Pacific Gas and Electric Company

Plan Review Team
Land Management

PGEPlanReview@pge.com

November 1, 2021

Mike Sawley
City of Chico
PO Box 3420
Chico, CA 95927

Ref: Gas and Electric Transmission and Distribution

Dear Mike Sawley,

Thank you for submitting the Valley's Edge plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities. 1-1

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review: 1-2

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page.

2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services. 1-3

3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities. 1-4

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851filing is required. 1-5

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management

Pacific Gas and Electric Company

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.

11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Pacific Gas and Electric Company

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING."**

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 15 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

Comment Letter 2

Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

November 16, 2021

Mr. Mike Sawley
City of Chico Community Development Department
Planning Division
411 Main Street, P.O. Box 3420
Chico, CA 95927
Mike.Sawley@Chicoca.gov

DRAFT ENVIRONMENTAL IMPACT REPORT FOR VALLEY'S EDGE SPECIFIC PLAN – DATED OCTOBER 2021 (STATE CLEARINGHOUSE NUMBER: 2019089041)

Dear Mr. Sawley:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for Valley's Edge Specific Plan (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site. 2-1

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight. 2-2
2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. 2-3

This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.

2-3 Cont.

3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook

2-4

4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers*.

2-5

5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material*.

2-6

6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)*.

2-7

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please visit DTSC's Site Mitigation & Restoration Program page to apply for lead agency oversight. Additional information regarding voluntary agreements with DTSC can be found at DTSC's Brownfield website. 2-8

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Comment Letter 3

Department of Development Services

Paula M. Daneluk, AICP, Director
Curtis Johnson, Assistant Director

7 County Center Drive
Oroville, California 95965

T: 530.552.3700
F: 530.538.7785

buttecounty.net/dds

December 8, 2021

Mike Sawley, AICP
Principal Planner
411 Main Street, 2nd Floor
Chico, CA 95927

Re: Butte County Planning Division Comments on the Valley's Edge Draft EIR.

Dear Mike Sawley,

The Butte County Doe Mill / Honey Run Specific Plan will determine the mix of uses that will occur in a 1,444-acre area located east of Chico. The Specific Plan will allow mixed residential development and some commercial uses. (Butte County General Plan 4-(33-34)). Upon review of the Draft Environmental Impact Report for the Valley's Edge Specific Plan, which is similar in scope to the Butte County Doe Mill / Honey Run Specific Plan, Butte County Planning has the following comment: 3-1

Per Division 7 of the Butte County Zoning Ordinance, we recommend the 300' agricultural buffer be enforced along the north eastern section approximately 1,800 feet in length adjacent to parcel APN: 018-390-008 from project parcel APN: 018-390-007. We note that per page 3-2 and Figure 2-3 of the DEIR the 300' agricultural buffer is in effect for the eastern boundary, and meets the requirement. The Agricultural Buffer is intended to protect agricultural lands from the negative impacts of residential development and activities. The 300-foot buffer is placed upon the developed parcel, and restricts residential development. Other uses that do not involve the construction of residences are permitted within the buffer area. 3-2

If you have any questions about this comment please contact me at 530.552.3685 or tweems@buttecounty.net.

Sincerely,

Tristan Weems, AICP
Associate Planner

BUTTE LOCAL AGENCY FORMATION COMMISSION
1453 Downer Street, Suite C • Oroville, California 95965-4950
(530)538-7784 • Fax (530)538-2847 • www.buttelafco.org

December 8, 2021

Mike Sawley, Principal Planner
Planning Services Department
City of Chico
PO Box 3420
Chico, CA 95927

RE: Review of the Valley's Edge Specific Plan Draft EIR

Dear Mr. Sawley:

The Butte Local Agency Formation Commission (LAFCo) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) prepared for the Valley's Edge Specific Plan project, which would require annexation to the City of Chico, under the authority of the Butte LAFCo.

General Comments

As LAFCo has not yet received an annexation application for the project, our comments at this time are not to be considered as a measure of completeness for the anticipated annexation application. The following comments are provided in order to allow the City of Chico the opportunity to address LAFCo concerns related to the project description, environmental review and issues related to impacts to other agencies should this be necessary to effectively process the annexation request. At such time an annexation application is formally submitted, LAFCo will review all materials and make a completeness determination, which may require the submittal of additional information in order to effectively evaluate the proposed annexation.

Government Code Section 56668 lists the fourteen factors that LAFCo's must consider in the review of a proposal. These factors are:

4-1

a) Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.
b) Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of Steve Peterson March 20, 2007 Page 2 of 5

c) Alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas. "Services," as used in this subdivision, refers to governmental services whether or not the services are services, which would be provided by local agencies subject to this division, and includes the public facilities necessary to provide those services.
d) The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.
e) The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.
f) The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Section 56016.
g) The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.
h) Consistency with city or county general and specific plans.
i) The sphere of influence of any local agency, which may be applicable to the proposal being reviewed.
j) The comments of any affected local agency or other public agency.
k) The ability of the newly formed or receiving entity to provide the services, which are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.
l) Timely availability of water supplies adequate for projected needs as specified in Section 5352.5.
m) The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs as determined by the appropriate council of governments consistent with Article 10.6 (commencing with Section 65580) of Chapter 3 of Division 1 of Title 7.
n) Any information or comments from the landowner or owners.
o) Any information relating to existing land use designations.

4-1 Cont.

LAFCo staff encourages the City to review the above factors and ensure that the Specific Plan is consistent with and addresses these factors in the DEIR.

Please accept the following specific comments regarding the DEIR:

Agricultural Issues

The proposal would result in the conversion of land identified as Agriculture by the Butte County General Plan. Pursuant to Butte LAFCO Policy 2.13.1, LAFCO will apply a heightened level of review when considering proposals for changes of organization or reorganization that are likely to result in the conversion of prime agricultural/open space land use (as defined in Government Code Section 56560) to other uses. Only if the Commission finds that the proposal will lead to planned, orderly, and efficient development, will the Commission approve such a conversion. For purposes of this

4-2

standard, a proposal leads to planned, orderly, and efficient development only if all of the following criteria are met:

- The land subject to the change of organization or reorganization is contiguous to either lands developed with an urban use or lands within the sphere and designated for urban development;

- The proposed development of the subject lands is consistent with the Sphere of Influence Plan, including the Municipal Service Review of the affected agency or agencies and the land subject to the change of organization is within the current 10-year Sphere of Influence boundary;

- The land subject to the change of organization is likely to be developed within five years. In the case of very large developments, annexation should be phased wherever feasible. If the Commission finds phasing infeasible for specific reasons, it may approve annexation if all or a substantial portion of the subject land is likely to develop within a reasonable period of time;

- Insufficient vacant non-prime or open space land exists within the existing agency boundaries or applicable 10-year Sphere of Influence that is planned and developable for the same general type of use; and,

- The proposal will have no significant adverse effect on the physical and economic integrity of other agricultural/open space lands.

4-2 Cont.

Further, pursuant to LAFCo policy 2.13.4, in making the determination whether conversion will adversely impact adjoining prime agricultural or open space lands, LAFCO will consider the following factors:

- The agricultural/open space significance of the subject and adjacent areas relative to other agricultural/open space lands in the region;

- The use of the subject and the adjacent areas;

- Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural/open space land, or will be extended through or adjacent to any other agricultural/open space lands which lie between the project site and existing facilities;

- Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural/open space land from the effects of the proposed development; and,

- Applicable provisions of the County's General Plan Agricultural Element, Open Space and Land Use Elements, applicable growth-management policies, or other statutory provisions designed to protect agriculture or open space. (Refer to www.buttecounty.net/dds/planning,htm to locate Butte County's General Plan.)

The Draft EIR does not address the topic of agriculture as “impacts in these areas would be less than significant or no impacts would occur”. While LAFCo staff agrees the proposed project would not impact or convert Prime Agricultural Land, no determination is made that the project area does/does not qualify as Open Space Land as defined in Government Code Section 56560. Further discussion of this topic is needed to ensure that the project meets all LAFCo policies. 4-3

Sincerely,

Shannon Costa

Shannon Costa
Local Government Planning Analyst
Butte LAFCo

Comment Letter 5

629 Entler Avenue, Suite 15
Chico, CA 95928

(530) 332-9400
(530) 332-9417 Fax

STEPHEN ERTLE
Air Pollution Control Officer

December 9, 2021

City of Chico Community Development Department
Attn: Mike Sawley, Principal Planner
P.O. Box 3420
Chico, CA 95927

RE: Draft Environmental Impact Report - Valley's Edge Specific Plan

Dear Mr. Sawley,

The Butte County Air Quality Management District (District) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Valley's Edge Specific Plan (VESP). Based on the information reviewed, the District has the following comments:

1. Pages 4.2-8, 4.2-9, 4.2-29 (*clarification*): Butte County was designated attainment for the 24-hr PM2.5 national ambient air quality standard by US EPA effective August 10, 2018. 5-1
2. Page 4.2-16 (*clarification*): US EPA officially determined that the Chico / Butte County nonattainment area had attained the 24-hour PM2.5 NAAQS on September 10, 2013. US EPA approved the Chico / Butte County redesignation request and maintenance plan on July 11, 2018, effective August 10, 2018. The first sentence in that bulleted item is correct. 5-2
3. Page 4.2-21 (*typo*): Action C-1.5 is listed twice on this page. 5-3
4. Page 4.2-32: The District concurs that impacts from construction-related criteria emissions are expected to be less than significant based on the information provided. 5-4
5. Page 4.2-38: The District concurs that impacts from construction-related toxic air contaminant (TAC) emissions are expected to be less than significant with the implementation of Mitigation Measures AQ-6 and AQ-7. 5-5
6. Pages 4.2-34, 4.2-41: The District concurs that operational-related emissions and the project's cumulative impact are expected to be less than significant with the implementation of Mitigation Measures AQ-2, AQ-3, AQ-4, and AQ-5. The District can participate as needed with an off-site mitigation program. 5-6
7. Page 4.2-35: The District recommends that on-site measures that reduce ROG, NOx, and PM_{10} emissions be prioritized over off-site mitigation measures where feasible. Actions from the VESP resulting in emission reductions of ROG, NOx, and PM_{10} that are currently not quantified in the DEIR (such as electric vehicle infrastructure) should be quantified as best as possible prior to participation in an off-site mitigation program. 5-7

If you have any questions, please contact me at 530-332-9400 x108.

Sincerely,

Jason Mandly
Senior Air Quality Planner

Comment Letter 6

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
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Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

December 15, 2021

City of Chico Community Development Department
Mike Sawley, Principal Planner
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Chico, California 95927
mike.sawley@chicoca.gov

RE: VALLEY'S EDGE SPECIFIC PLAN (PROJECT)(VESP)
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) SCH#2019089041

Dear Mr. Sawley:

The California Department of Fish and Wildlife (CDFW) received and reviewed the DEIR from the City of Chico (City) pursuant the California Environmental Quality Act (CEQA) statute and guidelines[1].

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code. 6-1

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.,* § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. 6-2

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

6-2 Cont.

PROJECT DESCRIPTION SUMMARY

The approximately 1,448-acre Project site is located in unincorporated Butte County within the City's Sphere of Influence, at the transition of the valley floor and lower foothill region. The proposed Project includes a mixed-use community with a range of housing types, commercial uses, parks, trails and recreation and open space areas. The residential component would consist of approximately 1,392 multi-generational or family housing residential units and 1,385 age-restricted (55+) residential units. The commercial portion includes approximately 56 acres designated for a mix of professional and medical offices, neighborhood retail shops and services, multi-family apartments, day care, and hospitality uses. Approximately 672 acres would be designated as parks, trails, open space and preservation, including a large regional park, a community park, neighborhood parks, mini parks and tot lots, and an active adult park.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Cumulative Impacts

Section 4.3-5 of the DEIR discusses the Project's cumulative effects to natural resources including special-status plant and animal species; however, the DEIR only focuses on Project impacts in relation to the unadopted Butte Regional Conservation Program (BRCP). The DEIR argues that the Project would not exceed any of the applicable maximum allowable removal thresholds established by the BRCP, and therefore, cumulative impacts to biological resources would be less than significant. The BRCP is not final or adopted and thus it should not be used in the cumulative analysis for this Project. The DEIR should include a complete cumulative impact analysis that does not rely on the BRCP.

6-3

Cumulatively, the Oak Valley Phase 1, Meriam Park, Belvedere Heights Phase 2, and Stonegate residential developments and the Canyon View High School site have already had a significant impact on local biological resources. If approved, the proposed

6-4

Project will bring the total of permanently impacted habitats to nearly 1,000 acres of grassland habitat and several acres of sensitive aquatic habitat including vernal complexes, drainages, and seasonal wetlands. As addressed in this comment letter, many of Mitigation Measures BIO-1 through BIO-10 are unenforceable, based on outdated information, and/or fail to explain how the measures as implemented will be effective in reducing the impacts. For these reasons the implementation of Mitigation Measures BIO-1 through BIO-10 are insufficient to reduce the Project's cumulative impact to a less-than-significant level. The Project's contribution to cumulative impacts to biological resources as proposed will be cumulatively considerable resulting in a potentially significant cumulative impact. CDFW recommends that the Project alternatives are modified to ensure they avoid, minimize, or mitigate these cumulative impacts to natural resources described in Section 4.3-5 of the DEIR.

6-4 Cont.

Deferred Mitigation

CEQA Guidelines §15126.4 (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. The DEIR lists a number of mitigation measures for biological resources that rely on future approvals or agreements as a means to bring identified significant environmental effects to below a level of significance. Because there is no guarantee that these approvals or cooperation with all of the involved entities will ultimately occur, the mitigation measures are unenforceable and may not reduce the impacts to biological resources to a less-than-significant level. Mitigation measures should establish performance standards to evaluate the success of the proposed mitigation, provide a range of options to achieve the performance standards, and must commit the lead agency to successful completion of the mitigation. Mitigation measures should also describe when the mitigation measure will be implemented and explain why the measures are feasible. Therefore, CDFW recommends that the DEIR include measures that are enforceable and do not defer the details of the mitigation to the future. The DEIR defers mitigation for impacts to aquatic features, Butte County meadowfoam (*Limnanthes floccosa ssp. californica*) (BCM), and the removal of mature trees (addressed below). The DEIR should give an accurate and detailed explanation of proposed avoidance measures and compensatory mitigation to offset permanent impacts to these resources.

6-5

Impacts to Hydrologic Features and Associated Habitats

The DEIR should identify all perennial, intermittent, and ephemeral rivers, streams, and lakes within the Project footprint and any habitats supported by these features such as wetlands and riparian habitats that are subject to section 1600 et seq. of the Fish and Game Code. The DEIR should identify any potential impacts to fish and wildlife resources dependent on those hydrologic features; and estimate the footprint area that will be temporarily and/or permanently impacted by the proposed Project by hydrologic feature and habitat type. The maps in the DEIR do not clearly show the impact to these habitats which makes it difficult to know what will be impacted and what regulatory permits may be required. CDFW recommends updating the maps to provide this clarity.

6-6

Notification to CDFW may be required, pursuant to Fish and Game Code, section 1602 if the Project proposes to: divert, obstruct, or change the natural flow or the bed, channel or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river, stream, or lake. The construction of recreational trails in riparian areas may also be an activity subject to Fish and Game Code, section 1602. In these cases, the DEIR should propose mitigation measures to avoid, minimize, and mitigate impacts to fish and wildlife resources.

Please note that CDFW definition of wetlands as well as extent of the areas regulated under Fish and Game Code, section 1602 differs from other aquatic resource regulatory agencies.

6-7

Butte County Meadowfoam

Butte County Meadowfoam is endemic to Butte County and is restricted to a narrow 25-mile strip along the eastern flank of the Sacramento Valley from central Butte County to the northern portion of the City. BCM populations and its habitat have been substantially reduced in number and fragmented by development.

In 2009 a genetic study of BCM throughout its range (Sloop, 2009) identified that the isolated, unconnected occurrences of BCM surrounding the City of Chico are genetically unique from occurrences north of and south of the City highlighting the importance of preserving the viability of smaller BCM populations.

The DEIR's proposed BCM mitigation measures are inadequate to reduce Project impacts to less-than-significant levels for the following reasons: a) assessment of Project impacts on BCM is based on survey results that are outdated and performed during periods of historic drought; and b) BIO-1 does not set specific performance criteria to ensure that the measure, as implemented, will be effective.

6-8

a) Protocol-level BCM Surveys

BCM is an annual species which occurs in habitat subject to annual fluctuations such as drought; therefore, BCM may not be evident and identifiable every year. Both the physical (i.e. 2018 Camp Fire) and climatic conditions within the Project area have changed since the last botanical field survey was conducted in 2017. Botanical surveys that are older than two years and performed in conditions that do not maximize detection may overlook the presence or actual density of BCM on the Project site. CDFW recommends additional protocol level botanical surveys be conducted at the appropriate time of year with proper weather conditions and the results be incorporated into the DEIR for review and comment. Both current and past survey results should be used to provide an accurate assessment of the BCM populations that may be impacted. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).) If after updating the surveys, it is determined that the project may have the potential to result in "take", as defined in the

6-9

Fish and Game Code, section 86, of a State-listed species, the DEIR should disclose that an Incidental Take Permit (ITP) (Fish & G. Code, § 2081) should be obtained from CDFW prior to starting construction activities. The DEIR should include all avoidance and minimization measures that will be employed to reduce impacts to a less than significant level. If take of listed species is expected to occur even with the implementation of these measures, an ITP will include additional minimization and mitigation to fully mitigate the impacts to State-listed species (Cal. Code Regs., tit. 14, § 783.2, subd.(a)(8)). 6-9 Cont.

b) **BCM Habitat Mitigation and Monitoring Plan**

BIO-1 calls for the establishment of on-site preserves and requires the developer to prepare a Habitat Mitigation and Monitoring Plan, record easements, and complete other requirements, as necessary, to establish the two Butte County Meadowfoam preserves and the other preserve on the VESP project site in compliance with all applicable state and federal resource agency permits. The preserves shall be separated from any development by a minimum of 250 feet unless site-specific hydrological analysis accepted by the U.S. Fish and Wildlife Service demonstrates that a reduced separation would still prevent direct or indirect effects to Butte County meadowfoam within the preserve. No development shall be approved by the City within 500 feet of the avoidance area until the preserves are established. 6-10

Throughout the DEIR the "on-site preserves" for BCM are referred to inconsistently as either "Primary Open Space/P-OS" or "preserves." The DEIR does not clearly define the locations of the on-site preserves graphically. The "preserve" limits and designations in Figure 4.3-4 of the DEIR conflict with those shown in Figure 2.5. In addition, the "preserves" shown on Figure 4.3-4 do not appear to extend 250 feet from all BCM occurrences as described in the DEIR. Without a static legal description and an accurate visual representation of the "preserves'" it is impossible to determine whether their establishment is sufficient to avoid impacts to BCM populations.

Further, the DEIR provides no scientific evidence or assessment of whether such a small preserve is sufficient to successfully avoid all potential long-term impacts to BCM to a less-than-significant level within the project area. Construction of low-density residential development will abut the "on-site preserves" with no assessment provided of potential adverse impacts from project-related construction, maintenance, and fuel modification activities. Adverse impacts that could occur include but are not limited to edge effects such as a permanent change in year-round hydrology, exposure to herbicides, and introduction of invasive ant species onto the habitats occupied by these plants, which could interfere with pollination and dispersal. Without science-based evidence that a preserve of this size is sufficient to prevent long-term impacts and potential extirpation of BCM, impacts from adjacent development will continue to be significant. In addition to this, the small size of the preserves may make adaptative management difficult and could result in the extirpation of BCM at this location. CDFW 6-11

recommends that additional biological studies including appropriate hydraulic studies are prepared to establish the minimum BCM preserve size. 6-11 Cont.

The DEIR defers formulation of certain components of BIO-1 without setting specific performance criteria to ensure that these measures, as implemented, will be effective. For instance, BIO-1 mandates the "VESP Habitat Mitigation and Monitoring Plan shall include at a minimum: management techniques to be used on the preserves; monitoring methods and frequencies to detect changes in Butte County Meadowfoam and allow for adaptive management; and a funding strategy to ensure that prescribed monitoring and management would be implemented in perpetuity to ensure efficacy of the preserves." Yet the DEIR does not specify performance standards for evaluating the efficacy of the Habitat Mitigation and Monitoring Plan. Additionally, BIO-1 does not provide for any feasible alternatives should the long-term, irreversible impacts from the project result in impacts to BCM. Given the high variability of BCM populations, CDFW recommends annual BCM surveys are part of the long-term management plan to establish the long-term viability of the population and that the DEIR includes measures that will be implemented if BCM population declines are detected within the preserves. 6-12

Rare Plants

a) Protocol-level Rare Plant Surveys

The DEIR does not explain why it was infeasible for the project proponent to perform protocol-level rare plant surveys within the last two years so an accurate assessment of project impacts can be conducted (CEQA Guidelines, § 15126.4, subd. (a)(1)(B)). Both the physical (i.e. 2018 Camp Fire) and climatic conditions within the Project area have changed since the last botanical field survey was conducted in 2017. Botanical surveys that are older than two years and performed in conditions that do not maximize detection may overlook the presence or actual density of rare plants on the Project site. CDFW recommends additional protocol-level rare plant surveys be conducted at the appropriate time of year with proper weather conditions, and the results incorporated into the DEIR for review and comment. Protocol-level surveys shall be conducted in compliance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (2021)*. 6-13

b) Shield-bracted Monkeyflower and Bidwell's Knotweed

Populations of shield-bracted monkeyflower (*Erythranthe glaucescens*) and Bidwell's knotweed (*Polygonum bidwelliae*) occur on the site (DEIR - Attachment C). Given the specialized habitats and limited range and distribution of these species they should be considered species of regional and local significance (§ 21155. 1, subd. (a)(2)(c)(iii)). CDFW recommends the avoidance and minimization measures provided for these species in the 2018 Biological Resource Assessment be incorporated into the DEIR to reduce project impacts to shield-bracted monkeyflower and Bidwell's knotweed. 6-14

Western Spadefoot

The DEIR does not explain why the project proponent has not performed focused surveys for spadefoot toads (*Spea hammondii*). CDFW recommends focused multi-year surveys for spadefoot toads be conducted at the appropriate time of year with proper weather conditions. Survey methods and results should be incorporated into the DEIR for review and comment. 6-15

The DEIR states, "habitat for western spadefoot is limited to the northwestern portion of the project site where there are deeper soils and aquatic habitat." However, burrow depths can be quite shallow ranging from approximately 1/3 inch to 7 inches (Baumberger et. al 2019); therefore, suitable upland habitat for western spadefoot may be found throughout the site, not just in the northwestern portion. Western spadefoot are primarily terrestrial and have been recorded occupying upland habitat as far as 859 feet from the nearest aquatic breeding pool (Baumberger et. al 2019). To reduce impacts to western spadefoot, preserved habitat in the northwestern portion of the site should expand a minimum of 859 feet from all aquatic features. Preserved habitat should be placed in a conservation easement and fenced to prevent public access. In addition, potential long-term edge effects on preserved habitat including but not limited to altered hydrology, exposure to pesticides, and light pollution should be assessed and included in the DEIR for public review and comment. 6-16

Ringtail

CDFW recommends avoidance and minimization measures are implemented to mitigate potential impacts to ringtail (*Bassariscus astutus*) to less-than-significant. The DEIR states that only the riparian habitat within the Project site provides habitat for ringtail. The DEIR goes on to state, "the likelihood of denning is reduced because the project site does not have extensive riparian habitat (less than 1% of project site) and lacks permanent, year-round water."

Research shows that contrary to the popular conception that ringtails require open, permanent water for survival, studies have found many ringtail home ranges had no water source within them, and no ringtail were observed in the vicinity of water (Harrison 2012). Ringtails can be found in habitats lacking drinking water and are capable of producing urine concentrations among the highest known with the Procyonidae family which allows for water economy comparable to that of the desert kit fox (*Vulpes macrotis*) (Chevalier 2005). Ringtail are known to occupy oak woodland habitat with relatively large home ranges (Harrison 2012). Based on ringtails' ability to occupy a variety of habitats regardless of the presence of permanent water, all 487 acres of blue oak foothill pine habitat onsite is also suitable ringtail habitat. Habitat fragmentation of blue oak foothill pine habitat and removal of an estimated 200 acres of oak woodland proposed by the Project may have a significant impact on any ringtails occupying the site. In addition, the impacts from the construction of trails throughout riparian and blue oak foothill pine habitat and light pollution from project development may be significant 6-17

impacts to resident ringtail and should be assessed and included in the DEIR for review and comment. 6-17 Cont.

CDFW recommends a thorough and accurate assessment of direct project related impacts on ringtail and its habitat be included in the DEIR prior to Project approval. To minimize long-term impacts to ringtail and their habitats, CDFW recommends the 487 acres of blue oak foothill pine habitat and 13 acres of valley foothill riparian be avoided as much as possible. These avoided habitats should be placed in a conservation easement and fenced to prevent public access. In addition, avoidance and minimization measures to reduce the effect of light pollution on these avoided habitats should be included in the DEIR. Please note that ringtails are fully protected species and CDFW cannot authorize take to this species. 6-18

Nesting Bird Surveys.

The nesting bird season is generally defined as February 1 through August 31; however, earlier nesting may occur based on several factors including species, altitude, and weather. Fish and Game Code section 3503 protects the nests and eggs of all birds, not just migratory birds and birds of prey, regardless of the time of year. To minimize the chances of missing nests, pre-construction surveys for nesting birds may need to be performed outside of the general nesting bird season.

In addition, CDFW recommends BIO-2(b) be revised to read as follows: "If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance buffer from the active nest. The buffer distance *shall be a minimum of 250 feet for passerines and 500 feet for raptors. Buffer distances may be increased or reduced* based on factors such as the species of bird, topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule *as determined by the qualified biologist*. Limits of construction to avoid active nests shall be established in the field with flagging, fencing, or other appropriate barriers and shall be maintained until the chicks have fledged, are foraging independently, and are no longer dependent on the nest, as determined by the qualified biologist. *The qualified biologist shall regularly monitor the nest and shall have stop work authority if construction activities are having an adverse impact on the nest*. CDFW shall be consulted if active nests are observed during the pre-construction survey." 6-19

Bird Enhancement and Mortality Reduction Strategies in Project Design and Implementation.

Proposed development will ultimately border existing open space areas and drainages onsite. These open space areas provide suitable habitat for nesting birds. Placement of buildings adjacent to suitable nesting bird habitat may adversely affect bird populations by introducing sources of common bird mortalities such as reflective windows that birds may collide with. Given declines in segments of the overall bird population and 6-20

ecological benefits of healthy bird activity, CDFW recommends consideration of bird enhancement and mortality reduction strategies in project design and implementation. Incorporation of these strategies can reduce anthropogenic effects on birds and promote sustainable development in California.

6-20 Cont.

Collisions with clear and reflective sheet glass and plastic is also a leading cause in human-related bird mortalities. Many types of windows, sheet glass, and clear plastics are invisible to birds resulting in casualties or injuries from head trauma after an unexpected collision. Birds may collide with windows as little as one meter away in an attempt to reach habitat seen through, or reflected in, clear and tinted panes (Klem 2014), so even taking small measures to increase visibility of windows to birds can make a substantial difference in minimizing long-term impacts of urban development near natural environments.

Incorporation of bird and wildlife strategies not only promotes environmental stewardship but also facilitates compliance with State and federal protections aimed at preserving bird populations. CDFW recommends that the City includes in the DEIR bird and wildlife friendly strategies for all windows within the project:

6-21

- Install screens, window patterns, or new types of glass such as acid-etched, fritted, frosted, ultraviolet patterned, or channel. Additional information can be found at https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds/collisions/buildings-and-glass.php.

