissioner's Office, Department of Public Works and Office of Emergency Services. Please consider the following as combined comments.

Public Works Department, Stuart Edell:

1. Although metric units are much easier to use than English units, most people in the United States are accustomed to, and most reports within the watershed are written in, English units. The report mixes the two types of units, English units (inches, feet, miles, °F, cfs) should be used for the primary report and metric units (millimeters, meters, °C, m<sup>3</sup>/s), if used, should be contained in parenthesis behind the English units.

*This correction was made throughout the document as recommended.*

2. Section 2.1.3 Surface Hydrology, should contain references to the latest FEMA flood/floodplain information.

*This change was made in Sections 2.1.3 and 4.5.2.*

3. Sections 4.3 and 4.4 should reference the County's current activity updating the elements of the General Plan.

*This reference was added in the appropriate section.*

4. The report references several guides or keys for identification of plants and animals, but it does not state who did the identification and there is no apparent concurrence from a qualified botanist or biologist.

*It is unclear what type of technical background information is needed. There is no standard format for ECR documents regarding how professional background information is presented. In response to this particular question, biologists directly involved in this project included Ms. Jean Hubbell, M.S.; Dr. Paul Maslin, PhD; and Mr. John Hunt, M.S. Candidate. Outside reviews of this work came from at least one PhD ecologist and several professional staff with State and Federal wildlife agencies.*

Agriculture Commissioners Office, Deputy Ag . Comm. Rob Hill:

1. Page A-3, Top of the page, change “Assistant” to Deputy

*This correction has been made.*

Office of Emergency Services, Officer Mike Madden:

1. The nomenclature (both scientific and common names) for the birds listed in the report is old, incorrect or have been changed since 1988. OES suggests that current names should be reflected in the ECR. “One day” bird counts are misleading as to what actual bird populations are in the Little Chico Creek Watershed.

*More specific information is needed as to which nomenclature is in error. If OES biologists or other staff members have found specific errors in the Draft, we welcome that input and will make corrections in subsequent on-line errata to be posted on the Butte County website as part of the electronic version of the ECR being developed. Suitable limitations of the bird-count sampling methods were stated in the December 1 draft on page 10.*

We hope that you find these comments useful in your preparation of the Final Existing Conditions Report for the Little Chico Creek Watershed. Please feel free to call if you have any questions.

Sincerely,

Pia Sevelius  
Watershed Coordinator

cc. Deputy Ag. Comm. Rob Hill  
OES Officer Mike Madden  
Public Works, Stuart Edell  
Water and Resource Conservation, Vickie Newlin