Mitigation to Minimize Artificial Lighting Impacts

Artificial light is another outcome of development. Roads and buildings typically include exterior night lighting and therefore have potential to introduce or increase light pollution to adjacent fish and wildlife habitat. The adverse ecological effects of artificial night lighting on terrestrial, aquatic, and marine resources such as fish, birds, mammals, and plants are well documented (Johnson and Klemens 2005; Rich and Longcore 2006). Some of these effects include altered migration patterns and reproductive and development rates, changes in foraging behavior and predator-prey interactions, altered natural community assemblages, and phototaxis (attraction and movement towards light). Light pollution disrupts the ability of night-foraging birds (CDFW 2007).

6-22

Illumination of riparian corridors by night lighting has the potential to adversely affect birds. Physiological, developmental, and behavioral effects of light intensity, wavelength, and photoperiod on bird species are well documented. In the wild, urban lighting is associated with early daily initiation of avian song activity (Bergen and Abs 1997). Avian species are known to place their nests significantly farther from motorway lights than from unlighted controls (de Molenar et al, 2000). Placement of nests away from lighted areas implies that artificial light renders part of the home range less suitable for nesting. If potential nest sites are limited within the bird's home range, reduction in available sites associated with artificial night lighting may cause the bird to use a suboptimal nest

site that is more vulnerable to predation, cowbird parasitism, or extremes of weather. Artificial lighting generally threatens wildlife by disrupting biological rhythms and otherwise interfering with the behavior of nocturnal animals (contributions from Artificial Night Lighting Conference, 2002). Nocturnal and migrating birds, migrating bats, insects, fish, and amphibians are particularly affected by artificial night lighting (Evans Ogden 1996 and citations therein). Billions of moths and other insects are killed from lights each year. Nocturnal birds use the stars and moon for navigation during migrations. When these birds fly through a brightly lit area, they can become disoriented, which can lead to injury and/or death. In addition, artificial lighting can affect aquatic invertebrates that are prey for other animals. Other references that may provide useful insight into the analysis of indirect impacts include Longcore and Rich (2001) and the National Cooperative Highway Research Program (2002). 6-22 Cont.

As described in the DEIR, it would be difficult, if not impossible, to orient the lights in a manner that obstructs all light from reaching wildlife and their habitats onsite. The glow cast from headlights and streetlights would spill into sensitive habitats. In an area that now experiences minimal urban lighting (sky glow) and almost no direct lighting, this would likely constitute a significant biological impact. CDFW recommends the DEIR include minimum setbacks between artificial lights and adjacent woodland and riparian habitats to reduce this potentially significant impact.

Oak Woodland

The proposed oak woodland impacts listed in the DEIR contradict the acreages of habitat provided in the 2018 Biological Resource Assessment (BRA) (DEIR-Attachment C). Section 4.3-2 of the DEIR states. Please clarify this discrepancy, the DEIR should accurately present and analyze impacts to all habitats present onsite. 6-23

Per the DEIR, the Project will convert an estimated 200 acres of blue oak foothill pine woodland to development while preserving 80% of the existing oak canopy onsite; however, based on the information provided in the 2018 BRA, the project site only contains 485.7 acres of blue oak foothill pine habitat. Therefore, the Project is proposing to permanently convert approximately 40% of the existing blue oak foothill pine habitat to development. 6-24

The Oak Woodland section on page 29 of the 2018 BRA states, "An oak canopy evaluation was conducted within the BSA by Gallaway Enterprises in 2017. This oak canopy evaluation involved the GIS mapping of the oak canopy within the BSA and the use of survey plots to ground truth and collect data to estimate the number of trees within the oak canopy mapped. The resulting acres of oak canopy mapped was a total of 239 acres with the average of 23 trees per an acre of canopy. The DEIR does not provide a figure showing where the 239 acres of oak woodland is located. Without knowing the location of this oak woodland, direct and indirect project impacts on the woodland cannot be analyzed. CDFW recommends a map of the 239 acres of oak woodland be included in the DEIR. 6-25

The VESP concludes that Project developer(s) shall appropriately mitigate for trees removed and/or damaged by the Project in accordance with the VESP Oak Woodland Mitigation and Monitoring Program (OWMMP) (such as planting onsite, off site, or paying an in-lieu fee). Mitigation ratios provided in the OWMMP vary from 1:1 to 9:1 with differing years of monitoring required. The 9:1 ratio would require planting 9 acorns for each tree removed. These mitigation ratios are inadequate for the replacement of mature native oak trees. The OWMMP goes on to state, "Replacement trees shall be of similar species, unless otherwise approved by the Director or their designee, and shall be placed in areas dedicated for tree plantings such as open space corridors, gateway areas, center medians, parks, and recreational areas." Planting trees of a different species in center medians, parks, and recreational areas is inadequate mitigation for the replacement of native oak trees and woodlands. Oak trees are characterized by large, spreading canopies that provide shade and perching, nesting, and foraging habitat for a wide variety of wildlife. Planting the trees in medians, park and recreational areas does not provide the same habitat values as the oak woodland impacts caused by the Project and is not adequate mitigation to offset Project impacts.

Oak trees typically have a very slow growth rate. The mitigation ratios proposed by the DEIR, would not adequately replace the habitat value that would be lost as a result of the removal of these types of trees. There would be a temporal loss of this habitat, due to the fact that replacement oak trees would not attain comparable size and structure until many decades or more. CDFW recommends the DEIR provide analysis showing that BIO-9 would be likely to succeed in recreating or restoring the oak woodland lost to project development. In addition, the DEIR should include specifics of where the mitigation trees will be planted, establish success criteria for mitigation plantings. CDFW recommends these oak mitigation areas be permanently protected via a conservation easement to ensure the perpetual existence of oak woodland and riparian corridors within the Project site.

6-26

The OWMMP also defers formulation of the in-lieu fee program as an alternative to onsite tree replacement. An in-lieu fee to mitigate impacts to oak woodland within the City does not exist. The OWMMP provides no explanation as to whether the in-lieu fee payment will be used to mitigate impacts to oak woodland. The OWMMP does not specify the fees to be paid or the number of trees to be planted offsite, nor does it identify whether any other sites might be available to the City for the planting of new oak trees. The DEIR also does not contain any analysis of the feasibility of an offsite tree replacement program. Similarly, the Regeneration Banking option provided in the OWMMP offers no information as to where oak trees will be planted. CDFW recommends the DEIR provides additional details needed to implement the Regeneration Banking as an oak woodland mitigation option.

CDFW is concerned that the OWMMP appears to exempt tree mitigation for trees removed as part of wildfire risks (section E.2(1) of OWMMP) and those in open space areas (section E.2(4) of OWMMP). The DEIR does not include information on how many

6-27

trees these exemptions may apply to, and therefore an accurate assessment of the significance of these exemptions on existing oak woodland cannot be performed. CDFW recommends that all trees impacted by the project are mitigated.

Additionally, throughout the OWMMP the Community Development Director or their designee is granted the authority to deem trees exempt from the OWMMP (section E.2 (1, 4) of OWMMP), waive and adjust mitigation requirements for trees removed (section E.6 (4) of OWMMP), and determine species of replacement trees (section E.6 (5) of OWMMP). CDFW recommends the OWMMP be redrafted to remove all exemptions and authorities granted the Community Development Director to ensure trees removed are mitigated.

6-27 Cont.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special- status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

6-28

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

6-29

CONCLUSION

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

6-30

Due to information in the public record, previous biological surveys conducted for the Project site, and the sensitivity of the biological resources present within the direct Project footprint, CDFW concludes that the Project as proposed will result in a significant impact to the environment. CDFW respectfully recommends the comments included in this letter be addressed. CDFW requests to be consulted when the City addresses these comments to ensure that the project will adequately mitigate the potential impacts to special-status species present within the Project area. 6-31

CDFW appreciates the opportunity to provide comments on the Project and we hope you will contact us to discuss our concerns, comments, and recommendations in greater detail. If you have any questions, please contact Melissa Murphy, Senior Environmental Scientist (Specialist), at melissa.murphy@wildlife.ca.gov.

Sincerely,

DocuSigned by:
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A2A0A9C574C3445...
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CEQA Comment Letters
California Department of Fish and Wildlife

State Clearinghouse

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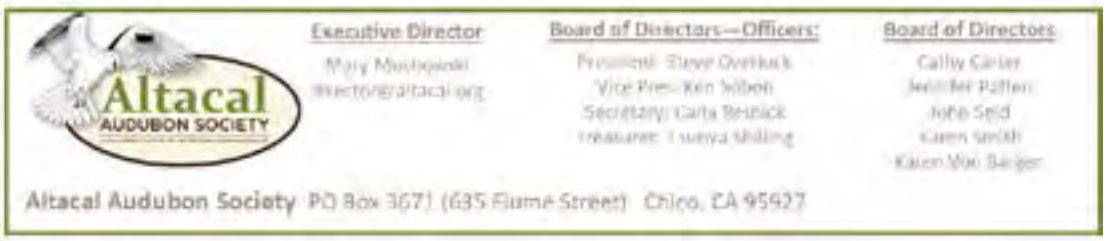

Altacal Audubon's Mission is to promote the awareness, appreciation, and protection of native birds and their habitats through education, research, and environmental activities. It is for this reason that we provide here our assessment of the potential and likely impacts of development into the Doe Mill/Honey Run Special Planning Area and specifically the proposed Valley's Edge Subdivision.

The impacts of development into private grasslands and forests adjacent to the traditional borders of urban areas are well documented. In the Forest Service publication entitled ***Forests on the Edge*** the authors note:

"Private forests provide critical habitat for many species. Increased housing development on rural private forests can have many implications for at-risk species. Populations of at-risk species may disappear, decline, or become more vulnerable with changes in the presence and distribution of private forest habitats (Robles et al., in press). Loss of habitat is highly associated with at-risk species that have declining populations, and it presents the primary obstacle for their recovery (Donovan and Flather 2002, Kerr and Deguise 2004). Decreases in habitat quality associated with housing development and roads can lead to declines in biodiversity (Houlahan et al. 2006), creation of barriers to movement (Jacobson 2006), and increases in predation (Kurki et al. 2000, Woods et al. 2003). Habitat degradation can also contribute to declines in fish numbers (Ratner et al. 1997)."

Grassland birds have declined by 53% since 1970 and 74% of grassland species are declining throughout North America (Rosenberg, et. al. 2019). Between 2001 and 2011, [Butte] County lost 5.645 acres of natural areas to development (Conservation Science Partners) and many grasslands are being lost to agriculture and urban development (Eviner, 2017).

7-1

While the draft EIR for Valley's Edge subdivision cites Special-Status Avian Species Occurrences on and off the project site, it contains flaws including.

1. Criteria used to identify avian species of conservation concern are of limited scope. Not included are:

   - Numerous species found on the subject property identified on the ***U.S. Fish and Wildlife Service Birds of Conservation Concern 2021*** (https://www.fws.gov/migratorybirds/pdf/management/birds-of-conservation-concern-2021.pdf).

   - Species found on the subject property, identified as ***California Bird Species of Special Concern*** (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84247&inline).

   - A significant number of species found on the subject property identified by Cornell Lab of Ornithology as ***bird species at significant risk*** or ***common bird species in steep decline***.

   -Various species found on the subject property are considered vulnerable on the ***2016 State of North America's Birds' Watch List***

7-2

2. Visitations by the Environmental Consultants failed to identify numerous species of concern (per the criteria in item #1 above) that are regularly reported present on the property to Cornell Lab of Ornithology's eBIRD site, including the following:

WHITE-TAILED KITE
eBird Observation Potter Road 2021
https://ebird.org/hotspot/L11905637

White-tailed Kites are relatively common, but ***their populations declined by 36% between 1970 and 2014***, according to Partners in Flight. The estimated global breeding population is 2 million. The species rates a 10 out of 20 on the Continental Concern Score, which means it is not on the Partners in Flight Watch List and is a species of low conservation concern. In the early 1900s White-tailed Kite populations dropped significantly due to habitat loss, shooting, and egg collection. Since then, populations have rebounded somewhat, although ***long-term trends suggest continued declines. Urban and suburban development can reduce the number of nest sites as well as prey abundance.*** Modern farming techniques can also reduce vegetation that its prey use for cover. In a conservation effort in northern California, the California Department of Fish and Game set aside grazed pastures and allowed them to return to grassland; they now support about 10 times the number of raptors, including White-tailed Kites, as before the program began.

7-3

LEWIS' WOODPECKER
USFS Birds of Conservation Concern
ebird Observation Potter Road 2021
https://ebird.org/hotspot/L11905637
eBird Observation N.E. end Potter Rd 2021
https://ebird.org/hotspot/L11905584

Lewis's Woodpeckers are uncommon and their ***populations declined by 72% between 1970 and 2014***, according to Partners in Flight. ***Due to their declining population, they rate a 15 out of 20 on the Continental Concern Score, placing them on the Yellow Watch List.*** The current estimated global breeding population according to Partners in Flight is 69,000 individuals. Lewis's Woodpeckers are threatened by changing forest conditions as a result of fire suppression, grazing, and logging as well as climate change. Fire suppression, logging, and grazing often result in higher densities of single age pines and fewer standing dead or decaying trees available for nesting.

7-4

EVENING GROSBEAK
2016 State of North America's Birds' Watch List
eBird Observation Potter Road 2021
https://ebird.org/hotspot/L11905637

Evening Grosbeaks are numerous and widespread, but ***populations dropped steeply between 1966 and 2015***, according to the North American Breeding Bird Survey—particularly in the East where numbers declined by 97% during that time. Partners in Flight estimates a global breeding population of 4.1 million, with 71% spending some part of the year in the U.S., 57% in Canada, and 5% living in Mexico. Evening Grosbeak rates a 13 out of 20 on the Continental Concern Score and is on the 2016 State of North America's Birds' Watch List, which includes bird species that are most at risk of extinction without significant conservation actions to reverse declines and reduce threats. Because of their irruptive nature, it can be difficult for large-scale surveys to make precise estimates, but a 2008 study of Project FeederWatch data found that the grosbeak's winter range had contracted and numbers had declined. Evening Grosbeaks were reported at only half the number of sites, and flock sizes were down by 27%, in the early 2000s compared with the late 1980s. Recent declines may be due to logging and other

7-5

development in the boreal forests of northern North America; to disease outbreaks such as salmonella, West Nile virus, and House Finch eye disease; or to reduced numbers of spruce budworm and other forest insects, in part due to aerial spraying by the U.S. and Canada. As climate change alters the landscape over the next century, balsam fir is expected to recede from New England, and Evening Grosbeaks may disappear from this region.

7-5 Cont.

OAK TITMOUSE
2014 State of the Birds Watch List Common Bird in Steep Decline
eBird Observation Potter Road 2020
https://ebird.org/hotspot/L11905637
eBird Observation N.E. end Potter Rd 2021
https://ebird.org/hotspot/L11905584

The Oak Titmouse is one of the most common birds in oak woodlands of California, but ***populations have declined by close to 2% per year between 1966 and 2014***, resulting in ***a cumulative decline of 57%, according to the North American Breeding Bird Survey***. Partners in Flight estimates a global breeding population of 500,000, with 89% living in the U.S. and 11% in Mexico. The species rates a 14 out of 20 on the Continental Concern Score. Oak Titmouse is a U.S.-Canada Stewardship species and is on the 2014 State of the Birds Watch List, which lists bird species that are at risk of becoming threatened or endangered without conservation action. ***The decline of this species is linked to the increase in California's population during the twentieth century*** (from 1.5 million to more than 30 million people), which has increased pressures on oak woodlands from activities such as timber harvesting, clearing for agriculture, ***and urban and suburban development. An estimated 80 percent of California's remaining oak woodlands are privately owned, so landowners can play a crucial role in conservation of this unique habitat.***

7-6

BREWER'S BLACKBIRD
2014 State of the Birds Common Bird in Steep Decline
eBird Observation Potter Road 2020
https://ebird.org/hotspot/L11905637
eBird Observation N.E. end Potter Rd 2021
https://ebird.org/hotspot/L11905584

Although they are common within their range, Brewer's Blackbirds ***populations declined by over 2% per year between 1966 and 2014 (amounting to a cumulative decline of 69 percent)***, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population at 20 million, with 74% spending part of the year in the U.S., 26% in Canada, and 25% wintering Mexico. They rate a 9 out of 20 on the Continental Concern Score, and the 2014 State of the Birds Report lists them as a ***Common Bird in Steep Decline***. Various hazards facing the species include shooting, trapping, and poisoning (measures aimed at protecting agricultural crops), and collisions with windows and other structures.

7-7

HORNED LARK
2014 State of the Birds Report Common Bird in Steep Decline
ebird Observation Potter Road 2020
https://ebird.org/hotspot/L11905637
eBird Observation N.E. end Potter Rd 2020
https://ebird.org/hotspot/L11905584

Horned Larks are numerous but their ***populations declined by over 2% per year between 1966 and 2015, resulting in a cumulative decline of 71%***, according to the North American Breeding Bird Survey. Partners in Flight

7-8

estimates a global breeding population of 120 million, with 62% spending some part of the year in the US., 17% in Canada, and 9% wintering in Mexico. The species rates a 9 out of 20 on the Continental Concern Score. Horned Lark is not on the 2016 State of North America's Birds' Watch List, but the 2014 State of the Birds Report listed it as a ***Common Bird in Steep Decline***. Loss of agricultural fields to reforestation and ***development, and human encroachment on the birds' habitat, are factors in their decline***—but the overall declining trend is not fully understood.

7-8 Cont.

NORTHERN HARRIER
California Species of Special Concern
USFS Birds of Conservation Concern
eBird Obervation Potter Road 2018
https://ebird.org/hotspot/L11905637

Northern Harriers are fairly common, but their ***populations are declining. The North American Breeding Bird Survey records a steady decline of over 1% per year from 1966 to 2014, resulting in a cumulative loss of 47%,*** with Canadian populations declining more than U.S. populations. Partners in Flight estimates the global breeding population at 1.4 million, with 35% spending some part of the year in the US., 17% in Canada, and 10% in Mexico. They rate an 11 out of 20 on the Continental Concern Score and are not on the 2014 State of the Birds Report. ***Habitat loss has contributed to reduced harrier populations*** as people have drained wetlands, developed land for large-scale agriculture, and allowed old farmland to become reforested. The small mammals that harriers prey upon have been reduced because of overgrazing, pesticides, and reduced shrub cover from crop field expansion. Because they eat small mammals, Northern Harriers are susceptible to the effects of pesticide buildup as well as direct effects by eating poisoned animals. In the mid-twentieth century their populations declined from contamination by DDT and other organochlorine pesticides, but rebounded after DDT restrictions went into effect in the 1970s. Northern Harriers have been mostly safe from hunting because of their reputation for keeping mouse populations in check, but they are still sometimes shot at communal winter roosts in Texas and the southeastern United States.

7-9

BURROWING OWL
California Species of Special Concern
USFS Birds of Conservation Concern
eBird Observation Potter Road
https://ebird.org/hotspot/L11905637
eBird Observation N.E. end Potter Rd 2021
https://ebird.org/hotspot/L11905584

Burrowing Owls are still numerous, but ***populations declined by about 33% between 1966 and 2015, according to the North American Breeding Bird Survey***. Declines have been particularly sharp in Florida, the Dakotas, and coastal California. Partners in Flight estimates a global breeding population of 2 million, with 31% spending some part of the year in the U.S., and 15% in Mexico. The species rates a 12 out of 20 on the Continental Concern Score and is not on the 2016 State of the Birds Watch List. The species is listed as Endangered in Canada and as a species with Special Protection in Mexico. Agriculture and ***development have significantly diminished the colonies of prairie dogs and other burrowing animals where Burrowing Owls once nested by the hundreds***. Pesticides, collisions with vehicles, shooting, entanglement in loose fences and similar manmade hazards, and hunting by introduced predators (including domestic cats and dogs) are also major sources of mortality. At the same time, Burrowing Owls have benefited from protective legislation, reintroduction and habitat protection programs, and

7-10

artificial nest burrows. Because they do not require large uninterrupted stretches of habitat, these owls can benefit from the protection of relatively small patches of suitable land.

7-10 Cont.

LOGGERHEAD SHRIKE
California Species of Special Concern
2014 State of the Birds Report lists them as a Common Bird in Steep Decline
eBird Observation Potter Road 2008
https://ebird.org/hotspot/L11905637

Loggerhead Shrikes are still fairly numerous in some areas (particularly the South and West), but ***their populations have fallen sharply. Between 1966 and 2015, the species declined by almost 3% per year, resulting in a cumulative decline of 76%***, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population is 5.8 million, with 82% spending some part of the year in the U.S., 30% in Mexico, and 3% breeding in Canada. The species rates an 11 out of 20 on the Continental Concern Score, and the 2014 State of the Birds Report lists them as a Common Bird in Steep Decline. Loggerhead Shrikes have been listed as endangered, threatened, or of special concern in several states and Canada, and have been proposed for federal listing (the subspecies that nests on San Clemente Island, California, is listed as endangered). The species' decline coincides with the introduction and increased use of chemical pesticides between the 1940s and the 1970s, and may result in part from the birds' ingestion of pesticide-laced prey from treated fields. Other likely causes of population decline include collision with vehicles, urban development, conversion of hayfields and pastureland, decimation of hedgerows, habitat destruction by surface-coal strip-mining, and altering of prey populations by livestock grazing. Given this bird's potentially high reproductive rate, and provided that adequate habitat continues to be available, Loggerhead Shrike populations may be able to recover if the causes of the bird's decline can be identified and eliminated.

7-11

YELLOW-BILLED MAGPIE
State of North American Birds Watch List
eBird Observation Potter Road 2008
https://ebird.org/hotspot/L11905637

According to the North American Breeding Bird Survey, ***Yellow-billed Magpie populations declined by an estimated 2.9% per year between 1968 and 2015, resulting in a cumulative decline of 76% during that period.*** Partners in Flight estimates a global breeding population of 110,000, rates the species ***a 16 out of 20 on the Continental Concern Score, and includes it on the Yellow Watch List for species with restricted range***. Yellow-billed Magpies are still sometimes trapped and shot in rural areas, especially cattle operations. They have also declined precipitously in areas where rodenticides were used. During the height of the West Nile virus epidemic, in the early 2000s, scientists estimate that Yellow-billed Magpies lost half their population. ***Perhaps the greatest threat to the existence of this species is habitat lost to development in California's populous Central Valley.***

7-12

Respectfully,

Mary Muchowski
Executive Director
Director@altacal.org
Altacal Audubon Society
PO Box 3671 Chico, CA 95927
(530) 592-9092

Comment Letter 8

From: GRACE M MARVIN
To: Mike Sawley
Subject: DEIR of Valley"s Edge
Date: Sunday, December 12, 2021 6:47:38 PM

Grace M. Marvin
1621 N. Cherry St.
Chico CA 95926
12/12/21

City of Chico Community Development Department
411 Main Street, P.O. Box 3420
Chico, California 95927.
mike.sawley@chicoca.gov

Attn: Mike Sawley, Principal Planner
Re: Valley's Edge Specific Plan Draft Environmental Impact Report-comments due 12/13/21

Mr. Sawley:
Please consider my comments regarding the inadequacy of the DEIR for the Valley's Edge project. First of all, the project does not address the serious need for much more affordable housing in the City of Chico. Consider what CA Government Code specifies in the December 2020 Butte County Association of Government's report (p.7). I have highlighted the particularly significant remarks. This Code indicates that in planning housing we should meet Section 65584(d) of the Government Code:

1. Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner*, which shall result in each jurisdiction receiving an allocation of units for low- and very low-income households. 2.* ***Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources,*** *the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reductions targets provided by the California Air Resources Board pursuant to*

8-1

Section 65080. ***3.*** *Promoting an improved intraregional relationship between jobs and housing, including* ***an improved balance between the number of low-wage jobs and the number of housing units affordable to low- wage workers in each jurisdiction.*** *4.* ***Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category****, as compared to the countywide distribution of households in that category from the most recent American Community Survey.* ***5.*** *Affirmatively furthering fair housing, which for the purposes of this process means 'taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically,* ***affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity,*** *replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws.*

8-1 Cont.

Thus, instead of a project like Valley's Edge, **our Chico community needs more urban infill that includes high density and affordable housing - including mixed use housing such as businesses on first floors and homes above. We also desire walkable neighborhoods, with easy access to jobs and schools and stores, and low GHG mass transit opportunities**, *e.g.,* more bikeways and electric busses. We do not need to attract wealthy citizens from outside of Chico if it means mostly more expensive housing and the accompanying excessive environmental destruction, including more extensive traffic (with undesirable traffic jams and growth in GHG emissions).

8-2

As it is planned, Valley's Edge would increase traffic immensely, while not easily accommodating affordable and low GHG transit possibilities. In addition, there is:

8-3

1-not sufficient analyses of GHG emissions;

8-4

2- not adequate attention to flooding (as has been a huge problem off of 20th St. with one house totally destroyed on 20th Street);

8-5

3- not accessible public transit and affordable traffic infrastructure -- for more than four times the amount of current traffic resulting from the Valley's Edge project; 8-6

4- not fully adequate protection and monitoring of environmental resources (#2 in CA Government Code, above) such as vernal pools, endangered species, oak woodlands, raptors, Butte County Meadowfoam, and waterways; 8-7

5- not adequate attention to preventing fire danger, as reflected in the eviction of people in nearby housing during the Camp Fire. 8-8

Please see to it that this project not be approved. 8-9

Sincerely,
Grace M. Marvin
Yahi Group Conservation Chair
Motherlode Chapter
Sierra Club

Comment Letter 9

Butte Environmental Council

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Chico, CA 95928
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December 13, 2021

City of Chico Planning Division
Attn: Principal Planner Mike Sawley
411 Main Street, 2nd Floor
PO Box 3420
Chico, CA 95927
mike.sawley@chicoca.gov

Thank you for the opportunity to comment on the Valley's Edge Specific Plan Draft Environmental Impact Report.

Below please find comments addressing the adequacy of the Draft Environmental Impact Report submitted on behalf of the Butte Environmental Council:

1. Greenhouse Gas Emissions

The DEIR acknowledges that land use changes are the second major cause of climate change (VESP DEIR 4.7-2), but fails to acknowledge that the land use change proposed in this project would contribute to climate change. The proposed land use change of grassland and woodland ecosystems to urban development would emit significant greenhouse gas emissions, and reduce the ability of the landscape within the project site to sequester and store carbon (Butte County SALC). Neither the DEIR nor Appendix F - Greenhouse Gas Model Outputs calculates the increase in greenhouse gas emissions resulting from the proposed land use change. The EIR for this project needs to quantify the increase in greenhouse gas emissions that would result from the proposed land use change in the site's ecosystem. Dams and the artificial lakes created by them result in significant greenhouse gas emissions, from the decomposition of excessive algal growth[1]. The VESP DEIR fails to analyze the complete greenhouse gas emissions for the project due to the absence of analysis of greenhouse gas emissions from the reservoirs on site and the land use change. 9-1 9-2

The project is inconsistent with state statutes and executive orders, as well as the Chico General Plan and the Chico Climate Action Plan (CAP) 2021 Update. 9-3

The Valley's Edge Specific Plan is in conflict with the following state and local policies:

State Plan and Policy Inconsistencies

California Executive Order B-55-18 9-4

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309167/

"establishes a statewide policy...to achieve carbon neutrality no later than 2045 and maintain net negative emissions thereafter" (dEIR 4.7-11). Valley's Edge obstructs the attainment of this policy by producing significant and unavoidable greenhouse gas emissions and by promoting the type of land use change that is exacerbating climate change. Destroying 700 acres of carbon sequestering agricultural grazing land obstructs the attainment of the policy. Enhancing carbon sequestration on agricultural land will likely be essential for carbon neutrality for the City of Chico in the County of Butte and the State of California. However, enhancing carbon sequestration on agricultural land will indubitably be essential for maintaining net negative emissions once carbon neutrality is reached (Butte County SALC) as called for in EO-B55-18.

9-4 Cont.

Butte County Association of Governments 2016 RTP/SCS

The DEIR is inconsistent with BCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy. This document "outlines the region's proposed transportation network, emphasizing multimodal system enhancements, system preservation, and improved access to high quality transit, as well as land use development that complements this transportation network (BCAG 2016)" (DEIR 4.7-16). The Valley's Edge Specific Plan would be a land use development antithetical to BCAG's proposed transportation network as defined above. The VESP's residential development density per acre is far too low for "high quality transit." See Transportation and Circulation analysis below.

9-5

City of Chico 2030 General Plan Goals, Policies and Action Inconsistencies

Goal SUS-5

Increase energy efficiency and reduce non-renewable energy and resource consumption Citywide. The implemented VESP would increase nonrenewable energy and resource consumption citywide from construction and operation.

9-6

Goal SUS-6

Reduce the level of greenhouse gas emissions Citywide. Policy SUS-6.3 (Greenhouse Gas Emissions and CEQA) – Analyze and mitigate potentially significant increases in greenhouse gas emissions during project review, pursuant to CEQA. The implementation of the VESP will increase greenhouse gas emissions citywide while the City of Chico General plan goal and policy referenced above calls for reducing greenhouse gas emissions citywide. The VESP DEIR does not mitigate potentially significant greenhouse gas emissions as demonstrated by DEIR's determination that significant and unavoidable greenhouse gas emissions will occur (DEIR ES-29).

9-7

Goal CIRC-9

9-8

Reduce the use of single-occupant motor vehicles. Valley's Edge residents will require single-occupant vehicles for daily life, thereby increasing the use of single-occupant motor vehicles, and increasing greenhouse gas emissions associated with operation of the development. 9-8 Cont.

Policy CIRC-9.3

Emphasize automotive trip reduction in the design, review,and approval of public and private development. VESP is situated so far from the urban core it will facilitate additional automotive trips than centrally located development. 9-9

Goal OS-3

Conserve water resources and improve water quality. Policy OS-3.3 (Water Conservation and Reclamation) – Encourage water conservation and the reuse of water. Pollutants from project operation, including landscaping fertilizers, pesticides, herbicides, leaking oil from vehicles, and trash will degrade water quality. Therefore the project will not improve water quality, thereby demonstrating inconsistency. 9-10

Goal S-9

Protect the community from risks posed by climate change. The VESP would exacerbate climate change and exacerbate the climate impacts the community will face. With the replacement of green spaces that reduce heat with development that absorbs heat, this project will increase the climate change impacts we already experience: extreme heat, wildfires and drought. The concrete will trap heat, and add to the urban heat island effect Chico feels daily during the warm season. Development in the Moderate Fire Severity Zone (CAL FIRE State Responsibility Area) would increase the vulnerability of the community to wildfire, which climate change is already increasing. This demonstrates how the specific plan does not protect the community from risks posed by climate change, and in fact puts the community at greater risk as described above. 9-11

Mitigation Measures

GHG-1

It is unclear how much greenhouse gas emissions this measure will mitigate. Waste is the smallest emission sector for the City of Chico, and other mitigation measures need to focus tangible reductions to the two of the largest emission sectors for the City of Chico as well as for the Valley's Edge Specific Plan: transportation and energy. 9-12

GHG-2 (AQ-2 & AQ-3)

AQ2: Idling restrictions only mitigate a negligible portion of vehicle emissions. This project will still have significant air quality emission impacts by bringing in substantial 9-13

automobiles and trucks that emit pollutants onto the site for both commercial and residential uses. 9-13 Cont.

AQ3: The Energy Conservation mitigation measures are not impressive. How many criteria pollutant emissions does installing energy star appliances reduce? How many criteria pollutant emissions does installing LED bulbs reduce? How many criteria pollutant emissions does providing information regarding energy efficiency and incentives reduce? Providing information regarding energy efficiency and incentives should not be included in the energy conservation measures as it is a non quantifiable energy conservation measure. There is no assurance that residents will maximize the use of natural lighting, and they may, in fact, use lights at the same rate as residents with lower natural lighting. Maximizing the use of natural lighting should not be included in energy conservation as it is a non quantifiable energy conservation measure. 9-14

More substantial greenhouse gas mitigation measures are required to comply with the many state and local policies requiring the City of Chico to reduce emissions. Strategies are laid out in state guidance and in the Chico Climate Action Plan. 9-15

This draft EIR demonstrates the Valley's Edge Specific Plan is non compliant with these policies and plans by obstructing their attainment (e.g. Chico CAP Update, City of Chico GP, EO B 55-19). 9-16

Thresholds of Significance

DEIR 4-7.29

This threshold of significance is inadequate based on its inconsistency with the city of Chico Climate Action Plan. The VESP, if implemented, would operate through 2045, when the City of Chico's target emissions will be 0 $MTCO_2e$ per capita per year. By using the 2030 target emissions as the threshold of significance, the DEIR implies the project will only be in operation through 2030, which is incorrect, since operation of this project will occur long through 2045. It is essential to make the threshold of significance in line with the City of Chico Climate Action Plan Update 2045 Target. 9-17

2. **Inadequacy of the Thresholds of Significance & Mitigation Measures**

Air Quality

Because Butte County is designated as nonattainment for ozone and particulate matter 2.5^2 for the national ambient air quality standards, and designated as nonattainment for 9-18

[2] https://chico.ca.us/sites/main/files/file-attachments/00_draft_eir_valleys_edge_specific_plan_reduced.pdf?1635523572

Ozone, Particulate Matter 2.5, and Particulate Matter 10 for California ambient air quality standards (DEIR 4.2-8), any increases should be categorized as significant. 9-18 Cont.

AQ-2
See previous comments on AQ-2. 9-19

AQ-3
See previous comments on AQ-3. 9-20

AQ-4
How many offsets are needed for this project? Monetary value into an offset mitigation program is not going to offset the health impacts of air pollution in the community. This project will result (before the inadequate mitigations) in emissions that exceed the Butte County Air Quality Management District significant thresholds for Reactive Organic Gas, Nitrogen Oxide, and Particulate Matter 10 (DEIR 4.29-29). With monetary offsets, the community is still going to feel the impacts of this projects' decreased air quality. 9-21

AQ-5
The measures provided in the Transportation Demand Management Plan Implementation (Residential) of only providing ride-share programs, end of trip facilities, and implementation of commute trip reduction marketing is wholly inadequate. Implementing commute trip reduction marketing is non quantifiable. The goal of a reduction in total VMT per service population of at least 1% is also inadequate, based on the inadequacy of the VMT analysis area (See Circulation Analysis). 9-22

Nowhere in the Air Quality Section not Appendix B - Air Quality Model Output calculates the air quality reduction for each and every mitigation measure to quantifiably demonstrate the mitigation measures adequately reduce the air quality to a level less than significant. 9-23

Until the calculations of how much the mitigation measures reduce the air pollutants are done and published, the air quality impacts are still at a level of significance. These **mitigation measures are inadequate** as most are small reductions that are not calculated or are non quantifiable. The project **air quality impacts are still significant.** 9-24

Biological Resources
Aquatic Resources
Wetlands 9-25

Project would have significant impacts on protected wetlands. Four ephemeral drainages and two other drainages, including Comanche Creek, run through the site. The site has over 6 acres of wetlands and 11.8 acres as other Waters of the United States. California has lost 90% of its wetlands, including vernal pools, and the diminishing of wetlands has meant a threat to the wildlife that the wetlands support. The main impact identified is an overall increase in human activity in the area; "which has the potential to spread invasive plants, damage existing wetland plants, and degrade the bed and banks of drainages" (DEIR 4.3-61). The proposed design considerations to reduce this impact below a level of significance is inadequate. Invasive plants would still be spread, existing wetland plants would still be damaged from human activity and the activity of pets (which can undoubtedly be expected from project operation) and utilization of the open space by residents. The proposed use of "fencing to keep the public from accessing these sensitive resources" (DEIR 4.3-61) and "boardwalks and/or bridges to be constructed to avoid direct impacts" (DEIR 4.3-61) would not prevent pets from disturbing these protected wetlands and would still result in the degradation and disturbance of existing wetland plants and wildlife which depend on these wetlands. The impact to protected wetlands in the construction of such boardwalks and bridges would be significant to the protected wetlands as well.

9-25 Cont.

Wildlife that would be impacted by wetland disturbance and degradation that is not adequately mitigated as described above include: vernal pool brachiopods, ground-nesting bees, amphibians, and many species of birds.

9-26

There is no guarantee interpretive signage would do anything to reduce the negative impacts from human activity to the protected wetlands and their associated vegetation and wildlife.

9-27

Control of trash may be a noble attempt to reduce impacts to protected wetlands, but there is no guarantee that the undefined control of trash mentioned in the DEIR Could prevent trash from significantly impacting protected wetlands. There is no green space within the city of Chico where the impact of trash is absent. The widespread use of food products and beverages with excessive packaging results in litter throughout the City of Chico, the VESP land area and its open space trails would be no exception. The only way to ensure there is sufficient control of trash to prevent significant impacts to the protected wetlands, is by keeping people far away from them.

9-28

"Absolute wetland avoidance may not be feasible" and about 1.25 acres of wetlands will be destroyed through permanent development (DEIR 4.3-61). The significance threshold for wetlands has a substantial adverse effect on protected wetlands through direct removal.

9-29

Waters of the United States

This property includes Waters of the United States and Waters of the State. The project developer claims that there will be no net loss to these jurisdictional waters (required by

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Army Corp of Engineers and Regional Water Control Board), but the engineering required to move these waters into ponds and artificial water feature will change the nature of the environment, potentially leading to collapse and failure of some species due to loss of habitat.

9-30 Cont.

Hydrologic Interruption of Protected Wetlands

"A significant impact would occur if development of the proposed project would do any of the following: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS; Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. ; **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**" (DEIR 4.3-48)

Wetlands need to be hydrologically connected to the land in the drainage basin that feeds runoff water into the wetlands. Hydrologic interruption of the landscape that drains into protected wetlands is considered a significant impact according to the threshold of significance identified on DEIR 4.3- 48. Protected Wetlands Including vernal pools and swales substantially adversely affected by the hydrologic flow changes that would occur from the proposed development. The vast development of buildings and other in previous services proposed to occur upslope of the wetland complex located in the north drainage will undoubtedly hydrologically interrupt the flow of water in the north drainage, resulting in significant impacts to protect the wetlands.

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The specific causes of hydrologic interruption of the north drainage that would significantly impact protected wetlands include addition of impervious surfaces, increase of stormwater drainage, stormwater pollution caused by vehicle leaks, pesticides fertilizers and other chemicals derived from project operation, creation of "appropriately-sized basins and culverts… used to slow water and decrease downstream runoff rates" (DEIR 4.3-62).

Seepage alterations as described in the Draft EIR and Appendix E Geotechnical Report would significantly impact down slope wetlands. Seepage alterations that would result in significant impacts to protected wetlands include: development on top of or below seepage areas or springs; collection and diversion of springwater or seepage water into "storm drain lights or other suitable locations" (Appendix E Geotechnical 2019); the increased seepage water diversion that is called for Appendix E Geotechnical Report in the following circumstances: underground utility trenches; pavement subgrades; and structure development.

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Each of the aforementioned causes of hydrologic interruption that would result from the implementation of the Valley's Edges Specific Plan would have potentially significant impacts on protected wetlands even with all of the proposed design considerations and mitigation measures. However, all of the aforementioned causes of hydrologic interruption would undoubtedly have a cumulatively significant and unavoidable impact to the hydrology of the site. 9-33

The hydrologic connection between the Valley's Edge site and the neighboring Stonegate site was inaccurately portrayed in the DEIR. The DEIR claims the sites are not hydrologically connected due to the Steve Harris Memorial Bikeway and the rock wall but that is false. The sites are hydrologically connected by culverts along Steve Harris Memorial Bikeway. Development in the VESP site will adversely affect the wetlands and the Butte County Meadowfoam preserved on the Stonegate site. 9-34

Sensitive, Endangered, Threatened, and Species of Concern
The species include the Butte County Meadowfoam, Valley Elderberry Longhorn Beetle, Western Spadefoot Toad, Western Pond Turtle, Burrowing Owl, Yellow Warbler, Loggerhead Strike, Native & Migratory Birds, Pallid Bat, and Blue Oaks.

Butte County Meadowfoam
While the project claims it will protect and preserve the endangered Butte County Meadowfoam, the DEIR states that "the plan sets no clear parameters for the meadowfoam preserves, including timing for establishment or management or monitoring requirements" (DEIR4.3-50). The DEIR does not provide sufficient evidence to prove that the preserve will actually protect the endangered Butte County Meadowfoam, and as such the level of significance for this biological resource is still significant. The preservation of the Butte County Meadowfoam is a major concern for the proposed project area. According to the California Department of Fish and Wildlife, killing or possessing the plant is prohibited by the California Endangered Species Act (CESA). Butte County meadowfoam is also listed as endangered under the federal Endangered Species Act. Butte County meadowfoam is an annual plant that has only been found in a narrow 28-mile strip along the eastern Sacramento Valley in Butte County. Plants are sometimes found at the edges of vernal pools, but they are primarily found in the deepest parts of vernal swales that connect vernal pools. The California Natural Diversity Database lists 21 occurrences of Butte County meadowfoam that are presumed to still exist. 9-35

Burrowing Owl
Proposed mitigation for burrowing owls involves "passively evicting" and relocating them from the burrows using one-way doors and then refilling their burrows to discourage their return. There is no specification of where they will be taken. (DEIR 4.3-55). 4.3-55 Once the breeding season is over and young have fledged, passive relocation of active burrows may proceed as described in measure BIO-3(b), above 9-36

Passive removal of the species is not an adequate mitigation measure. For the removal after breeding season, the young offspring are not capable of leaving their nest until 6 weeks of age.[3] According to wildlife expert and former Conservation Chair of Altacal Audubon, Scott Huber/Altacal Audubon, Western burrowing owl populations are in a freefall decline statewide. In nearby Yolo County in 2016 the Burrowing Owl Conservation Society and Institute for Bird Populations did a county-wide survey which showed that, since 2006, there has been a 76% decline in burrowing owl numbers. Imperial County recorded a 27% population drop in a single ear between 2007-2008. Butte County birders provide similar anecdotal observations of a decline in our area.[4] The burrowing owl is a California Species of Special Concern, and could soon be listed. The dEIR claims that burrowing owls will be removed and relocated. This process is not simple. According to the California Burrowing Owl Association the process is as follows: "1. A survey for-burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (approx 500 ft.) of the project impact zone. This 150-meter buffer zone is included to account for adjacent burrows and foraging habitat outside the project area and impacts from factors such as noise and vibration due to heavy equipment which could impact resources outside the project area." 2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 ft.), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (approx. 160 ft.) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons. 3. If burrows or burrowing owls are recorded on the site, a map should be prepared of the burrow concentration areas. A breeding season survey and census (Phase III) of burrowing owls is the next step required. 4. Prepare a report (Phase IV) of the burrow survey stating whether or not burrows are present. 5. A preconstruction survey may be required by project-specific mitigations no more than 30 days prior to ground disturbing activity." (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842&inline) Four site visits are required. This is not a process that a surveyor can check one day and construction work can resume the next. Moreover, nesting time runs from February 1 through August 31. During the times the owls are nesting, they cannot be relocated.

9-36 Cont.

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Swainson's Hawk

There has been research that one reason the Swainson's Hawk has been declining is due to chemical pesticide usage.[5] The mitigation measures need to include avoidance or a buffer zone of pesticides during project operation. The impact of habitat loss, not just species removal, will have an adverse impact on the species.

9-39

[3] https://www.audubon.org/field-guide/bird/burrowing-owl
[4] https://chico.ca.us/sites/main/files/file-attachments/finaleir.pdf?1578454446
[5] https://www.audubon.org/news/pesticide-spraying-west-targets-food-source-declining-birds

Western Pond Turtle
The Western Pond Turtle species is in decline due to habitat loss.[6] Removal of habitat and removal of the species is an inadequate mitigation measure.

The cumulative effects of all the mitigation measures would still harm the threatened, sensitive and endangered species on the site, which in turn means that the mitigation measures are not successful or adequate. As such, the mitigation measures of meadowfoam preserves, surveys, barely minimal construction buffers, and "passively" removing the species and/or habitat is inadequate. 9-40

Table 4.3-6 Cumulative Impacts to Special-Status Species Habitat, details 569 acres of Burrowing Owl Nesting and Foraging Habitat, 213 acres Pallid Bat Tree Roosting Habitat, and 213 acres of Western Red Bat Tree Roosting Habitat will be removed. The Burrowing Owl has been declining in species due to habitat loss such is cited in the DEIR[7]. This level of take of their habitat is insufficient, and the mitigation measures as thus are insufficient. 9-41

This is an enormous development, with the plan to create 2,777 units with an anticipated population of 5,654 (or more; see Housing and Population Section, population attributed to 8024). During construction, huge amounts of dirt will be moved, grading by heavy equipment will be required, large machines will roar and vibrate. While the project developers claim they will watch out for the creatures, both the direct harm and indirect impacts--from dust, noise, runoff, the presence of polluting materials (wood paper, metal scrap, glass), constant human presence--give very little hope that natives of this habitat survive, much less thrive. While the project developers claim that they will restore riparian areas and replant vegetation, these "mitigations" will be too little, too late for the wildlife supported by this ecosystem. And finally--when the project is complete--the open space, the water features, the vegetation will be overrun with people who don't stay on the trails, who don't respect natural resources. This project will cumulatively contribute to a loss of habitat and species for these sensitive species identified in the DIER. 9-42

Sensitive Natural Community

Valley Foothill Riparian Woodland
According to the DEIR, valley foothill riparian woodland is considered a sensitive natural community regulated as a part of the stream zone under the Fish and Game Code, section 9-43

[6] https://www.biologicaldiversity.org/species/reptiles/western_pond_turtles/index.html
[7] https://www.audubon.org/field-guide/bird/burrowing-owl

1600. The DEIR claims that many of the threats to these species can be mitigated: surveys will be done to ensure no birds are nesting; the Butte County Meadowfoam will be protected in a preserve; a buffer zone will be created to minimize adverse impacts to the species. It also claims that it will restore streambeds and riparian areas and "preserve and renew" oak woodlands. 9-43 Cont.

Circulation & Transportation

Valley's Edge is not a compact development. The site is in the foothills beyond the edge of the Chico urban area. Low-density houses are spread up the ridgelines, reaching near the east end of the property. A section of very-low density zoning completely disconnected from the rest of the plan area would be accessible only by Honey Run Road.[8] 9-44

The plan appears to have superior traffic calming measures to most neighborhoods in Chico and is generous with bicycle and walking paths. However, the remote location and the situating of most of the housing at higher elevations undermines the transportation value of the bicycle paths (as distinguished from the value for recreation).

This comparison used to determine the VMT threshold for 'significant impact' is exaggerated by comparing a proposed annex into the city of Chico to rural and suburban populations who have the need to travel greater distances on a regular basis, even amending BCAG statistics to include commuters who travel between counties. 9-45

In the VMT analysis used in the dEIR, Valley's Edge receives reductions in the estimated VMT by virtue of its location near the city of Chico, the planned elementary school and commercial services, the 9-acre section of medium-high density zoning, and for around 50% of units being restricted to people age 55+ who are estimated to take about half the trips of other people. 9-46

Still, the dEIR analysis gave Valley's Edge a VMT per service population of 26.1, about 15% ***higher*** than the projection of the Chico 2030 General Plan.[9] The threshold of significance for VMT impact is given in the dEIR as "85% or more of the existing 9-47

[8] We do not treat Equestrian Ridge in these comments because we believe it is so physically disconnected and distinct in character from the rest of the development that it should be excluded from the EIR entirely and require its own separate environmental review process.
[9] The Chico 2030 General Plan dEIR projected a VMT per household of 56. The average household size in Chico is 2.5, giving per person VMT of 22.4.

average VMT per service population in the Region." The dEIR, however, only recommends a 1.4% reduction in VMT to reduce the impact to 'less than significant.'

The region considered is Butte County[10] because, as the dEIR states, "The City has not yet adopted thresholds for VMT impacts." Nor did the analysis default on data associated with Butte County. As the report explains, "modifications were made so that model estimates of trip lengths and VMT could better represent distance traveled outside Butte County."

9-47 Cont.

The Chico 2030 General Plan projected a VMT per household of 56[11]. Given an average household size of 2.5, and utilizing the 85% threshold for a 'significant impact,' Valley's Edge should need to plan for a VMT per service population of 19.04 to reduce the impact to 'less than significant;' a 27% reduction before considering other issues with the VMT analysis.

9-48

The standard for measuring the impacts of automobile use should be no less local than the City of Chico urban area; and a more appropriate comparison would be the Southeast Chico neighborhoods, which have a more compact form than North Chico and are generally designed to better accommodate alternative modes of transportation. If the Valley's Edge project produces an unmitigated excess of car trips, that traffic will also hinder the safety and efficiency of walking, biking, and use of transit. The residents of Doe Mill, Meriam Park, and the surrounding neighborhoods who are better fitted for relying on alternative modes of transportation will be disproportionately impacted from the additional car traffic spurred by Valley's Edge.

9-49

The reduction in expected VMT per service population granted for the age-restricted portion of the development does not reflect the probable demographics.

Among the factors listed in the dEIR which reduce the project's VMT per service population is the "senior adult housing units." These include about half of the total dwelling units. "Senior adult housing," the report states, "generates about half of the daily trip generation of general market single family residential dwellings." Restricting half of

9-50

[10] The report explains this in a footnote. In another section dealing with greenhouse gas emissions, it erroneously reports the region used for analysis as the city, leading to the false claim that the project at buildout would not exceed the average VMT of Chico.
[11] See Table 6.0-1 in the Chico 2030 General Plan dEIR:
https://chico.ca.us/sites/main/files/file-attachments/chicodeir_combined_noappendices.pdf?1577755314

the dwelling units to ages 55+ therefore grants the VESP around a 25% reduction in estimated VMT.

A number of data points however suggest this reduction is overly optimistic. The Federal Highway Administration's Office of Highway Policy Information (OHPI) estimates average annual VMT per driver[12]. While older drivers do travel less than those in prime commuting age, the numbers have converged over time. In data from 2017, drivers aged 55+ have only about 13% less VMT compared to the overall average. This difference is entirely accounted for by the 65+ age group. Drivers aged 55-64 travel more than the average of all age groups.

9-50 Cont.

Much of the difference between the VMT of the senior population and that of the younger age group is related to retirement. The average age of retirement has been increasing over time. Those born after 1960 are not eligible to claim full social security benefits until 67 years of age, up from 65 for the older generations. According to an analysis based on US Census labor force participation data, the average age of retirement in California is 64.[13]

The rising cost of living compared to wages and salaries will complicate retirement for the younger generations. Housing is typically the largest single expense in a household budget, followed by transportation.[14] The underemphasis on design for affordable housing in the Valley's Edge plan, the liabilities for infrastructure and amenities,[15] and the overall imbalance in local incomes and cost of housing make it probable that residents of the Valley's Edge community will be required to prolong their work life, increasing the years of VMT-heavy commuting.

9-51

Insomuch as the population who settles in Valley's Edge will not experience pressure to prolong work life beyond the average age of retirement, the effects on VMT may be worse. According to the same OHPI report cited above, households making over $100,000 annually take about 22% more trips than the overall average. The group earning $75,000 and up take around 28% more trips than the lower earning groups which make up the bulk of the population of Chico currently.[16]

9-52

[12] Table 23a: https://www.fhwa.dot.gov/policyinformation/documents/2017_nhts_summary_travel_trends.pdf
[13] https://smartasset.com/retirement/average-retirement-age-in-every-state-2016
[14] https://www.valuepenguin.com/average-household-budget
[15] See Land Use etc, below.
[16] Table 8.

The VMT per service population for Valley's Edge is underestimated by expectations about the transit and commercial services which are not supported by ridership or market analyses.

Service population is a fundamental element in determining the feasibility for both transit and commercial services. It is closely related to residential density.

Out of the 668.5 acres proposed for residential development, Table 2-1 in the dEIR gives a mean density of 4.1 units per acre. Another 56.3 acres are single-use commercial; and the roads make up another 40.4 acres, bringing the average density of the built out (non-park or open space) portion down to 3.6 units per acre.

47% of the project area, or 683 acres, are designated parks, open space, plus land for an elementary school. Open space is compatible with transit-supportive densities insofar as the housing is clustered and not spread throughout. While the entirety of the 9 acres designated for MHDR units and some medium and low density housing is located near the commercial center, most of the low-density housing is spread linearly along ridges, leading to both longer travel times to a transit stop or shop and more difficulty walking and cycling, especially for those less physically able. Another section of very-low density housing is located in the center of the proposed regional park with the only access from Honey Run Road to the southeast.

9-53

According to the Butte County Transit and Non-Motorized Transportation Plan, "A general threshold for transit-supportive residential uses is 15 units per acre for high-frequency bus service."[17] Due to the low overall residential density, it is likely that a transit route extending to the Valley's Edge plan area would require a greater subsidy to operate than existing routes in more compact areas of Chico.[18] In compliance with Policy CIRC-5.3 in the General Plan, "Ensure that new development supports public transit," new development should make transit more viable as an option in Chico's future, not requiring a further strained and inefficient bus system to offer the most minimal service to people in need.

[17] http://www.bcag.org/documents/planning/Transit_Non_Motor_Plan/Document/Chapter%206.pdf
[18] The Sacramento transit-oriented development guidelines (dating back to 1990) cite local studies suggesting 12 units per acre as a minimum for frequent and convenient transit service. According to the Capitol Region Council of Governments (Washington DC) any form of bus service (implying usual subsidies) requires 6 to 8 units per acre. Rapid transit service calls for at least 15 units per acre, but even then the ridership will be low and concentrated during commuting hours. They state furthermore that "researchers have found that there are sharp increases (a tripling) in ridership as average residential densities approach 30 units per acre." The highest density proposed for Valley's Edge is 18 units per acre, for less than 6% of the units in the project.

The dEIR also lacks an analysis of the feasibility of basic retail services, like a grocery and a pharmacy, given the population projected for Valley's Edge. The VESP expresses the intent to accommodate a grocery in the village core, but with the low population density, commercial uses are more likely to consist of specialties people travel to access. A comparable example is the commercial center of the Longfellow neighborhood, which was gradually converted from a focus on the basic needs of nearby residents (grocery, pharmacy, hardware store) to today being dominated by a fitness center used by residents from all across the area, mostly arriving by car. 9-54

CEQA guidelines require environmental analyses to reflect "a good faith effort at full disclosure," utilizing methodologies that can generate a fuller and more accurate estimation of VMT impact.[19] It is our opinion based on the factors above that the dEIR fails to satisfy this requirement. 9-55

Hydrology and Water Quality

Groundwater Recharge

The DEIR inadequately analyzes the impacts to groundwater recharge of the shallowest aquifer. The DEIR acknowledges that groundwater recharge of the shallowest aquifer is occurring where the creeks lie but fails to acknowledge that groundwater recharge is occurring throughout the rest of the site. This includes where there are breaks in Lahar flow and the significant area where the Lahar flow is absent altogether. The shallowest aquifer supports the area's groundwater dependent ecosystems such as riparian ecosystems and the associated aquatic ecosystem, the City of Chico's Urban Forest and Valley Oak woodlands. VESP Appendix E - Geotechnical Reports details that additional precautions required when building home foundations built on or partially on Lahar flows will need groundwater seepage diversion. The language in Appendix E makes it clear that buildings and impervious surfaces will be constructed on areas of the site where the relatively impermeable Lahar flow is absent. "The predominant geologic material observed at the site is well lithified lahar rock of the Tuscan Formation Unit C. It is commonly known that the Lahar is relatively impermeable and therefore restricts water transmission". (DEIR 4.9-10). The DEIR fails to acknowledge where the Lahar is impermeable and where the Lahar is absent altogether, and thus, does not adequately demonstrate the impermeability of the Lahar on site to determine that significant groundwater recharge is not occurring on site. The Public needs to see a map of the extent of the Lahar flow overlaid with the proposed impervious surfaces that would be 9-56 9-57

[19] https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

developed as a result of the implementation of the VESP. Until the public sees such a map showing the current extent of relatively impermeable surfaces and the proposed impervious surfaces, there is no way to conclude that there would not be significant impacts to groundwater recharge. The DEIR acknowledges that this geologic material doesn't underline the entire site but only a "majority of the project site" (DEIR 4.9-30). There could be significant groundwater recharge of the shallow aquifer occurring throughout the project site, including but not limited to the land area where the Lahar flow is absent or where there are cracks in it and where its permeability allows for water percolation.

9-57 Cont.

Water Quality

The DEIR acknowledges that the project can negatively affect water quality, both in the short term from construction activities such as erosion and sedimentation due to land disturbance, uncontained material and equipment storage, improper handling of hazardous materials, and in the long term operations from urban pollutants (DEIR4.9-26). The finding that project impacts on water quality are less than significant is incorrect and inadequate. Thorough analysis justifying the less than significant determination is absent. The DEIR claims that buffer zones along the creeks and certain design considerations would significantly reduce pollutant load in runoff water entering on site creeks but this is not reasonably justified.

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The DEIR does not provide sufficient evidence to prove that these buffers will actually reduce the toxicity of water that will be polluted by landscaping fertilizers, pesticides, herbicides, leaking oil and grease from vehicles, and trash below the level of significance. These pollutants which would result from project operation will significantly degrade the water quality thereby significantly impacting the environment.

Of particular concern is that this degradation of water quality will have on the sensitive wetlands downslope from the pollution sources, such as wetlands containing Butte County Meadowfoam, seasonal swales, seasonal wetlands, vernal swales, wet meadows, and aquatic ecosystems of streams and creeks.

9-59

The DEIR claims that Best Management Practices (BMPs) and Low Impact Development (LIDs) would mitigate the water quality impacts to less than significant, with on site detention systems and the inclusion of several design concepts to slow and filter out contaminants, encourage infiltration (of polluted water) and evaporation. There is currently no guarantee that these BMPs and LID methods will be successfully implemented throughout the entire project, therefore significant water quality degradation could still occur. The DEIR recognizes the potential for toxic runoff and failed to provide

9-60

adequate mitigation, or justify that the design considerations are adequate to protect water quality from pollutants resulting from the project. Project impact DEIR 4.9-1 needs to be reclassified as potentially significant or significant and unavoidable if the concerns analyzed above regarding the mitigation by design approach are not rectified.

9-60 Cont.

Energy

The electrical consumption section of the DEIR says that photovoltaic generation covers a portion of internal base electric loads, and that the proposed projects' small increase in energy consumption in the county makes the increase in electricity demand "less-than-significant." However, the DEIR does not consider power outage concerns in this high fire risk area (DEIR 4.5-20). With the increase of annual kilowatt-hour consumption and demand, Public Safety Power Shutoffs (PSPS) and Rotating Outages are more likely for our area. The proposed site is listed as a Potential PSPS area due to the high fire risk.[20] Rotating outages are based on block number, currently being redone by PG&E.[21] Much of the project area will have an unknown risk of rotating outages until the block numbers are reassigned. The north edge of Valley's Edge, against East 20th Street, is currently in Block 2G, meaning it is one of the first to have power cut in rotating outages. We will not know the VESP impact on power distribution until the area is blocked out for PG&E outages, and any increase in consumption increases the likelihood of PSPS during high fire risk.

9-61

Title 24 requires on-site clean energy generation, and requires new buildings to use photovoltaic systems to cover a portion of the internal base electrical loads. Although the increase in electricity demand is considered "less-than-significant", the photovoltaic generation percentage is not known or defined, and thus the true consumption is not accurately estimated. An addition of solar battery storage would help to offset the likelihood of rotating outages and PSPS (DEIR 4.5-20).

9-62

The VESP mentions CALGreen requirement of EV chargers, but does not specify a number of required chargers near new multifamily dwellings, non-residential locations, and the required number of chargers dependent on the parking spaces available.[22] The charging locations must also be ADA accessible, and the VESP has no mention of accessibility (DEIR 4.5-7).

9-63

[20] https://www.pge.com/en_US/residential/outages/public-safety-power-shuttoff/psps-planning-resources.page

[21] https://www.pge.com/en_US/residential/outages/planning-and-preparedness/safety-and-preparedness/find-your-rotating-outage-block/find-your-rotating-outage-block.page?#find-your-block-for-rotating-outage

[22] https://codes.iccsafe.org/content/CGBC2019P3/chapter-4-residential-mandatory-measures#CGBC2019P3_Ch04_SubCh4.1_Sec4.101.1

3. **Environmental Factors Not Analyzed**

Agriculture and Forestry Resources
The current use of the property is agricultural grazing land. The development and implementation of the Valley's Edge Specific Plan would convert this farmland into commercial and residential uses. The conversion of this grazing land to urban development will adversely impact the sequestering of carbon, and will result in other adverse significant impacts to the environment. For this DEIR to be adequate, the City of Chico needs to analyze this section within this environmental review document, in accordance with the 2021 CEQA Guidelines. 9-64

Population and Housing
The Valley's Edge Specific Plan calls for the development of 2,777 units on the 1457 acres (VESP 4-5). In Appendix F - Greenhouse Gas Model Outputs, the model estimates that this specific plan will have a population of 8,064 (VESP DEIR Appendix F). With the City of Chico's current estimated population of 101,475[23], the implementation of this plan would increase the population by 7.9%. The plan would induce substantial population growth by proposing new homes and businesses, as well as by extending many services. The DEIR is inadequate as it needs to fully analyze and incorporate a Population and Housing section, in accordance with the 2021 CEQA Guidelines. 9-65

4. **Other Environmental Considerations**
Land Use, Housing, and Environmental Justice

The Valley's Edge Specific Plan (VESP) land use conflicts with state and local goals and policies associated with housing and environmental justice. First, the plan inverts the housing needs of the Chico area, committing the bulk of land to the most expensive classes of housing of which Chico has exceeded its measure of need in the 2014-2021 Regional Housing Needs Assessment (RHNA) cycle. The high cost of housing in the VESP is reinforced by the maintenance obligations of a project-wide Homeowners Association (HOA) to be put in place by the developers and transferred to the purchasing owners. 9-66

Furthermore, the project HOA saddles the residents of the project core (and the lone 9 acre plot for apartment construction) with the cost of maintaining services and 9-67

[23] https://www.census.gov/quickfacts/fact/table/chicocitycalifornia/POP010220

infrastructure extending up the ridge lines. This inequality of return on public services is reflected at a greater scale in the contrasting environments of Valley's Edge and the Southeast Chico neighborhoods surrounding Meriam Park.

9-67 Cont.

The VESP is not planned to meet the city's housing needs.

Between agricultural land to the west and foothills to the east, Chico has limited land to expand to meet our growth needs. City staff, asked in a survey last year[24], "What are the primary barriers or gaps your jurisdiction faces in meeting its RHNA goals for producing housing affordable to very low- and low-income households?" cited "availability of land," and "affordability of suitable land." The Doe Mill/Honey Run Special Planning Area (SPA) is intended to be a permanent boundary of the city of Chico and so consists of the last acres available for urban development in the foothills south of Little Chico Creek. It is the clear intention of the General Plan that designated "areas of new growth," of which Doe Mill/Honey Run is the largest, be tailored towards the otherwise unmet needs of our community.[25]

9-68

The BCAG 6th Cycle Regional Housing Needs Plan (RHNA) assigned 3,488 units to the city of Chico - 1,101 very-low income, 507 low-income, 700 moderate, and 1,110 above moderate income; or 31.8% above-moderate housing and 69.2% below. These allocations come after Chico's abysmal performance in the period of the current Housing Element beginning in 2014.
The VESP is not responsive to these needs.[26] 35% of the area proposed for residential development is dedicated to very low density housing.[27] 85% is dedicated to very low or low density housing, and less than 1.5% for medium high density, which corresponds to the needs for lower income groups. The Doe Mill/ Honey Run SPA land use projection in

9-69

[24]BCAG 6th Cycle Regional Housing Needs Plan:
http://www.bcag.org/documents/planning/RHNP/2020%20RHNP/BCAG_6thCycleRHNP_11.30.20_FINAL.pdf
[25] "Goal LU-6: Comprehensively plan the Special Planning Areas to meet the City's housing and jobs needs."
[26] The argument is made (for example by local real estate agent Brent Silberbauer during the planning commission hearing for this dEIR) that the availability of larger, more expensive houses facilitates a 'filtering' of smaller, more affordable units to the lower classes. Filtering is a well-documented process in housing markets but usually refers to affordability resulting from building age and deferred maintenance. To the extent that filtering also applies to people opting for more expensive housing, it would also apply to people downsizing into newly available smaller units. Probably moreso considering the prevalence of housing cost burden locally, with the California Housing Partnership estimating that 35% of moderate income households in Butte County are cost burdened, along with 64% of low-income households and as much as 91% of extremely low-income households (see their 2020 Butte County Affordable Housing Needs Report:
https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/Butte_Housing_Needs_Report_2020-HNR.pdf)
[27] The VESP proposes its own unique 'low-density' zoning with an average density which actually falls within the city's category for 'very low-density.'

the 2014 Housing Element included almost twice the acreage for medium high density housing. Medium density zoning, which California housing law equates to provisioning for moderate income housing, is roughly equivalent in the Housing Element land use projection and VESP, in spite of the latter's 40% increase in the acreage for residential development. The increase is entirely dedicated to housing for low or very low density, or the above moderate income group, with a decrease in acreage for medium high density housing also contributing to a more pronounced emphasis on higher income households. The General Plan provides for flexibility in SPA planning to accommodate changes in the housing needs.[28] Although the need for low-income housing has grown more significantly more acute, the VESP provides for less.

9-69 Cont

The master developer, in compliance with General Plan action LU-6.2.1, agrees to "work collaboratively with the City and below market housing providers to explore supplementary affordable housing opportunities utilizing governmental subsidies or other incentives." However, by arranging the land use designations to exclude higher density housing from all but a 9 acre section in the first phase of the project, the VESP precludes the opportunity for the City or below market housing providers to arrange funding for affordable housing developments after this section is built out. Before later phases of the project are completed, the ongoing pressure to satisfy low-income housing needs will induce Chico to seek new growth areas. The EIR needs to acknowledge that the land use proposed is incommensurate with the use of government subsidies for below market housing.

Overall, the dEIR lacks any analysis of the impacts of the VESP on the housing targets for Chico.

9-70

Situating the project in one large HOA burdens residents with the costs of design inefficiencies considered unacceptable for the city as a whole.

Allowing a restricted access HOA to form over the VESP project area insulates the municipality from the obligation of maintaining some basic infrastructure, but that burden is passed onto the residents.

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The VESP circulation plan has a main collector route connecting the Skyway entrance to East 20th Street. To the West and along this route is the commercial and office section referred to as the "village core," the community commercial section on the north side of

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[28] "Policy LU-6.2 (Special Planning Area Implementation) - Allow flexibility when planning the Special Planning Areas in order to meet changing community housing and jobs needs."

the development, a community park, elementary school, and the only section of proposed medium high density zoning that could potentially include low-income housing. The characteristics of an efficient and sustainable land use pattern explicitly called for in the General Plan - mixing of uses, diversified housing types, clustered development, design for 'complete neighborhoods' - are all applied (albeit marginally) to the core but not to the periphery east of the main collector. Street access, pipes, and other infrastructure servicing the project core are required for access and servicing of development on the higher elevations of the north and east sides of the property,[29] but the inverse is not true.

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While this project is designed too inefficiently for the city to desire to adopt the basic infrastructure, that liability must still be distributed. In the VESP, the project core will be required to subsidize the maintenance costs of the periphery should property owner fees remain equal, tying the only section potentially accessible to residents with lower incomes to the largesse of the project periphery.

In addition to the geology of the Lahar formation, VESP includes features which will increase the cost of living in the community, with apparently no ability to opt in favor of a more affordable lifestyle. These include a wildfire suppression system including hundreds of pressurized fire hydrants, a park around a private lake, and other indoor and outdoor recreational facilities. The greater the sprawl into the higher elevations, the more services and facilities required. If California Park is any indicator, HOA responsibilities will also include rigorous landscaping and private security.

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However genuine the attempt to design an idyllic community, the indiscriminate distribution of expenses for private amenities cannot be squared with many of the goals and policies of the 2014 Housing Element, or the clearly stated purpose for Chico growing into the Special Planning Areas, "to meet the city's housing and job needs." A balance could be reached between the desire for high-quality amenities and local housing needs. The VESP does not attempt such a balance.

9-74

The layout of Valley's Edge in relation to the Southeast Chico neighborhoods generates the conditions for a concentration of poverty and environmental injustice.

South Chico is the historic industrial and working class section of the city. The census tract including the Chapman and Mulberry neighborhoods is a disadvantaged community for factors including nitrate contamination, air quality issues, residual industrial uses

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[29] The entire rest of the project minus Equestrian Ridge.

adjacent to residences, poverty, unemployment, and housing burden[30]. In the mid-twentieth century, African Americans and other minority groups were largely confined in their housing options to this area.

Further east beginning on Forest Avenue is a district developed from the late 80's to 2000's of largely moderate and low-income housing stretching from Highway 32 south to the Regional Commercial stores, continuing along Notre Dame Boulevard to Forest Avenue. This section features a mix of apartments, townhomes, and compact single-family homes.

The site of Meriam Park was skipped over for development west of Bruce Road which is today frequently called by the name of the most distinguishable section, Doe Mill. Meriam Park is currently being built into one of the most compact and livable communities in Chico and a cultural and economic center for the surrounding neighborhoods, including the headquarters of the Mechoopda Indian Tribe.

The zoning for Meriam Park, Traditional Neighborhood Design (TND), is unique and was adopted by the city specifically to permit the kind of compact, walkable city planning that the General Plan calls for. The resultant quality of the urban setting, and especially the presence of a large proportion of city's affordable housing, has drawn public grant funding to further improve the area's infrastructure, including the $22 million Infill Infrastructure Grant for widening Bruce Road and $12 million for a bike bridge over East 20th St.

Much of the future growth of Chico is also slated for this vicinity, including a large quantity of R2, R3, and CMU along Bruce Road and the city's only vacant R4 parcels on Highway 32. 6 out of 7 pending subsidized affordable housing projects in Chico are within or immediately adjacent to Meriam Park, primarily (4 out of 6 projects) along Highway 32 or Bruce Road.

The development of high-income restricted access communities with separate provisioning for maintenance of basic infrastructure in the foothills above more compact and affordable neighborhoods reliant on municipal services entails some likely adverse impacts on the latter.

For one, most of the significant impacts the dEIR does analyze — air quality, aesthetics, transportation, danger to biological wealth and diversity — have a focused impact on the

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[30] https://oehha.ca.gov/calenviroscreen/sb535

communities lying beneath Valley's Edge. Overriding considerations found to justify the project will place an unfair burden on the Southeast Chico neighborhoods not made explicit by the dEIR. The focus of the impact is made worse by the hierarchical street network which favors high volumes of high speed traffic on certain arterial roadways. The impacts are consequently worse along these roads, where Chico tends to concentrate multifamily zoning, exposing residents to higher levels of contaminants, noise, and traffic danger. In part to support the traffic volumes anticipated by Valley's Edge, Bruce Road will be widened, negatively affecting access between Oak Valley and Doe Mill with Meriam Park, neighborhoods designed to favor walking and alternative modes of transportation.

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In urban forestry, cycling infrastructure, and traditional neighborhood design, the Southeast Chico neighborhoods exhibits the most mature, consistent, and integrated application of progressive standards in Chico's urban planning and by permitting a massive expansion on their periphery with no practicable way for people to go about their daily lives without reliance on automobiles this district will be prone to decline into a condition of environmental disadvantage. Valley's Edge will produce an outpouring of traffic and its associated impacts, inhibiting local connectivity while sealing off an enclosure of the city from Bidwell Park to Butte Creek Canyon, privileging the access and connection to the natural environment that is considered the one of the most prized characteristics of living in Chico.

The purpose behind the allocation of public subsidies for affordable housing in this area, based on proximity to services and the principle of integration and environmental quality is thus subverted by creating the conditions for a gradual transformation of the area into one of concentrated poverty. The presence of compact low-income communities supports the public services, beguiles the infrastructure grant funding, and sources the workers for the restaurants, retail, construction, landscaping, and other employment anticipated in Valley's Edge. This is exactly the kind of situation that planning for environmental justice and jobs/housing balance is meant to avoid.

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Another impact of the VESP on the surrounding community concerns the civic divide engendered by such a large exclusively maintained community. The decoupling of local services in the SPA from the financial standing of the municipality harms support for public projects serving the broader community. For what capital improvements do exist, communities like Valley's Edge incentivize a priority of through traffic on arterial roads

9-78

over safety on these roads and residential access in the wider street network.[31] A comparable pattern exists in metropolitan regions around the country where high-income communities formed in eras of 'white flight' maintain high quality public services in sharp contrast to urban decay of historic city centers. In this case, residents of the Valley's Edge HOA will still exert political influence from within the municipality.

In general, the restriction of public access to some of the most visible and naturally appealing environments in Southeast Chico injures sense of place and community, and physically and psychologically reinforces social inequalities which are already exceptionally pronounced in the Chico area.[32]

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5. **Project Alternatives Potentially Supported**

Of the Alternatives given in the dEIR, only Alternative 1 adequately addresses the project's significant environmental impacts. Alternative 4 would make for a less environmentally unsound project without reducing the number of housing units, but it contains fewer viable low-income housing units and significantly more irreversible conversion of habitat than Alternative 2, the land use projection in the General Plan. The dEIR manages to compare the four given alternatives without anywhere noting, for example, that Alternative 2 includes 23% more open space than Alternative 4, which is dubbed "Increased Open Space and Higher Density." Alternative 4 merits a reduction in VMT per service population for the increase in MHDR units, the dEIR notes, but the same point is not made regarding Alternative 2, although 22% of the housing units in Alternative 2 are MHDR, while for Alternative 4 the amount is less than 9%.[33] A Land Use Summary Comparison Table notes that Alternative 2 would provide fewer residential units and non-residential square feet than the proposed project without comparing the built acreage, densities, or housing types, which would reveal that the entirety of the increase in residential units in the proposed project is accounted for by low density and very low density housing, including even a substantial reduction in MHDR units. Alternative 4, in contrast, has the complete Land Use Summary Comparison Table revealing housing types and densities and another graph detailing each land use revision. Because the conceptual land use map in the General Plan is not as detailed as the maps

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[31]This resembles the current state of Chico's capital projects, with emphasis on widening peripheral roads and repaving thoroughfares while streetscape improvements like on North Cedar, in spite of serving the densest residential area in the city, remain unfunded and are instead seen by the city as "an opportunity for the city to partner with Chico State University and the Mechoopda Tribe." (See: Chico 2020 Analysis of Impediments to Fair Housing: https://chico.ca.us/sites/main/files/file-attachments/attachmentd-analysisofimpediments.pdf?1589932732)
[32] https://chico.newsreview.com/2021/12/01/feeling-the-pinch/
[33] The density given for MHDR in Alternative 4 is 11.1, below the minimum for that zoning designation in the 2030 General Plan.

produced for the proposed project and other alternatives, the comparison is further obscured.

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The community is unable to properly balance the needs for housing in Chico with goals like reducing dependence on automobiles, preventing loss of habitat and biodiversity, and preservation of the foothills for public enjoyment when every alternative offered fails to do so. The range of alternatives is improperly portrayed without any that address consideration for housing needs while retaining the reduced development footprint of the 2030 General Plan Alternative and thereby reducing significant environmental impacts.

We also include an Alternative 6 which rezones the property to a land use designation suited for the site's diverse sensitive species and habitat, to prioritize growth in other areas of the city (including the areas the city has designated for higher density, like the Corridor Opportunity Sites).

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Alternative 5

The City of Chico needs to provide an Alternative 5, which extends the changes in Alternative 4 further and possibly incorporates other changes to achieve qualitative goals in line with the General Plan. Alternative 5 would have a more compact form with higher densities that would be supportive of transit: between 15 and 22+ dwelling units per acre. The higher density development would include more compact single-family homes and a greater diversity of other housing types by changing the zoning to allow for 90% of the dwelling units to be R2/R2-VE (Medium Density Residential), R3/R3-VE (Medium-High Density Residential), R4 (High Density Residential), and RMU (Residential Mixed Use), while 10% of the development can be zoned lower density residential. This alternative would not extend further east than the proposed collector street network. It would have increased open space, both accommodate reliable public transportation on the project site and enhance service to areas to the West; ensure on-site commercial can support basic needs in line with the Specific Plan claim to a “complete” and “20-minute” neighborhood, and ensure compliance with the Climate Action Plan and drafted Butte Regional Conservation Plan. In consultation with all relevant departments of city staff, this alternative ought to be formed in such a manner that the City would agree to adopt the basic infrastructure, obviating the necessity of an HOA and guaranteeing full public access and enjoyment of the area, as is the case with most neighborhoods.

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The increase in density and open space would reduce the impact on sensitive species and protected wetlands, reduce vehicle miles traveled, and most likely reduce the level of significance for greenhouse gas emissions. Most other project objectives listed in the dEIR would also be better accomplished, including provision of housing responsive to

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demographic shifts, promoting livable and complete neighborhoods, promoting outdoor recreation, and accommodation of bicycles and transit.

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Alternative 6

This alternative would rezone the property from Special Planning Area (SPA) to Open Space 1 (OS1) with a Resource Constraint Overlay, due to the fact that there are so many sensitive, threatened, and endangered species that would be impacted by development on this site. Open Space 1 would be better suited as a land use designation as the zone is appropriate for sites with environmental resources, including oak and riparian woodlands, wetlands, deer herd ranges, hillsides and viewshed management areas (City of Chico Land Use and Development Regulations 19.50.10). The site has all of the above sensitive habitats, and as such should be analyzed for this rezone.

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Alternative 1

No Project/No Alternative would not negatively impact sensitive species, not increase greenhouse gas emissions and other air quality pollutants, there would be no changes to the scenic view, and would not increase vehicle trips. The Butte Environmental Council supports Alternative 1.

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This public comment letter has been approved by the BEC Board of Directors. Thank you again for the opportunity to provide comment on this environmentally impactful project.

Sincerely,

Caitlin Dalby
Executive Director
Butte Environmental Council

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www.becnet.org

Butte Environmental Council (BEC) has been a leading 501(c)(3) environmental non-profit in Butte County since 1975, dedicated to environmental issues that threaten the land, air, and water of our communities. BEC is a grassroots organization supported by over 200 paying members, hundreds of volunteers and donors, dozens of local business sponsors, over 3,500 followers on social media, and over 4,000 subscribers to our monthly electronic newsletter. Throughout each year, BEC offers citizens many chances to engage in environmental education, advocacy and stewardship. BEC provides position statements when the organization's leaders recognize a regional environmental threat to citizens.

Public Comment Authors

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Comment Letter 10

12/13/2021

Sent via email

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Re: Valley's Edge Specific Plan Draft Environmental Impact Report, SCH No. 2019089041

Dear Mr. Sawley:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") and AquAlliance regarding the Valley's Edge Specific Plan (the "Project"). The Center and AquAlliance have reviewed the Draft Environmental Impact Report ("DEIR") closely and are concerned the DEIR fails to adequately disclose, analyze and mitigate the Project's impacts to biological resources, water supply and wildfire, among other impacts. The Center and AquAlliance urge the City to Chico (the "City") to revise the DEIR to better analyze and avoid the Project's significant environmental impacts. 10-1

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Butte County, including Chico.

AquAlliance is a public benefit corporation established to defend Northern California waters and to challenge threats to the hydrologic health of the northern Sacramento River watershed to sustain family farms, communities, creeks and rivers, native flora and fauna, vernal pools and recreation.

CEQA and the CEQA Guidelines impose numerous requirements on public agencies proposing to approve or carry out projects. Among other things, CEQA mandates that significant environmental effects be avoided or substantially lessened where feasible. (Pub. Res. Code §

21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d).) Unfortunately, the DEIR for the Project fails to comply with CEQA and the CEQA Guidelines in numerous respects.

I. The DEIR Fails to Adequately Disclose, Assess, and Mitigate Impacts of New Development in High Fire-prone Areas to Wildfire Risk.

Wildfires ignited by lightning strikes and Indigenous cultural burning have occurred on California's landscapes for millennia. They're a natural and necessary process for many of California's ecosystems. But in the past 200 years since European colonization, poor land-use planning and land management have shifted historical fire regimes, causing exceptional harm to communities and wildlife.

Between 2015 and 2020 almost 200 people in the state were killed in wildfires, more than 50,000 structures burned, hundreds of thousands of people had to evacuate their homes and endure power outages, and millions were exposed to unhealthy levels of smoke and air pollution. This includes the 2018 Camp Fire, which occurred very close to the Project area in Paradise, CA. It moved west and north, threatening Chico and requiring evacuations on the eastern side of the city. Meanwhile costs for fire suppression and damages have skyrocketed. Increased human-caused ignitions and the conversion of native habitats to more flammable non-native grasses have led to increased fire activity in the urban wildland interface, which is harmful to numerous biological resources and people. 10-2

A. The DEIR Fails to Adequately Assess the Potential Impacts of More Fire Ignitions from Placing More Homes and People in Fire-Prone Areas.

According to a report from Governor Gavin Newsom's Office, construction of more homes in the wildland-urban interface is one of the main factors that "magnify the wildfire threat and place substantially more people and property at risk than ever before" (Governor Newsom's Strike Force, 2019). Syphard et al. (2019) found that housing and human infrastructure in fire-prone wildlands are the main drivers of fire ignitions and structure loss. This is not new information; scientists have been reporting it for many years in scientific, peer-reviewed journals, and firefighters have observed it.

As outlined in the Center's recent report, *Built to Burn* (Yap et al., 2021), increasing housing development in fire-prone wildlands is putting more people in harm's way and contributing to a dramatic increase in costs associated with fire suppression and damages. Sprawl developments with low/intermediate densities extending into habitats that are prone to fire have led to more frequent wildfires caused by human ignitions, like power lines, arson, improperly disposed cigarette butts, debris burning, fireworks, campfires, or sparks from cars or equipment (Balch et al., 2017; Bistinas et al., 2013; Keeley et al., 1999; Keeley & Fotheringham, 2003; Keeley & Syphard, 2018; Radeloff et al., 2018; Syphard et al., 2007, 2012, 2019). However, a recent study stated that "[d]enser developments, built to the highest standards, may protect subdivisions against direct flame impingement of a vegetation fire, but density becomes a detriment once buildings ignite and burn" (Knapp et al., 2021). 10-3

The DEIR fails to adequately assess and disclose the impacts of increased wildfire beyond the project area's boundaries. Such developments do not only affect future residents. The increased wildfire risk affects existing communities adjacent and downwind of the project area. Fires ignited in or near the project area could lead to the destruction of homes within the new development as well as homes downwind of the project area. Homes can also add fuel to fires and increase spread (Knapp et al., 2021). Impacts to areas beyond one development is exemplified by the Camp Fire, which was sparked by a powerline in Pulga, CA and spread to Paradise and East Chico. Not only were families in these areas affected by burned homes and lost loved ones, but they, along with families hundreds of miles away, were affected by severe air pollution from the wildfire smoke. And unlike wildland wildfires, the burning of 19,000 structures resulted in high levels of heavy metals like lead and zinc being detected in air pollution more than 150 miles away in Modesto, CA (CARB, 2021). In addition, there are significant economic impacts of wildfires on residents throughout the state. One study estimated that wildfire damages from California wildfires in 2018 cost $148.5 billion in capital losses, health costs related to air pollution exposure, and indirect losses due to broader economic disruption cascading along with regional and national supply chains (Wang et al., 2021). Such impacts should be disclosed in the EIR.

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B. The DEIR Fails to Adequately Disclose the Public Safety Threats of Increased Wildfire Ignition Risk Due to the Proposed Project.

The EIR must fully disclose the danger of fast-moving wildfires and mitigate the resulting impacts. Public safety threats are often exacerbated by infrastructure unable to accommodate the consequences of more human-caused fires at the wildland urban interface. Thus, it is imperative that adequate safety plans for residents and construction/maintenance workers that reflect real-world experience associated with wildfires in California are in place prior to an emergency. Notification systems may not function as expected during an emergency, and evacuation routes can get clogged with traffic quickly, endangering the lives of those trying to evacuate (Johnson & Hovik, 2018). In addition, the combination of smoke obscuring roads and signage, trees collapsing or being flung into roadways by the wind, and the emotional state of those fleeing for their lives can lead to deadly collisions and roadblocks. And survivors are left to cope with the death of loved ones, physical injuries, and emotional trauma from the chaos that wildfires have inflicted on their communities. These issues are heartbreakingly depicted in an article published in the Sacramento Bee on Oct 22, 2017 (Lundstrom et al., 2017).

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It is important to note that even if an adequate evacuation plan is in place, in natural areas with high fire threat where fires have historically burned, a public safety or evacuation plan may not be enough to safeguard people and homes from fires. Having warning systems and evacuation routes in place is important for fire preparedness and fire safety, but these are not guaranteed to function when a fire occurs. And wildfires may ignite with little or no notice, and, as mentioned previously, in severe weather conditions, wind-driven fires can spread quickly—they can cover 10,000 hectares in one to two days as embers are blown ahead of the fires and towards adjacent fuels (e.g., flammable vegetation, structures) (Syphard et al., 2011). This occurred in the Camp Fire in Butte County, which spread at a rate of 80 hectares a minute (about one football field per second) at its fastest, and in its first 14 hours burned over 8,000 hectares (Chico Enterprise Record, 2018; Sabalow et al., 2018). And the 2018 Hill Fire in Ventura

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County spread three miles in 15 minutes (County of Los Angeles, 2019). In these types of emergencies warning systems can be slow and ineffective at reaching all residents in harm's way, and planned evacuation routes may not be sufficient. These issues were observed during the Camp Fire, which led to at least 85 deaths and 13,000 burned homes (Sabalow et al., 2018), as well as in last year's Tubbs Fire in Sonoma County and Thomas Fire in Lake County and Ventura County, which led to more than 40 deaths and almost $12 billion in property damage (Lundstrom et al., 2017; St. John, 2017).

10-9 Cont.

Impacts of wildfire disproportionately affect vulnerable communities with less adaptive capacity to respond to and recover from hazards like wildfire. Low-income and minority communities, especially Native American, Black, Latino and Southeast Asian communities, are the most marginalized groups when wildfires occur (Davies et al., 2018). Past environmental hazards have shown that those in at-risk populations (*e.g.*, low-income, elderly, disabled, non-English-speaking, homeless) often have limited resources for disaster planning and preparedness (Richards, 2019). Vulnerable groups also have fewer resources to have cars to evacuate, buy fire insurance, implement defensible space around their homes, or rebuild, and they have less access to disaster relief during recovery (Davis, 2018; Fothergill & Peak, 2004; Harnett, 2018; Morris, 2019; Richards, 2019). In addition, emergency services often miss at-risk individuals when disasters happen because of limited capacity or language constraints (Richards, 2019). For example, evacuation warnings are often not conveyed to disadvantaged communities (Davies et al., 2018). In the aftermath of wildfires and other environmental disasters, news stories have repeatedly documented the lack of multilingual evacuation warnings leaving non-English speakers in danger. (Axelrod, 2017; Banse, 2018; Gerety, 2015; Richards, 2019). Survivors are left without resources to cope with the death of loved ones, physical injuries and emotional trauma from the chaos that wildfires have inflicted on their communities.

10-10

C. The DEIR Fails to Adequately Mitigate the Project's Impacts to Wildfire Risk to Less Than Significant.

The project area is sited in a moderate fire hazard severity zone that has burned in 1999, 2007, and 2018 in a county where 78% of wildfires (51/65) between 2008 and 2018 have been started accidentally by people. Clearly, it's a matter of if, not when, a wildfire will occur in the project area. Yet the DEIR downplays the risk, stating that "no substantial evidence has been identified that links increases in wildfires with the development of ignition resistant communities" (DEIR at 4.14-26). Conversely, there is no evidence that building ignition resistant communities is even possible. In addition, this insinuates that they are developing ignition resistant communities, which is not substantiated with scientific evidence. But there is substantial evidence indicating that more people in high fire-prone areas leads to increased ignitions(Yap et al., 2021).

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Mitigation Measure WFIRE-2 simply states that structures will be in compliance with California Fire Code, which is required by law. But compliance with the fire code has not shown an improvement in fire safety or ignition reduction. A 2021 study found that 56% of homes built during or after 2008 (when the new fire building code went into effect) burned in the Camp Fire (Knapp et al., 2021). The researchers show that there was no significant difference in fire survival between buildings built between 1997 - 2007 and 2008 - 2018 (11 years before and after

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code was in effect) (Knapp et al., 2021). This study also found that homes can add fuel to fires and fire safety is not guaranteed (Knapp et al., 2021). The authors sum it up succinctly here: "Denser developments, built to the highest standards, may protect subdivisions against direct flame impingement of a vegetation fire, but density becomes a detriment once buildings ignite and burn" (Knapp et al., 2021). 10-12 Cont.

First and foremost, the primary policy to minimize impacts to wildfire risk should be to avoid placing human infrastructure in high fire-prone areas. *Second*, developers should be required to go above and beyond current state and federal standards and building codes to further minimize wildfire risk. The project requires defensible space "within 20-30 feet of the rear property line adjacent to the WUI perimeter to reduce fire hazards" (DEIR at 4.14-29), but such mitigation has not been found to be effective at reducing ignition risk. Defensible space is most effective within 5 to 30 feet immediately adjacent to structures (Knapp et al., 2021; Syphard et al., 2014), and, in combination with ember-resistant vents and roofing, such measures may help make homes *fire-resistant*. But even the best mitigation cannot make a development *fire-proof*. 10-13

There are other mitigation measures that should be implemented to minimize wildfire impacts of sprawl development in fire-prone areas. For example, external sprinklers with an independent water source would reduce flammability of structures (California Chaparral Institute, 2018). Although external sprinklers are not required by law, water-protected structures are much less likely to burn compared to dry structures. The DEIR should require 30 feet of irrigated defensible space immediately adjacent to structures and external sprinkler systems for any new development in wildfire zones. In addition, rooftop solar and clean energy microgrids should be required for all structures. 10-14

Mitigation Measure WFIRE-3 is also insufficient. While post-fire flooding and landslides/erosion are a concern after wildfires occur, understanding the post-fire conditions should include fire ecologists, not just engineers and firefighters. Fire ecology is complex in California's landscapes, and understanding the post-fire landscape requires those knowledgeable of how different species in different ecosystems respond to and recover from wildfire. For example, some species of oaks can survive wildfires, and, even if they appear dead aboveground, they may have extensive root systems that survive fire and allow them to regrow (basal or epicormic resprouting). Salvage logging and compacting the soil could lead to more harm than good for both the ecosystem and erosion control. WFIRE-3 should require coordination with CDFW or fire ecology experts when assessing post-fire landscapes. 10-15

D. The Negative Declaration Fails to Adequately Assess and Mitigate the Potential Health and Air Quality Impacts from Increased Smoke from Human-caused Ignitions.

Human-caused wildfires at the urban wildland interface that burn through developments are becoming more common with housing extending into fire-prone habitats. This is increasing the frequency and toxicity of smoke exposure to communities in and downwind of the fires. This can lead to harmful public health impacts due to increased air pollution not only from burned vegetation, but also from burned homes, commercial buildings, cars, etc. Buildings and structures often contain plastic materials, metals, and various stored chemicals that release toxic 10-16

chemicals when burned, such as pesticides, solvents, paints, and cleaning solutions (Weinhold, 2011). The California Air Resources Board found that the Camp Fire burning 19,000 structures resulted in high levels of heavy metals like lead and zinc being detected in air pollution more than 150 miles away in Modesto, CA (CARB, 2021). Such impacts should be disclosed in the EIR.

10-16 Cont.

Wildfire due to human activity and ill-placed developments lead to increased occurrences of poor outdoor and indoor air quality from smoke (*e.g*., Phuleria et al. 2005), which can have public health effects. Hospital visits for respiratory symptoms (*e.g*., asthma, acute bronchitis, pneumonia, or chronic obstructive pulmonary disease) and cardiovascular symptoms have been shown to increase during and/or after fire events (Delfino et al., 2009; Künzli et al., 2006; Jia C. Liu et al., 2015; Rappold et al., 2012; Reid, Brauer, et al., 2016; Viswanathan et al., 2006). Children, elderly, and those with underlying chronic disease are the most vulnerable to the harmful health effects of increases in wildfire smoke. And, as discussed in the Center's Built to Burn report, health impacts from wildfires, particularly increased air pollution from fine particulates ($PM_{2.5}$) in smoke, also disproportionately affect vulnerable populations, including low-income communities, people of color, children, the elderly and people with pre-existing medical conditions (Delfino et al., 2009; Hutchinson et al., 2018; Jones et al., 2020; Künzli et al., 2006; Reid, Jerrett, et al., 2016).

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Increased $PM_{2.5}$ levels during wildfire events have been associated with increased respiratory and cardiovascular emergency room visits and hospitalizations, which were disproportionately higher for low socioeconomic status communities and people of color (Hutchinson et al., 2018; Jones et al., 2020; Jia Coco Liu et al., 2017; Reid, Jerrett, et al., 2016). Similarly, asthma admissions were found to have increased by 34% due to smoke exposure from the 2003 wildfires in Southern California, with elderly and child age groups being the most affected (Künzli et al., 2006).

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Farmworkers, who are majority people of color, often have less access to healthcare due to immigration or economic status. They are more vulnerable to the health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

Unprecedented California wildfires in the urban wildland interface are increasing negative health impacts within and beyond its borders. A recent study found that wildfire smoke now accounts for up to 50% of ambient fine particle pollution in the western United States (Burke et al., 2021). Land-use planning must improve now. The DEIR fails to adequately assess, disclose, and mitigate potential impacts of increased smoke exposure due to human-caused ignitions.

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E. The DEIR Fails to Adequately Assess and Mitigate the Impact of Increased Wildfires on Fire Protection Services and Utilities.

The DEIR fails to adequately consider the impacts on firefighters and first responders of the proposed project. Adding more development to these wild areas will necessitate significant

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firefighting costs from both state and local authorities. Cal Fire is primarily responsible for addressing wildfires when they occur, and its costs have continued to increase as wildfires in the wildland urban interface have grown more destructive. During the 2017-2018 and the 2018-2019 fiscal years, Cal Fire's fire suppression costs were $773 million and an estimated $635 million, respectively (Cal Fire, 2019). Note that this does not include the cost of lives lost, property damage, or clean up during these years, which is estimated to be billions of dollars. The vast majority of wildfires in California are caused by humans (Balch et al., 2017; Keeley & Syphard, 2018), and building more roads and inducing more sprawl development in high fire hazard areas will increase the frequency and likelihood of such fires (Radeloff et al., 2018; Syphard et al., 2012, 2013, 2019). This project will burden future generations of California with the costs of defending and recovering even more cities from dangerous blazes.

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According to Captain Michael Feyh of the Sacramento Fire Department, California no longer has a fire season (Simon, 2018); wildfires in California are now year-round because of increased human ignitions in fire-prone areas. Emergency calls to fire departments have tripled since the 1980s (Gutierrez & Cassidy, 2018), and firefighters (and equipment) are being spread thin throughout the state. Firefighters often work 24- to 36-hour shifts for extended periods of time (often weeks at a time), and they are being kept away from their homes and families for more and more days out of the year (Ashton et al., 2018; Bransford et al., 2018; Del Real & Kang, 2018; Gutierrez, 2018; Simon, 2018). In addition, the firefighting force often must rely on volunteers to battle fires year-round.

The extended fire season is taking a toll on the physical, mental, and emotional health of firefighters, as well as the emotional health of their families (Ashton et al., 2018; Del Real & Kang, 2018; Simon, 2018). The physical and mental fatigue of endlessly fighting fires and experiencing trauma can lead to exhaustion, which can cause mistakes in life-or-death situations while on duty, and the constant worry and aftermath that family members endure when their loved ones are away working in life-threatening conditions can be harrowing (Ashton et al., 2018). According to psychologist Dr. Nancy Bohl-Penrod, the strain of fighting fires without having sufficient breaks can impact firefighters' interactions with their families, their emotions, and their personalities (Bransford et al., 2018). There have also been reports that suicide rates and substance abuse have been increasing among firefighters (Greene, 2018; Simon, 2018). This is not sustainable.

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The EIR must adequately assess and mitigate the impacts to fire protection services and first responders. Placing more roads and development in fire-prone areas will further burden already strained people and resources. Funding is already lacking for the increasing costs of fire suppression in California. According to Cal Fire, costs were over $4.6 billion in the past five years (2016-2020) (Cal Fire, 2021). But the DEIR does not provide a mechanism for developers to reimburse Cal Fire for the many millions (or billions) of dollars Cal Fire will likely expend when—not if—Butte County community members need to be defended from natural or human-caused wildfires in the vicinity. If costs are not sufficiently covered by the developers, California and federal residents end up paying in the form of fire insurance premiums and taxes that support Cal Fire and federal government subsidies and grants for homes in high-risk areas. And these costs do not include other indirect/hidden costs associated with wildfires, such as the costs of doctors' appointments, medication, sick days taken from places of work, funerals, etc. As the

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costs of housing in California continues to increase, these costs will also continue to rise. Given the current lack of funding and shortage of firefighting personnel, any development in high fire-prone areas should be required to provide adequate funding and resources for firefighting operations and safety measures.

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II. The DEIR's Water Supply Analysis is Inadequate

A. The EIR must disclose, analyze, and mitigate the Project's impacts on groundwater

The Project has the potential to negatively impact groundwater supplies, yet an analysis of these impacts is absent from the DEIR. A lead agency is not bound by the thresholds of significance provided in appendix G of the CEQA guidelines, it has discretion to develop their own thresholds. (See *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Given the Project's water demand will be met exclusively with groundwater (DEIR at 4.12-2), the city should establish a project-specific threshold of significance to address potential drawdown of groundwater within the Vina Subbasin.

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CEQA requires that an EIR assess potentially significant environmental impacts (Cal. Pub. Res. Code § 21100(b)(1); 14 Cal Code Regs §§15126.2(a), 15143), and the drawdown of groundwater basins is an established negative impact, exemplified by the passage and ongoing implementation of the Sustainable Groundwater Management Act ("SGMA"). The project will drawdown groundwater by approximately 1 foot in order to supply the city's demand, accounting for the project. (DEIR at 4.12-20.) The DEIR makes the erroneous claim that "groundwater withdrawals within the Chico District are not limited by regulation, the theoretical water supply is the total design capacity of all the active wells, which is 99,200 AFY (City of Chico 2010)." (DEIR at 4.12-22.) This statement ignores the facts and current legal requirements relevant to the Project.

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A draft Groundwater Sustainability Plan for the Vina Subbasin ("draft GSP"), which encompasses the Project site, will be submitted to the California Department of Water Resources for final review in January of 2022. (Vina draft GSP.) The draft GSP includes the following assessment of groundwater trends in the subbasin:

> Since the year 2000, there has been a cumulative decline in March 1 groundwater storage of about 400,000 acre-feet (AF). This indicates that the cycles of groundwater pumping are not in balance with the cycles of recharge that replenish the aquifer, and that groundwater depletion has occurred consistent with long-term decline in groundwater levels.

(Vina draft GSP at 94.)[1] To say that groundwater extraction is unregulated is at best an outdated reference included by error, and at worst a misrepresentation of fact and law employed to overstate the amount of water available for the Project. The DEIR must be revised to accurately

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[1] Vina GSA, 2021. Draft Vina Subbasin Groundwater Sustainability Plan, December 15, 2021. Available at https://www.vinagsa.org/files/48795fc14/Vina_GSP_12.09.2021_redline.pdf. Viewed 12/13/2021.

disclose the Project's impacts on groundwater, and how much groundwater will be available for Project use throughout the 20-year water supply planning horizon. 10-25 Cont.

A revised water supply analysis is needed to determine whether there is sufficient groundwater to supply the Project, as the DEIR states. If a legally adequate analysis of available water supplies concludes that current groundwater supplies in insufficient to supply the Project's demand, alternative supplies must be identified, and the environmental impacts associated with procuring that supply must be analyzed. (See *Vineyard Area Citizens for Smart Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 434.) The amount of water used is a critical component of a Project's CEQA analysis, but it is not the full extent of the inquiry. The source of water, and the timing of extraction or diversion, has environmental consequences that must be disclosed, analyzed, and mitigated. 10-26

III. The DEIR Fails to Adequately Disclose, Analyze and Mitigate the Project's Impacts to Biological and Hydrological Resources

A. The DEIR fails to adequately disclose, evaluate, and consider impacts to Waters of the U.S., uplands, adjacent preserves, and species dependent on the vernal pool landscape

Preserves and Open Space

The DEIR does not contain sufficient detail and analysis concerning the establishment, management and long-term success of the onsite preserve and open space areas. Many of the preserve areas are small and linear, and raise the following concerns:

a. "The size of small preserves presents unique management challenges related to higher levels of human and domestic animal (pet) impacts as compared with larger preserves, especially when situated within heavily developed or fragmented areas. Small preserves have a much higher edge to area ratio, especially for preserves that are more linear in shape, as well as a much shorter distance into the center of the preserve. As a result, as shown in this study, small preserves, especially those in proximity to moderate to high density residential areas, are generally prone to much higher levels of human and domestic animal impact as compared with large preserves or more remote small preserves." (Vollmar 2009, pp. 18-19) 10-27

b. "The size of small preserves also presents unique management challenges related to thatch management and invasive plant control. As discussed extensively below, thatch management through regular grazing or mowing is generally critical for maintaining ecological health within pools and associated upland annual grasslands (Marty 2005, Pollak and Kan 1998; Tu, Hurd, and Randall 2001). This is easier to achieve on large preserves where the owner or a lessee will graze the site as part of a separate, economically feasible ranching operation." (Vollmar 2009, p. 19) How will the open space and preserves be managed for biological values? 10-28

c. "In combination, these unique management challenges translate into the need for much more intensive management and monitoring efforts and 10-29

consequently much higher funding requirements on a per acre basis for small preserves as compared with large preserves. Preserve managers and regulatory agencies should take this into consideration when determining the size of endowments for new small preserves." (Vollmar 2009, p. 19) Will an endowment be required for preserve and open space management into perpetuity? 10-29 Cont.

d. "Preserves varied in shape from square or oval to linear; preserve shape is an important consideration size [as] more linear preserves have a greater edge to area ratio and thus greater potential edge effects." Edge effects include exotic weed invasions, wildlife harassment and/or collection, trash accumulation, management challenges, and more. (Vollmar 2009, p. 20) 10-30

Butte County Meadowfoam

In addition to the impacts to species and waters from the proposed Project, the impacts to Butte County meadowfoam (BCM) are considerable and not properly disclosed, analyzed or mitigated by the DEIR. The DEIR fails to discuss how the Project will maintain a healthy BCM population and habitat in light of the Vollmar research provided above and the following facts. 10-31

a. The Project's BCM preserves are surrounded by hardscape that will cause significant impacts to the species. "Another ongoing degradation of Limnanthes floccosa ssp. californica habitat involves illegal trash dumping and off-highway vehicle use (U.S. Fish and Wildlife Service 1992). Also, competition from grasses and other weedy non-native plants poses a potential problem to four occurrences of L. floccosa ssp. californica (California Natural Diversity Data Base 2003). For example, at the II-43 Doe Mill Preserve, competition from the non-native grass Taeniatherum caput-medusae (medusahead) apparently has reduced population size and seed set in L. floccosa ssp. californica (Center for Natural Lands Management 1997). In addition, threats are also continuing due to inappropriate grazing practices in certain instances such as insufficient grazing at the Doe Mill Preserve." (USFWS 2006, p. II-43) 10-32

b. "[t]wo populations of L. floccosa ssp. californica are small enough (fewer than 500 plants even in favorable years) that random events could lead to their extirpation (C. Sellers in litt. 2001, California Natural Diversity Data Base 2003). Moreover, the narrow geographic range of the taxon increases the likelihood that a single catastrophic event could destroy all or most of the occurrences." (USFWS 2006, p. II-43) 10-33

c. "Another potential threat is lack of pollinators. Although *Limnanthes floccosa* ssp. *californica* is capable of setting seed in the absence of insect pollinators, continuing adaptation to environmental changes is not possible without the genetic recombination that occurs during cross-pollination. Considering the widespread habitat destruction and degradation in the area where *L. floccosa* ssp. *californica* is endemic, breeding habitat for pollinators could well be declining." (USFWS 2006, p. II-43) 10-34

Vernal Pool wildlife species

The DEIR erroneously reports that there are no branchiopods "adjacent to the project site." (p. 4.3-19) However, the Army Corps of Engineers contradicts this assertion when it revealed that the Schmidbauer property, due west of the proposed Project, contained two shrimp species: "The annual grassland landscape is interspersed with vernal pool/vernal swale complexes that are known to support the federally-listed endangered Butte County meadowfoam, federally threatened vernal pool fairy shrimp (Branchinecta lynchi) and the federally endangered vernal pool tadpole shrimp (Lepidurus packardi)."[2] Next, the DEIR concludes that there is "low potential" for crustaceans to occur within the proposed Project. This is unsupported. The U.S. Fish and Wildlife Service indicates that "Although the vernal pool fairy shrimp has been collected from large vernal pools, including one exceeding 10 hectares (25 acres) in area (Eriksen and Belk 1999), it tends to occur in smaller pools (Plantenkamp 1998), and is most frequently found in pools measuring less than 0.02 hectare (0.05 acre) in area (Gallagher 1996, Helm 1998). The vernal pool fairy shrimp typically occurs at elevations from 10 meters (33 feet) to 1,220 meters (4,003 feet) (Eng et al. 1990)…" (USFWS 2006, p. II-200) The fairy shrimp and tadpole shrimp are found just next door, as it were, and it is highly probable that at the very least fairy shrimp could be found in the small pools on the proposed Project site. Biological assessments by third-parties unattached to the proposed Project and its funders would be essential to provide accurate information about branchiopod presence and/or potential for restoration.

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The DEIR must also disclose, analyze and mitigation the Project's potentially significant impacts on the Stonegate and Doe Mill vernal pool preserves that are immediately to the west of the Project site. Project construction and operation has the potential to impact the hydrology of the adjacent preserves, in addition to the risk introducing pollutants to the sensitive habitat preserves.

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Additionally, vernal wetlands provide habitation and foraging for many special status species. Shrimp are an integral part of this wetland landscape, providing food chain support for migratory waterfowl and other native animals (Krapu 1974; Swanson et al., 1974; Silveira 1996). Numerous listed birds rely on the grasslands surrounding vernal wetlands for foraging, including: Swainson's hawk (*Buteo swainsoni*), Aleutian Canadian goose (*Branta canadensis leucopareia*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), American peregrine falcon (*Falco peregrinus anatum*), merlin (*Falco columbarius*), northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), sharp-shinned hawk (*Accipiter striatus*), white-tailed kite (*Elanus leucurus*), greater sandhill crane (*Grus canadensis tabida*), long-billed curlew (*Numenius americanus*), short-eared owl (*Asio flammeus*), western burrowing owl (*Athene cunicularia hypugea*), and loggerhead shrike (*Lanius ludovicianus*).

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In summary, the characterization of impacts in the DEIR is inadequate, particularly where high value resources are in close proximity to the Project hardscape and/or where resources are without adequate wildland and/or waters to thrive due to the Project's design. Much of the impacts that will occur in these areas were not discussed in the DEIR. These include destruction or degradation by vehicles, mountain bikes, joggers, pedestrians, pets, trash dumping, pollution,

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[2] U.S. Army Corps of Engineers, 2020. Department of the Army Environmental Assessment and Statement of Findings (SPK-1994-00040). p. 2.

etc. Over time, direct and indirect impacts and the effects of isolation will likely reduce the functions and values of the vernal pools, swales, and uplands to near zero. These impacts and suitable mitigation are not adequately addressed in the DEIR

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B. The DEIR failed to disclose the cumulative impacts to Waters of the U.S., uplands, and dependent species

The DEIR fails to provide an accounting of the losses of wetlands, uplands, and wetland dependent species in Chico, so the public and policy makers have an opportunity to consider how the Project is but one of many projects that have destroyed native vernal pool landscapes. This is most assuredly a significant cumulative impact within the City of Chico, in the region, and in the State of California.

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In addition to the cumulative direct losses of Waters of the U.S., upland habitat losses are cumulatively significant as well. Uplands are not only vital for hydrologic connectivity, but also for species survival. For example, loss of pollinators can seriously impact special status plants. "Although Limnanthes floccosa ssp. californica is capable of setting seed in the absence of insect pollinators, continuing adaptation to environmental changes is not possible without the genetic recombination that occurs during cross-pollination. Considering the widespread habitat destruction and degradation in the area where L. floccosa ssp. californica is endemic, breeding habitat for pollinators could well be declining." (USFWS 2006, p. II-43)

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IV. Conclusion

Thank you for the opportunity to submit comments on the Draft Environmental Impact Report for the Valley's Edge Specific Plan. The Project poses a multitude of improperly potentially significant impacts to the environment that are not properly analyzed or mitigated in the DEIR. The Center urges the City to revise the DEIR to address the legal and factual deficiencies identified in this letter.

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Given the possibility that the Center will be required to pursue legal remedies in order to ensure that the County complies with its legal obligations including those arising under CEQA, we would like to remind the County of its statutory duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" of this proceeding. (§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (2020) 53 Cal.App.5th 733.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the County's representatives or employees, that relate to the Project, including any correspondence, emails, and text messages sent between the County's representatives or employees and the Applicant's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

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Please add the Center and AquAlliance to your notice list for all future updates to the Project and do not hesitate to contact the Center and AquAlliance with any questions at the numbers or emails listed below. 10-44

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Exhibit 1

(if applicable)

Comment Letter 11

Friends of Butte Creek
2024 West Sacramento Avenue
Chico CA 95973

December 13, 2021

City of Chico Community Development Department
Attn: Mike Sawley, Principal Planner Re: Valley's Edge Specific Plan Draft Environmental Impact Report
411 Main Street, P.O. Box 3420, Chico, California 95927. **mike.sawley@chicoca.gov**

Mr. Mike Sawley

There is no demonstrated need for this type of housing with more needless retail. And where it is located is ridiculous. California Park was the first intrusion into our valuable foothills. Since then, most big projects have ended up in court or referendum, and eventually purchased for conservation. We need to open that conversation now. 11-1

Butte Creek is where it all drains. Every over-watered lawn, washed car, driveway or sidewalk, and residential pool overflow will carry pollutants, such as nutrients, fertilizers, pesticides, animal waste from dogs and cats and every rain storm will bring down more, plus automobile contaminants. It has been shown that a chemical in automobile tire shedding, 6PPD-quinone, leaches out of the particles that tires shed onto pavement. Even small doses killed coho salmon in the lab. Kolodziej, et al, Science, University of Washington, 2020. 11-2

It has been clearly demonstrated across the Pacific Northwest: the more developed the watershed, the less return of salmon and other anadromous fish. We only have to look in the middle of town. Many people remember regular returns of salmon to Big Chico Creek. Now almost nobody sees any salmon at all. Multiple years without spawning and a run is extirpated and likely not coming back without extreme measures and a dedicated community. 11-3

Butte Creek supports the Last Best Run of Threatened Spring Run Chinook Salmon in the State. We simply can't be chipping away at the fringes of this valuable watershed and dumping the polluted runoff directly into the creek. Chipping away the fringes of Butte Creek is only going to further the stressors that have put them on the endangered species list. In addition, every other wild species of bird, mammal, reptile, plant, and the soil bacteria and fungi that connects it all, will be disrupted and their habitats reduced. Spreading development into this habitat at a time when Climate Change is stressing every wild creature's territory, while making things worse by adding more CO2 to the atmosphere is environmental suicide. Let's Save Our Foothills for the Wildlife. 11-4

Allen Harthorn, Executive Director

Friends of Butte Creek

Comment Letter 12

To: Mike Sawley AICP Principal Planner Community Development Department

From: Eric M Veith 2995 Wingfield Ave Chico Ca 95928

Eric.m.veith@gmail.com 916-952-1058

Subject: Draft Environmental Impact Report Comments and Questions

Dear Mr. Sawley

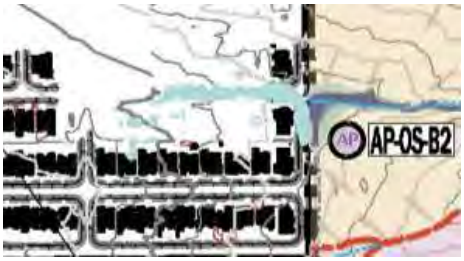
Please find below my comments and questions regarding the Valleys Edge Draft EIR. My general overall question is a request to know the estimated time lines for Draft EIR approval, Final EIR approval and when anticipated phase 1 N construction would begin. 12-1

Specific Draft EIR questions and comments are contained below and are by subject(s) covered in the Draft EIR. I appreciate your consideration of these comments / questions and look forward to a dialogue with you and your department on this important effort. 12-2

Storm Drainage:

FRAYJI Design Appendix H: CONNECTION: "RD(Dawncrest)C1A, C1B"

"Flow from Reach 1 (R1) is passed through two PVC pipes (C1A and C1B) that are part of this connection. The 54" and 42" pipes were able to convey runoff from the 2- and 10-year storm events, but not the 100-year storm event. The rise in backwater during the 100-year storm event caused water to spill over into the adjacent subdivision (Belvedere). A computed flow rate of **25 cfs** out of a total of **306 cfs** was observed to go over Dawncrest Dr and into the adjacent subdivision. This contradicts the study on these pipelines, which was done by NorthStar Engineering, where they reported that the PVC pipes convey the full 100-year flow. Since we are using a higher frequency TR-55 rain gauge in our study, the recorded discharge (Q) values at that connection are higher, therefore exceeding the handling capacity of the pipes." 12-3



Cropped Image from Appendix I showing Dawncrest Overflow

Questions:

1. Since this analysis pertains to the current condition what is the City of Chico's current mitigation response to protect Belvedere development now until the reach 2 diversion channel referenced in the EIR is completed which is in the unknown future? 12-4

2. What is the City of Chico maintenance interval and procedures to ensure the reach 1 existing culverts are not impaired with debris and or vegetation further exasperating the condition? 12-5

3. In February 1986 the Sacramento region incurred three massive storms back-to-back. I know this from serving in 1988 on the jury for the chicken ranch slew civil damage lawsuit brought by Cal Expo horse owners who were flooded. What analysis of coupled storms (up to 100 yr.) has been conducted for Reach 1 now, during construction phase and at final build out. 12-6
    a. Note the back-to-back storm analysis needs to consider different run off volumes due to laden / moisture saturated soil (which was presented to the jury in 1988). 12-7
    b. Is Reach 1 and or Reach 2 diversion channel adequate to handle back to back storms?

4. What is the analysis basis for the build out housing communities hard surface percentages and the impact for run off volumes? Has this been modelled in the EIR and what flow increases have been considered by this analysis? 12-8

5. Due to the potential for flooding in Belvedere sub division, I believe that the study of the temporary facilities and exact detailed design and construction phasing of the retention ponds/basins and sediment basins be required to make sure Dawncrest Rd is not overflowed during a 100-year flood or successive back-to-back storms during the construction period which could span years. This detailed design / construction phasing study effort and plan should be required ***prior*** to any approval of the EIR and presented to the community to ensure the safety of those Belvedere and nearby residents. 12-9

6. Since the analysis did not take into account the impacts of plugging of the two 54- and 43-inch culverts with construction sediment / run off from dust mitigation and or seasonal vegetation, this analysis should be conducted prior to approval of EIR to determine if reach 2 sizing is adequate. 12-10

Noise:

From February 27, 2019 File: 1679 Geoplus Partners Appendix E

However, largely due to the presence of surficial and near-surface hard bedrock, geotechnical issues that will impact the project design and construction include the following: 12-11

- Excavation for utilities, foundations and roadways.
- Fill construction with coarse materials.

- Perched groundwater and springs.

- Seepage through utility backfill and pavement section base.
- Cut-fill transitions resulting in differential settlement within fills; and
- Water-feature water retention.

These concerns will require modifications in the schedule and/or approach to site grading and possibly to planned utilities, structures and pavements during site development. General recommendations to reduce potential adverse effects of these issues as well as general information regarding the geotechnical aspects of project design and construction are presented in the following report.

12-11 Cont.

Excerpts from section 4.0

1. Based on the results of our field investigation, the Caterpillar D-10 trial ripping operation performed in 2015, and observation of grading in adjacent areas, the exposed lahar bedrock is generally impenetrable to moderate excavation effort, and resistant to heavy excavation effort such as the Caterpillar D-10 bull dozer with single shank ripper.
2. The lahar matrix material is not strong compared to other types of rock, i.e. basalt or granitic rock, which when only slightly weathered are commonly very difficult to excavate; however, it is the very limited fracturing present within the lahar that makes excavation very difficult. The fracture spacing is typically greater than about 10 feet in nearly vertical in orientation; this makes breaking up the rock with conventional excavation equipment very difficult. ***The use of mechanical rock breaking equipment, blasting and/or chemical rock breaking may be necessary***

12-12

Questions for the EIR:

1. Due to the Tuscan lava formation the requirement for rock jack hammering and or rock crushing is likely going to be implemented as reference in the Geotechnical report. The EIR concludes that exceeding the 86.5 dB sound levels at the property boundary is likely. What temporary sound attenuation plan is envisioned? This plan should be required to be developed and provided for community comment before approval of the EIR.

12-13

2. Given the geotechnical report that blasting may be necessary what considerations has the EIR made for potential impacts to nearby residents who are unaware of blasting operations? Will the construction hours of the project include the potential blasting efforts?

12-14

3. Since unsuitable fill material is available and rock crushing maybe employed and therefore what considerations has the EIR made for noise, airborne particulate, dust and other nuisances?

12-15

4. On page 4.10-23 the on-line document showed an error reference. What was this error / document, please identify what referenced noise document was not included in the EIR on your website?

12-16

Public Safety

1. With the Notre Dame fire station being manned with 1 Captain, 1 firefighter what personnel additions are anticipated to be added to that station to support approx. 1200-1300 additional single-family dwellings plus commercial facilities. 12-17

2. While the fire analysis conducted a response time analysis, no such analysis was conducted for the Chico police force. Given the proximity of Chico Police to the new subdivision it is likely that they will be responding to 911 calls from the new communities even though they are in unincorporated Butte county due to the shared response agreements. A complete analysis of the response time impacts to City of Chico residents, especially those in the adjacent communities should be completed and added to the EIR. 12-18

Traffic

1. Given the volume of cars going down E 20th (up to 560 – 610 at build out) the ability for Belvedere residents to make a left turn across that traffic volume seems unsafe. Inclusion of a round about at that interchange and or one 1 block down at Autumn Fields Way seems like a safe way to keep E 20th traffic moving while allowing Belvedere residents reasonable and safe access for the left turn from E 20th 12-19

Mike Sawley

From: Kathy Ferguson <fergusonkathy@ymail.com>
Sent: Sunday, November 7, 2021 12:08 PM
To: Mike Sawley
Subject: Valleys Edge Specific Plan

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

I am very concerned about this plan. I see many areas for more transients to move in. I live right on the corner of Potter Rd and E 20Th St. Transients use the bike path daily. We have had two serious fires in the field across from me set by transients. It looks to me like we are just making more places for them to destroy. I really think the city needs to deal with the transient problem before you create more locations for them to move into, parks, lakes, etc. 13-1
I'm also concerned about wildfires in that area. I have lived in Chico all my life and my family owns the land adjacent to this plan. There have been countless fires here including the Camp fire. Has that even been addressed?
Kathy Ferguson
Sent from my iPad

Comment Letter 14

Mike Sawley

From: Jona O'Shea <jonajoshea@me.com>
Sent: Saturday, November 13, 2021 9:40 AM
To: Mike Sawley
Subject: Valley's Edge Specific Plan - Comments

Dear Mr. Sawley,

We are writing this letter in order to ensure that our specific comments and concerns are represented in the project record and will be addressed in the Final Environmental Impact Report and at the Public Hearing on November 18, 2021.

We are very concerned about this project - the Valley's Edge Specific Plan (VESP) - being built in the proposed location (1.25 miles east of State Route 99 and bound by the Steve Harrison Memorial Bike Path formerly known as Potter Road on the west; Honey Run Road and Skyway on the South; undeveloped land on the east; and E. 20th Street, Dawncrest Drive, Lazy S Lane, and Stilson Canyon Road on the north. 14-1

One significant concern is the drainage and flooding issue in this location. In 2014, our home, along with five others in our Chico neighborhood in Belvedere Heights, was flooded. The city was sued by these homeowners (not including us) and the City of Chico was held responsible. In addition to the flooding damages paid to the homeowners, the home next to ours was torn down and that homeowner was compensated in order to relocate. The empty lot on Bancroft Drive is now there because of drain and flooding concerns. In addition to the above mentioned monies, the City of Chico also paid well over $750,000 in order to install a drain that was needed to siphon the water from the field above our development. This drain now pumps water from above the Belvedere Heights homes development into the field where this project is proposed to be built. When it rains, this particular location of the proposed project site is severely flooded and often floods over the Steve Harrison Memorial Bike Path. 14-2

Another more obvious significant concern is related to the aesthetics in this area. This proposed development will change the existing visual character for our neighborhoods. In addition, it will change the aesthetics of a beautiful place in Chico where many community members come to enjoy as they walk their dogs, walk, run, or ride bikes on the Steve Harrison Memorial Bike Path. One of the main reasons we purchased our home was because of the beauty of this open field area. 14-3

Our last and also very significant concern is regarding the Butte County Meadowfoam, a California endangered plant species. We were told when purchasing our home on Bancroft Drive that due to environmental reasons, specifically the concern of the endangered meadowfoam which grows in the proposed project site area, nothing could be built there. We would like to know about the environmental impact for the meadowfoam if this project is developed in the proposed area. 14-4

As stated on the California Department of Fish and Wildlife website: "Butte County meadowfoam is a California endangered plant species, which means that killing or possessing the plant is prohibited by 14-5

the California Endangered Species Act (CESA). Butte County meadowfoam is also listed as endangered under the federal Endangered Species Act. Butte County meadowfoam is an annual plant that has only been found in a narrow 28-mile strip along the eastern Sacramento Valley in Butte County. Plants are sometimes found at the edges of vernal pools, but they are primarily found in the deepest parts of vernal swales that connect vernal pools. At the time of this webpage posting, the California Natural Diversity Database lists 21 occurrences of Butte County meadowfoam that are presumed to still exist.

14-5 Cont.

Butte County meadowfoam habitat is highly fragmented throughout its range due to conversion of natural habitat for urban and agricultural uses. Although some Butte County meadowfoam occurrences have been partially or completely protected from development, habitat loss and degradation remains the biggest threat to the species. Development may degrade Butte County meadowfoam habitat through changes in above- and below-ground hydrology, introduction of invasive plants, from pesticide and herbicide use, and from additional habitat fragmentation. The invasive waxy manna grass (*Glyceria declinata*) could become a serious threat to Butte County meadowfoam because it can invade vernal pool habitat that is typically resistant to other exotic plant species. Butte County meadowfoam habitat may be vulnerable to changes in hydrology from climate change, and populations of Butte County meadowfoam are also vulnerable to extirpation from unpredictable chance events.

14-6

To help prevent extinction, remaining populations of Butte County meadowfoam should be permanently protected and managed. Status surveys should be conducted for known populations and potentially suitable habitat should be surveyed for undiscovered populations. The effects of grazing, burning and invasive species on Butte County meadowfoam should also be investigated, with the goal of determining the best management practices for each population."

14-7

Thank you very much for addressing and representing our above concerns about the Valley's Edge Specific Plan.

14-8

Sincerely,

Terry and Jona O'Shea

2867 Bancroft Drive

Chico, CA 95928

(530) 898-0754

Comment Letter 15

Mike Sawley

From: Mary Kay Benson <mkbe.sparkles3@gmail.com>
Sent: Monday, November 15, 2021 4:30 PM
To: Mike Sawley
Subject: My Valley's Edge public comment - please distribute to all Planning Commissioners

November 15, 2021

Dear Chico Planning Commissioners:

Opposing Valley's Edge development - public comment

My qualifications:
Past - Board Member Sierra Club, local Yahi Group, 2018
Past - Board Member Butte County League of Women Voters
Director of Natural Resources, 2019-2020,
Present - Butte County League of Women Voters, Housing & Homelessness Committee, 2021
Present - Steering Council Manager of Chico 350 Butte County since 2017
Present - Board North State Shelter Team, Secretary since 2021
Present - Student in TEK certification training since 2019 https://tekchico.org/

Mechoopda TEK: Water and Trees

If the Mechoopda Traditional Ecological Knowledge (TEK) Masters were managing this land, as they once did and for about 20,000 years until about only 180 years ago here - and hopefully they will again as they are in our ecological preserves: they know better than to remove oaks and expect to keep wetlands. Those oaks pull the water table up. This is an ecosystem and they are a keystone species. Removing oaks is to destroy the very beauty of nature the developer wants to market. "**Oak** trees act as a water **lift**, **pulling** water from deeper." The wetlands there thrive because the oaks are there. https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CSPA%20et%20al/part2/aqua_283.pdf At the very least the Mechoopda tribe should be consulted on this, as with all land use development.

15-1

Wildfires:
Wildfires have already burned at this site in our 2018 Camp firestorms. It is not wise or cost effective to build in wildfire zones, and people are already experiencing the escalating insurance home insurance costs if they can even get coverage. Once again, the land managed by our Indigenous masters even today, such as the ecological preserves and Verbena Field, have not burned, so their prescribed burns must be incorporated into any successful planning.

15-2

"Rebuilding for a Resilient Recovery: Planning in California's Wildland Urban Interface
Report ~June 10, 2021
California must comprehensively reshape how we rebuild after wildfires—or risk an unthinkable surge in costs and major setbacks to the state's housing supply amidst a record housing crisis. That's the finding of Rebuilding for a Resilient Recovery: Planning in California's Wildland Urban Interface, released today from

15-3

researchers at the UC Berkeley Center for Community Innovation and non-partisan, non-profit think tank Next 10.
The researchers studied three communities recently affected by fires—Santa Rosa (Tubbs Fire, 2017), Ventura (Thomas Fire, 2017) and Paradise (Camp Fire, 2018)—and found that state and local land use policies, coupled with the state's housing shortage, are ratcheting up the

economic and human cost of wildfire by incentivizing rebuilding in the high risk-wildland urban interface (WUI), instead of redirecting development away from fire-prone areas. This is intensifying untenable safety, economic, and climate risks as the state prepares for another harrowing wildfire season in the midst of record drought."

https://www.next10.org/publications/rebuilding-resilient

15-3 Cont.

Transportation:

In this arena, the developer's planning is sorely lacking other than the old car-centric approach, and what shows is not based on Chico commuting data but on some much larger than county resource, which does not apply. The 21st century public transportation required to service such a remote area cannot be sustained with such low ridership planning as presented. CA requires all electric buses by 2029, but Butte County bought 5 so-called "clean diesel" models last year instead, although there is no such thing as clean diesel or "clean burning gas" as the current buses proclaim. Reducing sulphur emissions is not the same as reducing CO2 emissions. Greenwashing is the new disinformation propaganda used to provide cover for companies not committed to sustainable business practices.

https://www.nytimes.com/2018/12/14/climate/california-electric-buses.html

15-4

I am a disabled low income senior myself living in a senior mobile home community which is a busy transport hub for B-line. Since Covid the ridership is down 70%. There are delayed plans to even purchase all electric buses by BCAG, and yet there is no masterful planning on how to make public transportation more usable and/or sustainable. http://www.blinetransit.com/documents/UTN/2122-Transit-Needs-Assessment-Final.pdf

There has been no planning for widening roads in that area, as will be necessary.

15-5

Need for Low-income Housing:

Lastly, I would like to bring up the need for more low-income housing and that Chico in particular has overbuilt luxury single family dwellings already, according to the latest Butte County Housing Needs report to the detriment of lower income units. Since the 2018 fires and ongoing we have lost 15,000 homes here. In Paradise, 3 years later, they have rebuilt a little over 1000 now of the 14,000 they had. Most were low income housing and most were for seniors. https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/Butte_Housing_Needs_Report_2020-HNR.pdf

15-6

As an environmentalist, I see no real sustainable green resiliency planning, other than the state mandating all new homes will have to be solar-powered. Therefore, I oppose this development as currently planned. Thank you for considering the future of our city and our peoples' housing needs.

15-7

In Solidarity,

Mary Kay Benson
510.388.5363

350 Butte County

Comment Letter 16

From: Addison Winslow
To: Nicole Acain
Subject: Valley"s Edge dEIR Transportation Impact
Date: Wednesday, November 17, 2021 2:35:02 PM

Hi Nicole,

Would you pass this along to the commission?

Thank you,

Addison Winslow

***

Hi planning commissioners,

As part of the Butte Environmental Council's Advocacy Committee I reviewed the Valley's Edge Specific Plan and the Draft EIR. This is a very large project that will have a profound effect upon the character of Southeast Chico and the access of the whole of the city and visitors to experience the surrounding foothills. Issues are too numerous to expound within the reasonable bounds of one email, so what I want to focus on is specifically a critique of the project's Vehicle Miles Traveled analysis. 16-1

As a review, on July 1, 2020 SB 743 came into effect requiring public agencies to change the metric of automobile impacts from Level of Service, or the speed and volume of traffic through intersections, to Vehicle Miles Traveled (VMT), which better aligns with reducing greenhouse gas emissions, liability for road infrastructure, and automobile dependence. 16-2

The Valley's Edge dEIR analysis severely underestimates the amount of VMT the project is likely to produce and its disproportionate impact on the surrounding community. To simplify into three points, (1) the comparison used for VMT impact is inappropriate, (2) the VMT estimation per household doesn't accord with data based on the probable demographics, and (3) the expectations about transit and commercial services available to the development are not supported by ridership or market analyses. 16-3

(1) In the VMT analysis used in the dEIR, Valley's Edge receives reductions in the estimated VMT by virtue of its location near the city of Chico, the planned elementary school and commercial services, the 9-acre section of medium-high density zoning, and for around 50% of units being restricted to people age 55+. who are estimated to take about half the trips of other people.

Still, the dEIR analysis gave Valley's Edge a VMT per service population of 26.1, about 15% higher than the projection of the Chico 2030 General Plan. The threshold of significance for VMT impact is given in the dEIR as "85% or more of the existing average VMT per service population in the Region." 16-4

The region considered is Butte County because, as the dEIR states, "The City has not yet adopted thresholds for VMT impacts." Nor did the analysis default on data associated with Butte County. As the report explains, "modifications were made so that model estimates of trip lengths and VMT could better represent distance traveled outside Butte County." This is also misstated in the GHG portion of the report.

The Chico 2030 General Plan projected a VMT per household of 56. Given an average household size of 2.5, and utilizing the 85% threshold for a 'significant impact,' Valley's Edge should need to plan for a VMT per service population of 19.04 to reduce the impact to 'less than significant;' a 27% reduction before considering the other issues with the VMT analysis. The dEIR, however, only recommends a 1.4% reduction in VMT to reduce the impact to 'less than significant.' 16-5

The standard for measuring the impacts of automobile use should be no less local than the city of Chico urban area; and a more appropriate comparison would be the Southeast Chico neighborhoods, which have a more compact form than North Chico and are generally designed to better accommodate alternative modes of transportation. If the Valley's Edge project produces an unmitigated excess of car trips, that traffic will also hinder the safety and efficiency of walking, biking, and use of transit. The residents of Doe Mill, Meriam Park, and the surrounding neighborhoods who are better fitted for relying on alternative modes of transportation will be disproportionately impacted from the additional car traffic spurred by Valley's Edge. 16-6

(2) Among the factors listed in the dEIR which reduce the project's VMT per service population is the "senior adult housing units." These include about half of the total dwelling units. "Senior adult housing," the report states, "generates about half of the daily trip generation of general market single 16-7

family residential dwellings." Restricting half of the dwelling units to ages 55+ therefore grants the VESP around a 25% reduction in estimated VMT.

A number of data points however suggest this reduction is overly optimistic. The Federal Highway Administration's Office of Highway Policy Information (OHPI) estimates average annual VMT per driver (see Table 23a). While older drivers do travel less than those in prime commuting age, the numbers have converged over time. In data from 2017, drivers aged 55+ have only about 13% less VMT compared to the overall average. This difference is entirely accounted for by the 65+ age group. Drivers aged 55-64 travel more than the average of all age groups.

16-7 Cont.

Much of the difference between the VMT of the senior population and that of the younger age group is related to retirement. The average age of retirement has been increasing over time. Those born after 1960 are not eligible to claim full social security benefits until 67 years of age, up from 65 for the older generations. According to an analysis based on US Census labor force participation data, the average age of retirement in California is 64.

The rising cost of living compared to wages and salaries will complicate retirement for the younger generations. Housing is the largest cost in a household budget, followed by transportation. The underemphasis on design for affordable housing in the Valley's Edge plan, the liabilities for infrastructure and amenities which will be assumed either by the HOA or the city, and the overall imbalance in local incomes and cost of housing make it probable that residents of the Valley's Edge community will be required to prolong their work life, increasing the years of VMT-heavy commuting.

16-8

Insomuch as the population who settles in Valley's Edge will not experience pressure to prolong work life beyond the average age of retirement, the effects on VMT may actually be worse. According to the same OHPI report cited above, households making over $100,000 annually take about 22% more trips than the overall average (see Table 8 in above link). The group earning $75,000 and up take around 28% more trips than the lower earning groups which make up the bulk of the population of Chico currently.

16-9

(3) Service population is a fundamental element in determining the feasibility for both transit and commercial services and is closely related to density.

Out of the 668.5 acres proposed for residential development, Table 2-1 in the dEIR gives a mean density of 4.1 units per acre. Another 56.3 acres are single-use commercial; and the roads make up another 40.4 acres, bringing the average density of the built out (non-park or open space) portion down to 3.6 units per acre.

47% of the project area, or 683 acres, are designated parks, open space, plus land for an elementary school. Open space is compatible with transit-supportive densities insofar as the housing is clustered and not spread throughout. While the entirety of the 9 acres designated for MHDR units and some medium and low density housing is located near the commercial center, most of the housing is low-density spread linearly along ridges, leading to both longer travel times to a transit stop or shop and more difficulty walking and cycling, especially for those less physically able. Another section of very-low density housing is located in the center of the proposed regional park with the only access from Honey Run Road to the southeast.

16-10

According to the Butte County Transit and Non-Motorized Transportation Plan, "A general threshold for transit-supportive residential uses is 15 units per acre for high-frequency bus service." Due to the low overall residential density, it is likely that a transit route extending to the Valley's Edge plan area would require a greater subsidy to operate than existing routes in more compact areas of Chico. In compliance with Policy CIRC-5.3 in the General Plan, "Ensure that new development supports public transit," the Valley's Edge plan should make transit more viable as an option in Chico's future, not make the transit system more strained and inefficient.

The dEIR also lacks an analysis of the feasibility of basic retail services, like a grocery and a pharmacy, given the population projected for Valley's Edge, leaving us to take as an article of faith the claims of a "20 minute neighborhood" in the VESP. The plan expresses the intent to accommodate a grocery in the village core, but with the low population density, commercial uses are more likely to consist of specialties people travel to access, in a similar way that the uses in the commercial center of the Longfellow neighborhood went from a focus on the basic needs of nearby residents (grocery, pharmacy, hardware store) into being dominated today by a fitness center used by residents from

16-11

all across the area, mostly arriving by car.

16-11 Cont.

***

The conclusion this information leads me to is that the mitigation required for VMT is understated by more than 30%. In the current design, it is significant and unavoidable, but reductions in the extent of low-density sprawl, the removal of Equestrian Ridge, and a more compact form with an average residential density above 15 units per acre around the Village Core area could reverse the impacts. Special Planning Areas present the best opportunities in Chico to anchor reliable and efficient public transit routes and have a positive effect upon automobile dependence in the existing neighborhoods.

16-12

Addison Winslow

Comment Letter 17

From: Addison Winslow
To: Mike Sawley
Subject: Country Clubs in Valley"s Edge dEIR
Date: Monday, December 13, 2021 1:28:18 PM

Hey Mike,

I have one additional item of concern in the Valley's Edge dEIR. According to the Specific Plan, golf courses and country clubs are allowed with a use permit in all residential areas besides the MHDR, and in the valley open space designation, which together totals more than 900 acres.

The use-permit process doesn't (and really shouldn't) include a substantial environmental review, so if approval of this project allows a streamlined process for establishing another foothill country club over an area as large as this, the EIR should cover the potential impacts of that, or it should be removed as an allowable use.

Frankly, I'd prefer the latter and, to be clear, I'm not worried about disk golf.

17-1

Also, in case it wasn't belabored elsewhere, the city ought to consider changing the name "valley open space" to something geographically accurate, like "woodland open space," or just make use of an existing zoning category. If I'm not mistaken, secondary open space is the appropriate zoning for golf courses in the rest of the city, and primary open space typically covers sensitive habitats like oak woodlands and riparian areas. The Valley Open Space land use designation covers areas of the latter category while enabling uses of the former. This really should be made explicit and if there isn't a good reason for the parallel zoning code, the city should stick with the familiar categories, if just to save paper.

17-2

Thanks for being such a reliable, informative, and helpful recipient of all these comments,

Addison Winslow

Comment Letter 18

Mike Sawley

From: Heidi Musick <heidi@hmcbusiness.com>
Sent: Thursday, November 18, 2021 12:41 PM
To: Nicole Acain
Subject: Support for Valley's Edge

To: Planning Commissioners
Re: Support for Valley's Edge - November 18th Planning Commission Meeting
Date: November 18th, 2021

Good Afternoon Toni, Richard, Paul, Dennis, Bryce, Lindsay, Larry -

Heidi Musick here. Chico resident, born & raised & continues to create my family's future here.

Valley's Edge is exactly the type of well-thought out development that Chico *needs.* The North State is an ideal place to live and Chico is on the map. We need to be prepared to build, but build in the right way - *the Chico way*. I believe Valley's Edge plan accomplishes all that and more.

My husband and I were raised in Butte Creek Canyon, neighbors to the Valley's Edge community and we are excited. Just the open space design alone captures the beauty of Chico and it's foothills. Parks and public spaces are what created the original culture of Chico, this continues to build upon, *and respect*, that culture. Conscientiously choosing to develop open space first and housing second.

18-1

Even beyond the open-space plan, Chico is in dire need of housing. I work remotely now and that trend is not going away. Families are flocking to communities outside of metro areas. Chico *will* become the destination for remote workers of Sacramento, the Bay Area, and Southern California. The Valley's Edge plan protects the beauty of this town and provides necessary housing, while increasing Chico's ability to attract and retain a talented workforce.

I say it again - This is an ideal place to live and raise a family. Let's build something in our image... because it is going to happen regardless.
The Valley's Edge plan is built in the Chico image.

18-2

I look forward to seeing this vision come to fruition.

Many thanks,

Heidi R. Musick
Cell: 530-513-1749

Comment Letter 19

Dear Esteemed Planning Commission,

I am a resident of South Chico, in the Doe Mill neighborhood. A neighborhood once mocked and panned for its narrow streetscape, alleys and "east coast" architecture. Now 15 years later it has stood the test of time and is one of Chico's sought after neighborhoods. An example of "smart growth" once maligned as sprawl.; am proud to have played a part in it's creation, and to call it home. 19-1

As some of you may know, I have a 25 year history in sustainable development, renewable energy, urban planning and climate change solutions. So my perspective, for what it is worth is that of a staunch advocate for smart growth, climate solutions and building community. I am also a pragmatist, which means I look for real world implementable solutions that align with my values. 19-2

I have studied the Valley's Edge master plan in depth. In fact a couple years ago I worked with the Valley's Edge team. The team was working on their master plan and although 50% of the land was already preserved as parks and open space, they wanted to identify gaps in their strategy to make this a once in a generation example of responsible development and smart growth. 19-3

But before I share my perspective as a 40 year Chico resident, former Panther and Wildcat: I'd like offer a perspective on two words that seem to be used as an argument against this type of master planning, "Smart Growth".

Smart growth is a set of principles oriented around walkable communities, appropriate transit oriented urban planning, parks and open space, infill development, a variety of housing types and vibrant civic spaces. 19-4

I have noticed in Chico the term smart growth to be applied mostly to specific categories of housing and urban planning. Namely infill development and density rich housing. This thinking is not at all wrong in my opinion, just incomplete.

Infill development leverages existing transportation corridors, civic amenities, schools and public spaces through appropriate development within the urban core. This is a good thing and I am glad to see it happening throughout Chico. Empty lots are filling with apartments and mixed use projects. Multifamily housing is sprouting up along the edges of town everywhere. Roads are being connected.

But infill development is a part of smart growth, not the entire solution. Infill does not usually create parks and open space. It does not generally support intergenerational housing. Infill does not build schools or centers of gravity. Infill development uses the existing resources around it, and it does take a toll. 19-5

This brings me to Valley's Edge. Permit me to lay out the core tenets from the EIR in my observation.

1. Let the land determine where development takes place. Build on marginal land not suitable for agriculture or housing dense populations of sensitive habitat. Build on the rocks and thin soils. 19-6
2. Preserve the wildlife corridors, riparian areas and its diverse ecosystems and protect them in perpetuity. 19-7

3. Create low impact use opportunities for these 700 acres of open spaces so that people value them and the richness then bring, like they value Bidwell Park. Make the outdoors accessible to everyone 19-8
4. Create civic gathering spaces anchored around nature. Look at places like Bend Oregon, Portland, Even Pittsburgh. They have taken their natural resources and preserved them by making them integral to quality of life. 19-9
5. Implement low impact development strategies to minimize runoff pollution, encourage alternative transport. 19-10
6. Build housing for everyone. Create opportunities for multiple generations to live together and support each other. 19-11

Valley's edge to me represents a once in a generation opportunity. We can literally double our communities' parks, open space and trails. Build new housing for the growing segment of inter-generational families. Build a school. Build parks and preserve almost as much open space as already exists in the city today (excluding Bidwell). And importantly provide development opportunities within this structure that DON'T build on prime farmland or sensitive habitat like we see to the West and the North. 19-12

Is this plan perfect? No. Could it be improved? Probably. But should it be shut down or delayed over nuance and minutia? No. I have not seen a more thoughtful, well planned legacy building project in our community in my generation. If this is not smart growth, I don't know what is. 19-13

Sincerely,

Joshua Pierce

Jkpier1971@yahoo.com

530-624-5809

Comment Letter 20

Mike Sawley

From: Susan Tchudi <susantchudi@gmail.com>
Sent: Thursday, November 18, 2021 9:48 AM
To: Nicole Acain
Subject: Valley's Edge

Dear City Planners,

I have many, many concerns about the Valley's Edge project. I'll address a few of them here.

Natural Resources:
Much of the 1,448 acres of the land that is being proposed for the Valley's Edge development is wetlands. Four ephemeral drainages and two other drainages, including Comanche Creek, run through the site. There are around 30 acres of vernal pools and other wetland features. California has lost 90% of its vernal pools, and the diminishing of wetlands has meant a threat to the wildlife that the wetlands support. 20-1

Among the living things threatened by this project (on and off site) are: Butte County Meadowfoam (an endangered species), burrowing owls, the vernal pool shrimp, the Swainson's Hawk, a number of bat species, the Western Pond Turtle, the VELB (a beetle that lives in elderberry shrubs), and 38 species of nesting and migratory birds, including the western spadefoot, the loggerhead shrike, and the yellow warbler. Moreover, 20% of the mature oaks will be removed (this doesn't include the smaller trees that can be removed without a permit). And while the project developer claims it will protect and preserve the endangered Butte County Meadowfoam, the DEIR states that "the plan sets no clear parameters for the meadowfoam preserves, including timing for establishment or management or monitoring requirements" (4.3-49). 20-2

According to the DEIR, valley foothill riparian woodland is considered a sensitive natural community regulated as a part of the stream zone under the Fish and Game Code, section 1600. The DEIR claims that many of the threats to these species can be mitigated: surveys will be done to insure no birds are nesting; the Butte County Meadowfoam will be protected in a preserve; burrowing owls will be removed and relocated; a buffer zone will be created to protect creatures. It also claims that it will restore streambeds and riparian areas and "preserve and renew" oak woodlands. 20-3

Moreover, this property includes Waters of the United States and Waters of the State. The project developer claims that there will be no net loss to these jurisdictional waters (required by Army Corp of Engineers and Regional Water Control Board), but the engineering required to move these waters into ponds and artificial water feature will change the nature of the environment, potentially leading to collapse and failure of some species due to loss of habitat. 20-4

This is an enormous development, with the plan to create 2,777 units with an anticipated population of 5,654. During construction, huge amounts of dirt will be moved, grading by heavy equipment will be required, large machines will roar and vibrate. While the project developers claim they will watch out for the creatures, both the direct harm and indirect impacts--from dust, noise, runoff, the presence of polluting materials (wood paper, metal scrap, glass), constant human presence--give very little hope that natives of this habitat survive, much less thrive. While the project developers claim that they will restore riparian areas and replant vegetation, these "mitigations" will be too little, too late for the wildlife supported by this ecosystem. 20-5

And finally--when the project is complete--the open space, the water features, the vegetation will be overrun with people who don't stay on the trails, who don't respect natural resources. 20-6

Greenhouse Gases
A major flaw in the Valley's Edge--and one that cannot be mitigated--is the production of greenhouse gases that will result first, from the construction of the project (over a number of years, we suspect) and then, the travel of the 5,634 residents who live there to town for appointments, shopping, entertainment, etc.

The Chico General Plan calls for a different sort of community. Chico's Vision for 2030: 20-7

> Chico's compact land use pattern, transportation and energy choices, green building practices, technological advancements, and sustainability policies have reduced environmental impacts and greenhouse gas emissions.
>
> A major component of protecting the environment is the wise utilization of land. Focusing Chico's growth within the Sphere of Influence will reduce pressure to develop at the community's edges where it would impact agricultural lands and foothills.

> Strategies in this General Plan for protecting the environment include promoting compact, walkable, infill and mixed-use development; focusing redevelopment along transit corridors and at other central locations; protecting sensitive habitat, open space and agricultural lands; promoting the efficient use of energy and resources; improving local air and water quality; directing waste diversion and reduction; and establishing energy and water conservation measures in building, landscaping, and municipal operations.
>
> In 2030, Chico maintains its small-town character through sound planning and orderly growth. The urban form is compact, with a clear distinction between the City and its surrounding lands. The community enjoys a sustainable building pattern with green development, efficient use of land, mixed-use developments, and a circulation system supporting all modes of transportation. New neighborhoods have blended into and strengthened the existing fabric of the community.

Moreover:

> Infill development will play a large role in meeting future housing and job needs in Chico. Successful infill can present challenges as it often occurs on smaller and more irregularly- shaped parcels at densities higher than the adjacent development, and can require infrastructure upgrades. These changes from existing conditions can often result in neighborhood opposition. The two primary issues associated with infill development are compatible density and design. Policies to encourage infill development and address neighborhood compatibility have been in place since 1994, but these policies have not always yielded desired results. The Land Use Element focuses on the issue of infill compatibility from both a density and design perspective, and the issue is further addressed by policies in the Community Design Element.

Valley's Edge represents the opposite of the Vision for Chico in the General Plan. It's urban sprawl. And it is urban sprawl that threatens water resources, animal habitat, increases energy consumption and the use of fossil fuels and thus greenhouse gasses.

Chico's Climate Action Plan (approved unanimously by the Chico City Council) calls for the reduction of greenhouse gas (GHG) emissions and "achieve the City's target of carbon neutrality by 2045." According to the CAP, transportation is the largest producer of GHG. The dEIR states, that "The proposed project [with an estimated 5,645 residents] would result in GHG emissions of approximately 3.13 MT CO2e per capita. Thus, the proposed project's estimated GHG emissions would exceed the City's 2030 efficiency target of 2.76 MT CO2e per capita per year."

An important measure of the CAP advocates: "Support implementation of the City's General Plan that promotes sustainable infill development and mixed use development in new growth areas to reduce vehicle miles traveled (VMT)." The Valley's Edge Project is the opposite of infill--it's sprawl.

Housing:

The General Plan, the Housing Element, and the Climate Action Plan all emphasize the need for greater density in housing development. Most of the units in Valley's Edge (over 1500) are low density.

The DEIR for Valley's Edge does not provide information about two issues that should be taken into consideration when evaluating this development project: 1) How does it address the issue of affordability? While the developer claims that the project meets the general plan guidelines of having a diversity of housing types, there will be no housing for low or very low income households. Moreover, Phase one of the project will be the building of Equestrian Ridge, a very low density project for the very wealthy.

The developers claim the development will have a diversity of housing types, but all of this diversity will be at upper income levels, housing for people who can pay HOA fees and upscale amenities. Moreover, the claim that this is a mixed use development is hugely overstated. The "village" area is small and can't begin to serve the food, medical, or social needs of a 5,000+ population. People will need to travel for most of their daily supplies.

Other Questions and Concerns
--Will public transit be able to serve an area with such low density?
--What is the jobs/housing balance for this development?
--In a time of drought, where will the water come from to fill their 1,000,000 water storage tank?
--Can we afford to lose 20% of our mature trees in a time when we need that growth for CO2 sequestration?
--Does the developers' plan seriously consider the wildfire risk?
--Does the developers' plan seriously consider the flood risk?

I appreciate your consideration of all of these challenging issues related to this enormous project.

20-7 Cont.
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20-17

Sincerely,
Susan Tchudi
co-host Ectopia, KZFR 90.1 Chico
10846 Nelson Bar Road
Yankee Hill, CA 95965
susantchudi@gmail.com
530-781-4122

Comment Letter 21

Mike Sawley

From: Susan Tchudi <susantchudi@gmail.com>
Sent: Thursday, November 18, 2021 9:55 AM
To: Nicole Acain
Subject: Public Comments for Planning Commission in response to dEIR for Valley's Edge

Dear Commissioners,

Here is the public comment I hope to make at the meeting tonight. I'm adding it in addition to the other comments I sent to you.

To the Planning Commission:

My name is Susan Tchudi. I cohost Ecotopia on KZFR in Chico. I also convene the Environmental Coalition of Butte County.

I can see why one could be seduced by the proposed Valley's Edge development. On paper, this Eastern foothill project looks beautiful—parks, ponds, green spaces walking trails amidst a large neighborhood, including apartments and housing for seniors. However, this project is in the wrong time and the wrong place.

The draft Environmental Impact Report is out for this project and it reports that two impacts— Greenhouse Gas Emissions and Aesthetics—are significant and cannot be mitigated. That means that the construction and the miles traveled to get Chico and back can't be fixed. And this pristine riparian woodland area with its birds, reptiles and animals and plants will be slashed through with 2,777 housing units with an anticipated population of 5,654. 21-1

The Valley's Edge development project is a contradiction (if not a violation) of some of Chico's guiding principles and documents. The current General Plan calls "protecting the environment include promoting compact, walkable, infill and mixed-use development." In addition, "In 2030, Chico maintains its small-town character through sound planning and orderly growth. The urban form is compact, with a clear distinction between the City and its surrounding lands." This enormous 1,448 acre urban sprawl project provides the opposite of a compact urban form. 21-2

The Climate Action Plan, approved by Chico's City Council just weeks ago, calls for zero net emissions by the year 2045, aligned with with the State's emission targets. According to the dEIR, "The proposed project would result in GHG emissions of approximately 3.13 MT CO2e per capita. Thus, the proposed project's estimated GHG emissions would exceed the City's 2030 efficiency target of 2.76 MT CO2e per capita per year." 21-3

And finally, the City Council will be approving the Housing Element Update, which emphasizes the need for affordable housing. The Valley's Edge development, with its Garden-of-Eden vision, is not meant for those in need, but for those with deep pockets. 21-4

Susan Tchudi
10846 Nelson Bar Road
Yankee Hill, CA
530-781-4122
susantchudi@gmail.com

Comment Letter 22

Mike Sawley

From: Susan Tchudi <susantchudi@gmail.com>
Sent: Monday, December 13, 2021 4:07 PM
To: Mike Sawley
Subject: Comment on DEIR for Valley's Edge

Dear Mr. Sawley,
Below are my comments about the Draft EIR for the Valley's Edge Development. Among my major concerns is that the EIR overstates its claim that mitigation can reduce enormous environmental impacts.

In terms of Natural Resources, for example, much of the 1,448 acres of the land that is being proposed for the Valley's Edge development is wetlands. Four ephemeral drainages and two other drainages, including Comanche Creek, run through the site. There are around 30 acres of vernal pools and other wetland features. California has lost 90% of its vernal pools, and the diminishing of wetlands has meant a threat to the wildlife that the wetlands support. 22-1

Among the living things threatened by this project (on and off site) are: Butte County Meadowfoam (an endangered species), burrowing owls (a California Species of Special Concern) , the vernal pool fairy shrimp, the Swainson's Hawk, a number of bat species, the Pond Turtle, the VELB (a beetle that lives in elderberry shrubs), and 38 species of nesting and migratory birds, including the western spadefoot, the loggerhead shrike, and the yellow warbler. According to former AltaCal Audubon Society conservation director, Scott Huber, "the yellow warblers are another California Species of Special Concern that regularly occur . . . [in this area]. Because of their size they are often overlooked by birders. Yellow warblers are associated with both the riparian vegetation and the valley oaks . . . . The Cornell Laboratory of Ornithology reports that yellow warblers "have been slowly declining, and according to the North America Breeding Bird Survey, 'have decreased by 25% between 1966 and 2014.'" (letter to Mike Sawley, May 18, 2018) 22-2 22-3

Also according to expert, Scott Huber, Western burrowing owl populations are in a freefall decline statewide. In nearby Yolo County in 2016 the Burrowing Owl Conservation Society and Institute for Bird Populations did a county-wide survey which showed that, since 2006, there has been a 76% decline in burrowing owl numbers. Imperial County recorded a 27% population drop in a single ear between 2007-2008. Butte County birders provide similar anecdotal observations of a decline in our area. (letter to Mike Sawley, May 18, 2018) 22-4

The burrowing owl is a California Species of Special Concern, and could soon be listed. The dEIR claims that burrowing owls will be removed and relocated. This process is not simple. According to the California Burrowing Owl Association, the process includes a survey for burrows and owls of the entire project site that is suitable habitat "within 150 meters (approx 500 ft.) of the project impact zone." The buffer zone is used to account for owls outside the site but that use the site for foraging. Also it covers impacts from noise and vibration of heavy equipment. In addition the survey should allow 100 percent visual coverage. Attention has to be paid to differences in terrain or vegetation to make sure all surfaces are accounted for. If burrows are located, a map needs to be created to show where burrows are. "A preconstruction survey may be required by project-specific mitigations no more than 30 days prior to ground disturbing activity." Four site visits are required. (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842&inline) This is not a process that a surveyor can check one day and construction work can resume the next. Moreover, nesting time runs from February 1 through August 31. During the times the owls are nesting, they cannot be relocated. While the dEIR states that it will remove and relocate the burrowing owls, including filling in their burrows so they cannot return, it says nothing about where or how the burrowing owls will be relocated. The plan for mitigation seems vastly inadequate and oversimplified. 22-5

The preservation of the Butte County Meadowfoam is another major concern for the proposed project area. According to the California Department of Fish and Wildlife, killing or possessing the plant is prohibited by the California Endangered Species Act (CESA). Butte County meadowfoam is also listed as endangered under the federal Endangered Species Act. Butte County meadowfoam is an annual plant that has only been found in a narrow 28-mile strip along the eastern Sacramento Valley in Butte County. Plants are sometimes found at the edges of vernal pools, but they are primarily found in the deepest parts of vernal swales that connect vernal pools. The California Natural Diversity Database lists 21 22-6

occurrences of Butte County meadowfoam that are presumed to still exist. While the project developer claims it will protect and preserve the endangered Butte County Meadowfoam, the DEIR states that "the plan sets no clear parameters for the meadowfoam preserves, including timing for establishment or management or monitoring requirements" (4.3-49). Again, the DEIR overstates its ability or plan to mitigate. 22-6 Cont.

According to the DEIR, valley foothill riparian woodland is considered a sensitive natural community regulated as a part of the stream zone under the Fish and Game Code, section 1600. The DEIR claims that many of the threats to these species can be mitigated: surveys will be done to ensure no birds are nesting; the Butte County Meadowfoam will be protected in a preserve; a buffer zone will be created to protect creatures. It also claims that it will restore streambeds and riparian areas and "preserve and renew" oak woodlands. This is a very, very large piece of land. The claims to mitigate seem extremely general and over optimistic. 22-7

Moreover, this property includes Waters of the United States and Waters of the State. The project developer claims that there will be no net loss to these jurisdictional waters (required by Army Corp of Engineers and Regional Water Control Board), but the engineering required to move these waters into ponds and artificial water feature will change the nature of the environment, potentially leading to collapse and failure of some species due to loss of habitat. 22-8

This is an enormous development, with the plan to create 2,777 units with an anticipated population of 5,654. During construction, huge amounts of dirt will be moved, grading by heavy equipment will be required, large machines will roar and vibrate. While the project developers claim they will watch out for the creatures, both the direct harm and indirect impacts--from dust, noise, runoff, the presence of polluting materials (wood paper, metal scrap, glass), constant human presence--give very little hope that natives of this habitat survive, much less thrive. While the project developers claim that they will restore riparian areas and replant vegetation, these "mitigations" will be too little, too late for the wildlife supported by this ecosystem. And finally--when the project is complete--the open space, the water features, the vegetation will be overrun with people who don't stay on the trails, who don't respect natural resources. 22-9

Neither the VESP nor the DEIR seems to consider the impacts of climate change--less availability of water, dangers of drought, and total lack of consideration of the impact of GHG emissions. The VESP flaunts the huge increase in greenhouse gas emissions in its unapologetic creation of a sprawling housing development. It will be impossible to get public transportation in an area of such low density and so far away from the city center. 22-10

A major concern barely touched upon in the DEIR is the danger of wildfires. With increasing drought, in Valley's Edge's location in the WUI, and the instances of fire in this area in the past, this piece of land is prime for wildfire. 22-11

There is one other issue I would like to address that is not part of the dEIR but I want to comment on because it became a part of the public record when it was addressed at the Planning Commission meeting. That is the issue of housing. BCAG's Regional Housing Needs Plan demonstrates the need for houses at the local income levels. It allocates 1,101 for very low income; 507 for low income; 770 for moderate income; and 1,110 for above moderate income. With the development of Meriam Park and others, there is no need for Valley's Edge's 2,777 units. The housing that we need is for workforce and low income people currently living in our community. A posh HOA community on the edges of town does not suit our needs. Moreover, the General Plan, the Updated Housing Element, and the Chico Climate Action Plan variously call for infill, reduction of GHG, and housing for low income residents. 22-12

Thank you for including my comments in response the the DEIR for Valley's Edge.

Susan Tchudi
10846 Nelson Bar Road
Yankee Hill, CA
susantchudi@gmail.com
530-781-4122

Comment Letter 23

Comments of David Welch, 13 Hilda Way, Chico 530-566-2898

I bring a somewhat unusual perspective to the examination of this EIR. I'm very much a member of the senior demographic and am also a lifelong cyclist, having ridden for transportation and sport for more than 50 years and I'm nationally certified to teach safe cycling. I also have long-standing familiarity with the topography of the site. 23-1

Looking at the EIR through that lens I see a lot of conflict between what my experience tells me and what the EIR visualizes as the role of active transportation in reducing vehicle miles traveled and mitigating the traffic and climate impacts of the project. 23-2

The combination of the large physical size of the project, the very low density housing in most of the project area, the concentration of commercial at one corner and the steep terrain in most of the project area tell me that the bike paths touted as an important part of the transportation mix will be used recreationally by a few sport cyclists like myself, but will likely play almost no role in the actual transportation mix in the project. Neither typical seniors, nor young parents with children in tow are going to climb those hills coming home from commercial services or employment sites within or beyond the project area. 23-3

At the same time, the increases in auto traffic on surrounding major roads as a result of the project will actually work to discourage the use of active transportation by residents of nearby areas better suited for it like Merriam Park. 23-4

On a broader scale, the comparison used in the EIR for assessing the significance of vehicle miles traveled is a very dubious one. It's not at all clear what area was used as a regional standard, but the population numbers tell us it was bigger than all of Butte County and had to include a lot of rural areas where people drive long distances by necessity. A comparison to the city of Chico or another similar urban area would be a much more valid standard. 23-5

I must also say, the assumption that the senior portion of the project population drive substantially less is outdated and likely erroneous for this population. Not only is retirement age steadily rising, but there is good evidence that high income seniors – the kind that will live in a high-cost project like this – generate high levels of VMT for leisure and other pursuits even in retirement. 23-6

Lastly, the EIR discusses at length the various active recreational amenities provided within the project but it is never made clear to what extent those amenities will be made available to the general public or only to project residents. Project residents absolutely will add to the burden on existing parks and recreational facilities in Chico – it's only right that the rest of us should be compensated for that by a commitment to making all of the parks and trails in the project open to everyone. 23-7

Comment Letter 24

Mike Sawley

From: Wilson, April <A1W9@pge.com>
Sent: Thursday, November 18, 2021 2:37 PM
To: Mike Sawley
Subject: VALLEY'S EDGE SPECIFIC PLAN

Mike,

This is a terrible plan that will affect myself and all of my neighbors. We specifically bought and paid a premium to be in
a peaceful, serene environment. This a huge development that will have serious impacts on both our noise and traffic. I cannot see people entering this off the Skyway as it would be tough to cross traffic as well as slow down to turn. It would be one thing to add a small development that had limited number of homes but this is huge. We are talking about a school, a park, and many homes. The length of time this is going to take that impacts my neighborhood is enormous. I am contacting my builder Bill Webb to see what steps we all need to take to stop or at the very least alter to an acceptable size.
this project.

24-1

Thank you,

April Wilson

Comment Letter 25

From: Karen Laslo
To: Mike Sawley
Subject: Valley"s Edge Specific Plan - Draft EIR, Public Comment
Date: Tuesday, December 7, 2021 7:27:07 AM

VALLEY'S EDGE SPECIFIC PLAN - DRAFT EIR

Public Comment from Karen Laslo (karenlaslo@gmail.com)

General Comments

Our Chico General Plan 2030 calls for a compact urban form. The Valley's Edge Specific Plan (VESP) is not compact, it's sprawl. It's the exact opposite of where our town should be heading in regards to new housing development. We need small, "work force" houses, duplexes and apartments that are affordable to middle and low income residents. VESP housing will be mostly, large, single-family houses. Valley's Edge will only be affordable to wealthy people from out of Butte County, such as the Bay Area or Los Angeles, seeking to retire to "the country."

Valley's Edge will do nothing to answer Chico's housing needs. It will, however, create a wealthy class society living high up in the foothills above the rest of us down here below in Chico's flat land.

25-1

Climate Impacts

Since this project will be stuck way out in the middle of nowhere, away from any and all commercial stores, health clinics, grocery stores, etc., the biggest impact on climate change will be increased car traffic trips from the inhabitants. This is the opposite of Chico's Climate Action Plan. The impact from more greenhouse gas emissions is unacceptable and can't really be

25-2

mitigated and should be the grounds for denying the project right from the start. 25-2 Cont.

Air Quality

The air quality in Chico and the Sacramento Valley is already poor, especially in winter. Bad air is unhealthy. Particulate matter in air pollutions is bad for people's lungs, especially the elderly and children. VESP would add even more to the poor air quality that we already have since the inhabitants will have to drive to get everything they want to live there.

Mitigation measures which include an idling reduction, (Chico has this already but it's rarely enforced), a ride-share program (it's doubtful that the wealthy people, who would be the only ones who could afford to live there, would be into "ride sharing.")

It's obvious that the mitigations put forth by the VESP are inadequate and won't do much to reduce the significant impacts to our already poor air quality in Chico and Butte County. It's shameful that the low and middle income families living down below in Chico's flat land would suffer from even more air pollution caused by the wealthy people living high above them if the VESP is approved. 25-3

Biological Resources

Plant and animal species that will be impacted and/or destroyed by the VESPA include Butte County Meadowfoam, Elderberry Longhorn Beetle, Western Spadefoot Toad, Western Pond Turtle, Burrowing Owl, Yellow Warbler, Loggerhead Shrike, native and migratory birds, Pallid Bat and our native Blue Oak trees. 25-4

As a long-time "birder" I'm quite concerned about the impacts of VESP on our migratory and native birds and **especially the Burrowing Owl [**my emphasis]**.** 25-5

These small owls are disappearing mainly due to habitat loss from over development and urban sprawl. The following status and biological information on this interesting creature can be found at *Burrowing Owl Conservation Network, see link:* *http://burrowingowlconservation.org/burrowing_owl_facts/:*

"LEGAL STATUS/PROTECTION:

The burrowing owl is federally protected by the Migratory Bird Treaty Act in the United States, Canada and Mexico.

Burrowing Owls are listed as Endangered in Canada and Threatened in Mexico. ***They are considered by the U.S. Fish and Wildlife Service (USFWS) to be a Bird of Conservation Concern at the national level, in three USFWS regions, and in nine Bird Conservation Regions*** [my emphasis]***.*** *At the state level,* ***Burrowing Owls are listed as Endangered in*** *Minnesota, Threatened in Colorado, and as a Species of Concern in Arizona,* ***California,*** *Florida, Montana, Oklahoma, Oregon, Utah, Washington, and Wyoming.*

HABITAT:

This owl is found in dry, open areas with low vegetation where fossorial mammals (i.e. ground squirrels) congregate such as grasslands, deserts, farmlands, rangelands, golf courses, and vacant lots in urban areas [my emphasis]***.*** *It was once distributed broadly throughout western North America, but has found itself declining in numbers throughout all historic ranges in the last 30 years. The burrowing owl also occurs in Florida, Central America, and most of South America.*

DIET:

Burrowing Owls primarily feed on insects and small mammals, but they will also eat reptiles and amphibians. ***Burrowing Owls hunt while walking or running across the ground*** **[**my

25-5 Cont.

emphasis] *and by swooping down from a perch or hover, and they will catch insects from the air.*

THREATS:

The greatest threat to burrowing owls is habitat destruction and degradation caused primarily by land development and ground squirrel/prairie dog control measures. Despite their protected status, burrowing owls are often displaced and their burrows destroyed during the development process **[**my emphasis]**.** *The natural life span of the Burrowing Owl is 6-8 years. Burrowing owls are also at risk of predation from coyotes, birds of prey, and feral cats and dogs.* ***Because of an increase in urban and suburban sprawl, hazards are now consisting of automobiles as well*** [my emphasis]**."**

I don't see that there can be *any* mitigation that will not disturb and/or destroy Burrowing Owls found at the VESPA site mainly because they nest and roost in holes in the ground. "Passively moving" these small, sensitive owls is a ridiculous notion and will only hasten their demise.

25-5 Cont.

Blue Oaks Removal

According to the VESP's website, the proposed development is supposed to be a place where people can ". . . take a dawn walk through the majestic oaks." That's ironic since the Plan calls for at least 1,100 of the 5,500 "majestic oaks" to be cut down.

The predominant oak in the VESPA area are Blue Oaks, with some Black Oaks and Live Oaks. Blue Oaks are fire resilient and drought tolerant. They are tenacious with tough roots that go down quite deep. It's commonly known that Blue Oaks are slow growing, see link: http://oaks.cnr.berkeley.edu/blue-oaks-grow-slowly/. Many of the Blue Oaks in the VESPA site are quite large which means that they could be really old. Some are about the same size as the Heritage Blue Oak located on Preservation Rd.,

25-6

not far from the VESP site. According to Chico Urban Forester, Richie Bamlet, that Heritage Blue Oak is about 300 years old. It should be mandatory to find out how old some of the largest Blue Oaks are *before* they're cut down. It would be a shame to cut down any "majestic" oak tree that would be considered a Heritage Tree.

As a member (but not the spokesperson) of Chico Tree Advocates I say that the destruction of 1,100 Blue Oaks for this project is totally unacceptable. Blue Oaks are the foundation of the foothill's oak woodland habitat ecosystem. Blue Oaks are critical for the sequestration and storage of carbon, a potent greenhouse gas that is steadily warming our planet.

25-6 Cont.

Construction Site of the VESP

If approved, the construction of the VESP would continue for several years. During that time it's doubtful that any wildlife would be able to survive the destruction of their habitat. The fields at the site are littered with rocks and boulders. It's assumed that heavy equipment will be used to remove of most of the rocks to create a level space to build the luxury homes for the proposed development. Even if the rocks are "saved" for aesthetic purposes, the wildlife will be gone.

25-7

The exhaust from heavy the equipment will also add to the air pollution.

25-8

The construction alone of the VESP will make the cost of houses far out of reach from the average Chico family or senior citizen.

25-9

Transportation and 55+ Housing

Because of the low density of houses and the linear distribution of the houses the development would not be supportive of a public bus system. Also, it's doubtful that the wealthy people, who would be the only ones able to afford houses there, young or

25-10

old, would be willing to ride a bus to get to where they want to go.

25-10 Cont.

Since the Plan call for the houses to be widely spread out, up and down the ridges in the foothills, it wouldn't be conducive to anyone who would want to use a bike for transportation instead of a car - unless they were in top physical condition, therefore, the transportation value of the bike trails would be minimized.

25-11

Since about half of the VESP housing would be restricted to people 55 or older, the lack of alternative transportation would be harmful to that aging population, especially when they would, inevitably, lose their ability to drive. It's unlikely that many seniors would be able to ride a bike for transportation instead of driving their cars.

According to Public Square, a CNU Journal, "Only 60 percent of the American population can drive. Our automobile environments disenfranchise and endanger those who are physically unable or too young to drive, or too poor to own a car. The total number of nondrivers is expected to increase dramatically as Baby Boomers age." See link: https://www.cnu.org/publicsquare/2020/03/05/aging-population-needs-walkable-bikeable-cities?fbclid=IwAR0hH4N87FB7jMDNR4AjtPf5BisOEuTZgPfP1Mq-DHSScuaqwszOh42f5dM

25-12

Fire Hazard

The danger of fire is really high for any development in the foothills. While the Blue Oaks may be fire resilient, houses, cars and buildings *are not*. During the horrific Camp Fire, along with the tragedy of peoples' homes being lost, all the contents of those homes and garages burned too. The burning of plastics (including cars), household chemicals, such as pesticides, cleaning supplies, etc., dramatically added to the existing air pollution. A wildfire

25-13

in the VESP would likely spread to other existing developments in the area, such as Doe Mill or the houses that are along east 20the St.

The extreme fire danger for the VESP area should be grounds for stopping the project. Trying to mitigate the fire hazard would, of course, add to the cost of the development that would be passed on to the homeowners. But the danger would still exist.

25-13 Cont.

Energy

The addition of electric vehicle chargers is a good idea. However, they would not be of much use unless the majority of homeowners owned electric cars.

The design and orientation of homes in any new development is crucial to saving energy. Solar panels along with the addition of "passive solar" design can make a huge difference in saving energy and making the people who live in the homes comfortable, see link: https://www.energy.gov/energysaver/passive-solar-home-design. Even apartment buildings can be designed to make use of passive solar energy.

Once the cost of constructing and building a house or apartment has been completed, using passive solar design, the energy savings is "free" for the life of the building.

Not only does passive solar design create "free" warmth in the winter but it provides year-round light so that traditional incandescent or fluorescent lighting are rarely needed during the day, saving even more energy. Southern orientation of houses and buildings with roof-top solar panels is an excellent combination for saving energy.

25-14

Thank you for taking my comments into consideration.
Karen Laslo

Comment Letter 26

From: Annette Faurote
To: Mike Sawley
Cc: Nicole Acain
Subject: Valley"s Edge Development
Date: Friday, December 10, 2021 11:48:49 AM

Please make this part of the permanent record and answer these important questions. Thank you.

Dear Planning Department:

While the developers of Valley's Edge have attempted to incorporate positive features much is still lacking in this development.

This is a huge development having lasting impacts on the Chico Environs. Many of these problems are NOT fully and honestly described in the EIR. Here are my points of deep concern: 26-1

1-Valley's Edge will **affect the air quality** of Butte County. This is a **car dependent development**. The EIR does not fully address the real life impacts. People in the 55+ age group will be driving everywhere (except recreationally). There is not enough density to support the bus system. Upper areas of the development are on large parcels which will be car dependent. These increases in emissions (ROG, PM 2.5 and NOx) will be **harming the health of our community.** Mitigation measures are inadequate. Monetary mitigation will not offset the impacts of health problems for our community. 26-2

2-Valley's Edge is defined as mixed use, but this is really stretching the mixed use definition. As the small amount of other uses are located near the entrance and Not mixed through the sprawling 1450 acres. 26-3

3-This development is the true definition of **urban sprawl**. Mitigation measures dealing with sprawl are inadequate. It will impact (RUIN) the viewshed for the east side of Chico with unsightly large houses. It will exacerbate traffic congestion in surrounding areas. 26-4

4-Will all of this development be open for the enjoyment and recreation of all Chico residents? Will it be a gated area? 26-5

5-This is all built in urban/wildland interface areas that are **extremely fire prone**. This area is defined by CalFire as a **moderately fire severity zone which is predicted to burn every 5-15 years.** The fire risk and expense of protecting these homes is a large concern. **Development** 26-6

should NOT be built in a zone predicted to burn every 5-15 years. 26-6 Cont.

6-This area is **important ecologically.** There are many important and threatened species that should be protected: ringtail cats, bobcats, burrowing owls, west pond turtles, wintering bald eagles, etc. What is being done about this? 26-7

7-This development **will destroy perhaps over 1,000 Valley Oaks. This amount of oak destruction is unexceptable.** Valley Oaks are one of the most important tree species for numerous varieties of birds, mammals and other native life. This will cause a huge amount of habitat destruction. This damage to wildlife and habitat needs stronger mitigation measures. 26-8

8-The interference of hydrologic recharge of the aquifer should be addressed. In these days of droughts this is of the utmost importance. Hydrologic interruption has not been adequately analyzed. And realize that the hydrologic system is interconnected to areas west of this development. 26-9

9-**There are 11 acres of other protected waters and 6 acres of wetlands that will likely be destroyed**. How is this being addressed? 26-10

10-**This development will significantly increase greenhouse gas emissions**. Chico and all of California has been tasked with reducing greenhouse emissions. This is in exact opposition with the Chico City Climate Action Plan. Sprawl is the opposite of urban infill which is how Chico should grow. **This MUST BE ADDRESSED.** 26-11

11-Chico has serious housing needs. But many of these houses will be expensive homes appealing to the wealthier population. We need more affordable housing, not urban sprawl subdivisions. 26-12

Due to these enormous problems with Valley's Edge I support and request a 5th alternative to be considered which would expand on alternative 4 and address problems, inadequacies and make positive changes.

Alternative 5 would have a more compact community allowing for greater open space and habitat protection. At greater housing densities the community could support a bus system. Additionally, a grocery store, pharmacy and other useful businesses were added that would decrease auto commuting and increase walkability and bicycling. The "Equestrian Ridge '' area should be moved adjacent to the denser community and gain closer compliance to the Greenhouse Gas reduction targets of the Chico Climate Plan. 26-13

Please reconsider/rework this large development and make it smart 26-14

development. This is what is needed.

26-15

Sincerely,
A. Faurote
16 Rose Ave
Chico, Ca 95928

Comment Letter 27

From: volecole@juno.com
To: Mike Sawley
Subject: Fw: Valley"s Edge Development and the Draft Environmental Impact Repor t
Date: Sunday, December 12, 2021 3:31:51 PM

Dear Mr. Sawley,

This is to let you know that my husband and I are opposed to the Valley's Edge Development Plan and do not believe that the Draft Environmental Impact Report presents complete consideration of all the issues. Firstly, we do not need another big housing development, particularly for higher income people, in an area where there are already large housing developments. (Oak Valley, Meriam Park and proposed Stonegate). This would significantly increase car useage, incurring traffic problems, increased greenhouse gas emissions, and lowering air quality. In the time of the Climate Change crisis we need to be reducing the negative impacts on our planet and inhabitants, not increasing them. 27-1

Secondly, yes, we do need more housing, but at this point in time we need more housing for lower income people. A better plan would be to provide lower income housing in infill areas. (The proposal from Smart Growth Advocates given to the Chico City Council is a good example). 27-2

And lastly, it would cause a loss of habitat for sensitive species (both flora and fauna), bring the wildfire threat closer to houses, and damage our water recharge area. 27-3

We believe that these issues have not been adequately addressed the Draft Environmental Impact Report and ask that you consider these concerns further.

Respectfully,

Jane Coleman and David McKinney

Comment Letter 28

From: volecole@juno.com
To: Mike Sawley
Subject: Valley"s Edge Development and Draft Environmental Impact Report
Date: Sunday, December 12, 2021 4:32:58 PM

Dear Mr. Sawley,

This is to let you know that my husband and I are opposed to the Valley's Edge Development Plan and do not believe that the Draft Environmental Impact Report presents complete consideration of all the issues. Firstly, we do not need another big housing development, particularly for higher income people, in an area where there are already large housing developments. (Oak Valley, Meriam Park and proposed Stonegate). This would significantly increase car useage, incurring traffic problems, increased greenhouse gas emissions, and lowering air quality. In the time of the Climate Change crisis we need to be reducing the negative impacts on our planet and inhabitants, not increasing them.

Secondly, yes, we do need more housing, but at this point in time we need more housing for lower income people. A better plan would be to provide lower income housing in infill areas. (The proposal from Smart Growth Advocates given to the Chico City Council is a good example).

And lastly, it would cause a loss of habitat for sensitive species (both flora and fauna), bring the wildfire threat closer to houses, and damage our water recharge area.

We believe that these issues have not been adequately addressed the Draft Environmental Impact Report and ask that you consider these concerns further.

28-1

Respectfully,

Jane Coleman and David McKinney

Comment Letter 29

From: Patricia Puterbaugh
To: Mike Sawley
Subject: Valleys Edge
Date: Sunday, December 12, 2021 12:15:51 PM

Hello - This is Patricia Puterbaugh, 1540 Vilas Rd., Chico, CA 95973
Making comments on the plan for the Valleys Edge Development/Sprawl

Please make sure these comments are part of the public record, thank you

Valleys Edge Comments:

1. This is sprawl. We need infill projects done first. Infill projects which actually increase and address the lack of mid and low income housing in Chico. We do not need more projects for expensive homes - especially if they are designed to attract retirees and others from out of the area who will only add to our overburdened infrastructure in Chico. 29-1

2, Environmental Impacts are too numerous to list and they analysis in the documents is inadequate. Wildlife, water quality, air quality will be negatively impacted. Traffic will be a nightmare. What is the intersection of 20th St. and Bruce Rd going to look like after this is built out? Any plans for roundabouts in this area? At least that may keep the traffic moving.
This area is a FIRESHED. This is an area especially prone to wildfire and it is irresponsible and dangerous to build an entire community in a FIRESHED. People invite wildfire. The area will become even more prone to wildfire with homes within it. 29-2

This area is a WATERSHED and a place where water enters our precious Tuscan Aquifer. We do not need any more homes built on top of our aquifer.
We do not have enough water to service this huge development. 29-3

3. Build back Paradise. Build back Butte Creek Canyon. The infrastructure is already built in these two places that are now much safer from wildfire. We need to address the housing shortage in Butte County by building back SMARTER. We do not need to build where developers will make LOTS of money from outsiders. We need to build where our citizens want to live and with homes they can afford. 29-4

4. There will inevitably be a lawsuit to oppose this sprawl and unnecessary paving over of precious woodlands. Why are you inviting this? This kind of growth is unsustainable and will not allow Chico to attain any sort of Climate standards we know we have to enact. 29-5

Thank you very much for taking my comments. Patricia Puterbaugh

Comment Letter 30

From: Suzette Welch
To: Mike Sawley
Subject: Valley"s Edge Development
Date: Sunday, December 12, 2021 11:53:03 AM

We do not need this development. Here are my objections to Valley's Edge:

There is no plan for high density low cost housing in Valley's Edge Development. Chico needs low cost, high density, infill housing and not another sprawl development which will decrease our environmental area of oak woodland and open country. 1,100 oak trees will be vulnerable for removal if this development gets approved. There are only 162 medium high density residential housing lots planned and 1739 very low and low density housing units which will be built out as large, luxury high priced houses. There is enough housing being built all over Chico right now especially luxury, high price housing. Meriam Park, which is being built out right down the road from this proposed development, does have high density housing but again it is luxury housing. 30-1

I am concerned that we will not have enough water for all of the new housing which is being built now plus water to meet all of the needs of agriculture if we add a lot more high water demand households. 30-2

All of the development which is happening all over Chico is putting more and more cars on the streets. There are already areas of Chico streets which become parking lots at certain times of day and we are beginning to look like Los Angeles. Plans call for Bruce Road to be widened up to Hwy. 32 but when that traffic gets to Bidwell Park there is only a 2 lane bridge crossing the creek. Increasing the width of this bridge will take away even more of the park. If this bridge needs to be made 4 lanes, which it will, the people of the city of Chico will have to pay for its construction. We do not have extra funds to do a project like this since we don't have enough funds right now to keep the streets we have in repair. Inevitably the development will bring more cars and air pollution into the city of Chico. 30-3

Suzette Welch
13 Hilda Way, Chico, Ca. 95926 530 570-3240

Comment Letter 31

From: Nancy Wirtz
To: G Marvin
Cc: Mike Sawley
Subject: Re: DEIR of Valley"s Edge
Date: Sunday, December 12, 2021 7:06:53 PM

Thank you, Grace. You stated the problem very clearly.
Mr. Sawley, I totally support the Sierra Club's position as expressed by Grace Marvin. 31-1
Nancy Wirtz
1191 Bonair Rd, Chico, CA 95926

On Sun, Dec 12, 2021, 6:47 PM GRACE M MARVIN <g-marvin@comcast.net> wrote:

Grace M. Marvin
1621 N. Cherry St.
Chico CA 95926
12/12/21

City of Chico Community Development Department
411 Main Street, P.O. Box 3420
Chico, California 95927.
mike.sawley@chicoca.gov

Attn: Mike Sawley, Principal Planner
Re: Valley's Edge Specific Plan Draft Environmental Impact Report-comments due 12/13/21

Mr. Sawley:
Please consider my comments regarding the inadequacy of the DEIR for the Valley's Edge project. First of all, the project does not address the serious need for much more affordable housing in the City of Chico. Consider what CA Government Code specifies in the December 2020 Butte County Association of Government's report (p.7). I have highlighted the particularly significant remarks. This Code indicates that in planning housing we should meet Section 65584(d) of the Government Code: 31-2

1. Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an

***equitable manner**, which shall result in each jurisdiction receiving an allocation of units for low- and very low-income households. 2. **Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources,** the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reductions targets provided by the California Air Resources Board pursuant to Section 65080. **3.** Promoting an improved intraregional relationship between jobs and housing, including **an improved balance between the number of low-wage jobs and the number of housing units affordable to low- wage workers in each jurisdiction.** 4. **Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category**, as compared to the countywide distribution of households in that category from the most recent American Community Survey. **5.** Affirmatively furthering fair housing, which for the purposes of this process means 'taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, **affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity,** replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws.*

31-2 Cont.

Thus, instead of a project like Valley's Edge, **our Chico community needs more urban infill that includes high density and affordable housing - including mixed use housing such as businesses on first floors and homes above. We also desire walkable neighborhoods, with easy access to jobs and schools and stores, and low GHG mass transit opportunities**, *e.g.,* more bikeways and electric busses. We do not need to attract wealthy citizens from outside of Chico if it means mostly more expensive housing and the accompanying excessive environmental destruction, including more extensive traffic (with undesirable traffic jams and growth in GHG emissions).

As it is planned, Valley's Edge would increase traffic immensely, while not easily accommodating affordable and low GHG transit

possibilities. In addition, there is:

1-not sufficient analyses of GHG emissions;

2- not adequate attention to flooding (as has been a huge problem off of 20th St. with one house totally destroyed on 20th Street);

3- not accessible public transit and affordable traffic infrastructure -- for more than four times the amount of current traffic resulting from the Valley's Edge project;

4- not fully adequate protection and monitoring of environmental resources (#2 in CA Government Code, above) such as vernal pools, endangered species, oak woodlands, raptors, Butte County Meadowfoam, and waterways;

5- not adequate attention to preventing fire danger, as reflected in the eviction of people in nearby housing during the Camp Fire.

Please see to it that this project not be approved.

Sincerely,
Grace M. Marvin
Yahi Group Conservation Chair
Motherlode Chapter
Sierra Club

31-2
Cont.

Comment Letter 32

From: Julian Zener
To: Mike Sawley
Subject: Valley"s Edge DEIR
Date: Sunday, December 12, 2021 6:28:25 PM

Dear Mr. Sawley:

I judge the *Valley's* Edge Environmental Draft Report to be severely inadequate. Please consider the following observations: 32-1

1. The project extends considerably into foothill ecology. Roads and other impermeable surface modifications will decrease recharge, increase already occurring downhill flooding and negatively impact vernal pools, Butte County meadowfoam as well as federally protected fairy and tadpole shrimp. This harm cannot be mitigated. 32-2

2. This project defines urban sprawl by extending way out from the urban center and therefore commits the city to a substantial increase in vehicle miles traveled, increase in green house gas generation, deterioration of air quality, substantial traffic congestion and the opposite of compact, high density, mixed use housing. These harms cannot be mitigated. 32-3

3. The vast majority of planned homes will not be affordable to Chico's residents. We already have an affordable housing crisis exacerbated by our recent fires and the pandemic - as reflected by the federal circuit injunction against the city for its handling of the unhoused. 32-4

Please do not allow this project to be approved. To do so invites litigation. 32-5

Sincerely,

Julian Zener
1621 N. Cherry St.
Chico, CA 95926

Comment Letter 33

To: Mike Sawley, Principal Planner, City of Chico
From: Tom Barrett
RE: Valley's Edge Specific Plan Draft Environmental Impact Report Comments
Date: Dec. 12, 2021

Valley's Edge Specific Plan Draft Environmental Impact Report Comments

The proposed Valley's Edge development would disturb almost 1,500 acres of extremely important transition zone between the Northern Sacramento Valley and the Foothills. 33-1

According to the Specific Plan:

> "*The proposed project includes a mixed-use community with a range of housing types, commercial uses, parks, trails and recreation and open space areas. The residential component would consist of approximately 1,392 Multi-Generational or family housing residential units and 1,385 age-restricted (55+) residential units. The commercial portion includes approximately 56 acres designated for a mix of professional and medical offices, neighborhood retail shops and services, multi-family apartments, day care, and hospitality uses. Approximately 672 acres would be designated as parks, trails, open space and preservation, including a large regional park, a community park, neighborhood parks, mini parks and tot lots, and an active adult park*."

While I have a lot of concerns about the proposed development, among them: traffic, air quality, greenhouse gas production, hydrology (run off vs. aquifer recharge), view shed destruction, wildfire-urban interface, access to the proposed parks, schools, creating water features where none exist on very shallow soils, etc.; what I would like to address, because it isn't addressed in the Draft EIR are the Mima mounds located on this property. 33-2

This property contains one of the last, almost undisturbed (livestock grazing has been going on for years) unique collection of Mima mounds in California. Mima mounds were once common along the transition zone on both sides of the Sacramento Valley and in Southern California; however, except for a few areas, these unique landforms have been developed into housing or agricultural developments. The Mima mound formations on this property are in relatively good shape but are one of the last of these landforms in California and Butte County. 33-3

The DEIR mentions "mounds" as a feature of the proposed development site but does not describe their uniqueness or rarity. Mima mounds haven't been hidden, they are well known by Chico's development and environmental community since the 1970's yet no steps have been taken to preserve these unique landforms. In fact, the development community claims that the environmental community gave them carte blanche to develop the "waste land" transition 33-4

zone and foothills in exchange for maintaining a “green line” in the fertile agricultural areas around Chico.

33-4 Cont.

Mima mounds, or as they are also known in other places, “pimple mounds” or “hog wallows”. According to the Washington Geologic Survey’s “Guide To Mima Mounds”, the name “mima” has been attributed to a word in the Chehalis language, of Washington, meaning “newness”, and a similar Chehalis word “mianumn” means “to be surprised”. However, Wikipedia reports that the “mima” a name derived from a Native American language meaning "a little further along" or "downstream in Thurston County, Washington. The name attributed these landforms by the local First Peoples is not known to this author. Arguments over name meaning and formation of these mounds continues; however, it doesn’t negate the fact that these are a rare and unique landform that need to be preserved and protected.

Once common in a number of states they have been greatly reduced in numbers and area. The State of Washington, protected their Mima mounds by creating the Mima Mounds Natural Area Preserve in 1976. The Secretary of the Interior had designated the area as a National Natural Landmark in 1966. None of our Butte County mounds or any other of the remaining mound areas have been afforded similar protection.

33-5

There is great debate over the mounds in terms of how and why they were formed. Some say that ground animals (gophers, mice, etc.) mounded up the soil and created prairie dog-like habitats, others say they are caused by glaciers, or wind, or earthquakes. However they were formed, they are a unique and interesting landform that needs to be protected before none exist.

Please address how these unique landforms can be protected if this development proceeds.

33-6

Mima Mound Photos

These photos were taken November 24, 2021 by Tom Barrett.

For the Valley's Edge DEIR-

First, I would like to address **Alternative #4**, Then **Aesthetics,** then **BEC's Alternatives,** and **my Preference.**

NO ON ALTERNATIVE #4:

I know that Alternative #4 might sound like the reasonable response to some, but for so many reasons, I do not see the need to build on this land. The direction of development in Chico needs to go towards the " Opportunity Sites" before the Special Planning Areas, (SPA's), as written in the Chico General Plan. And these listed "Opportunity Sites" would address the GHG mitigation as well, which cannot be mitigated in this plan. 34-1

Though I am not a hydrologist, I understood that development above the proposed Stonegate project would prevent the surface water flow and conditions which allow the endangered species and vernal pools below in the Stonegate property to thrive. And if Stonegate is, or is not, allowed to build, but Valley's Edge is, that would alter the surface water flow and potential subsequent thriving of the vernal pools and the endangered species, the main reason for denying Stonegate. 34-2

From the BEC Comments:

The hydrologic connection between the Valley's Edge site and the neighboring Stonegate site was inaccurately portrayed in the DEIR. The DEIR claims the sites are not hydrologically connected due to the Steve Harris Memorial Bikeway and the rock wall but that is false. The sites are hydrologically connected by culverts along Steve Harris Memorial Bikeway. Development in the VESP site will adversely affect the wetlands and the Butte County Meadowfoam preserved on the Stonegate site. 34-3

<u>Sensitive, Endangered, Threatened, and Species of Concern</u>
The species include the Butte County Meadowfoam, Valley Elderberry Longhorn Beetle, Western Spadefoot Toad, Western Pond Turtle, Burrowing Owl, Yellow Warbler, Loggerhead Strike, Native & Migratory Birds, Pallid Bat, and Valley Oaks. 34-4

Wetlands need to be hydrologically connected to the land in the drainage basin that feeds runoff water into the wetlands. Hydrologic interruption of the landscape that drains into protected wetlands Is considered a significant Impact According to the threshold of significance identified on DEIR 4.3- 48. Protected Wetlands Including vernal pools and swales substantially adversely affected by the hydrologic flow changes that would occur from the proposed development. The vast development of buildings and other in previous services proposed to occur upslope of the wetland complex located in the north drainage will undoubtedly hydrologically interrupt the flow of water in the north drainage resulting in significant impacts to protect the wetlands.

The specific causes of hydrologic interruption of the north drainage that would significantly impact protected wetlands include addition of impervious surfaces, increase of stormwater drainage, stormwater pollution caused by vehicle leaks, pesticides fertilizers and other chemicals derived from project operation, creation of “appropriately-sized basins and culverts... used to slow water and decrease downstream runoff rates” (DEIR 4.3-62). The “low gradient water quality swales and a vegetative basins with retention or detention features" (deir 4.3-62).

Seepage alterations as described in the Draft EIR and Appendix E the Geotechnical Report would significantly impact down slope wetlands. Seepage alterations that would result in significant impacts to protected wetlands include: development on top of or below seepage areas or springs; collection and diversion of spring water or seepage water into “storm drain lights or other suitable locations” (Appendix E Geotechnical 2019); the increased seepage water diversion that is called for Appendix E Geotechnical Report in the following circumstances: underground utility trenches; pavement subgrades; and structure development.

Each of the aforementioned causes of hydrologic interruption that would result from the implementation of the Valleys Edges Specific Plan would have potentially significant

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impacts on protected wetlands even with all of the proposed design considerations and mitigation measures. However, all of the aforementioned causes of hydrologic interruption would undoubtedly have a cumulatively significant and unavoidable impact to the hydrology of the site.

34-5

AESTHETICS:

First, I know EIR’s are always mostly written, but it is a distinct disadvantage for the reader in making a land decision to mostly be looking at the written word. Best would be to walk the land over the seasons, but these photos give at least a sense of it. These photos which I have taken over many years of

34-6

walking this land describe the beauty, the change of light and seasons, the diversity of trees and plants, the multitude of wildflowers, the spaciousness, where you can fully breathe.

And it is because there is “nothing” on the land that the clouds can be fully seen in their glory – dark and threatening, or pearlescent, orange or red, with the setting sun.

Aesthetics are not easily quantified, but the loss of our visual connection with the Foothills, and to our close wild places, is potentially great.
This is the reason people from Europe and other countries love to visit our wilderness. They have mostly lost theirs.

34-6 Cont.

VALLEY’S EDGE – DEIR RESPONSE – **AESTHETICS**

IN THE DEIR IT STATES:
ANTICIPATED ENVIRONMENTAL EFFECTS: The Draft EIR indicates that there would

be significant and unavoidable project impacts related to aesthetics (changes to the
existing visual character and public views of the project site), greenhouse gas emissions
(operational emissions). Impacts on the remaining environmental resources would be less
than significant either with or without implementation of mitigation. The project is not
located on any of the lists of sites enumerated under Section 65962.5 (Hazardous Sites of the Government Code.)
.

34-7

VIEWSHEDS: This pristine land is one of the only remaining properties in Chico, outside of the Upper Bidwell Park area, that connects Chico residents to the viewshed of the Foothills and the oak woodland savannah. As you look up at the property from lower streets and the Freeway, a built environment would certainly occlude that view and the city’s connection to the Place in which they live. The Foothills are one of the most important features which gives Chico its “sense of place”.

34-8

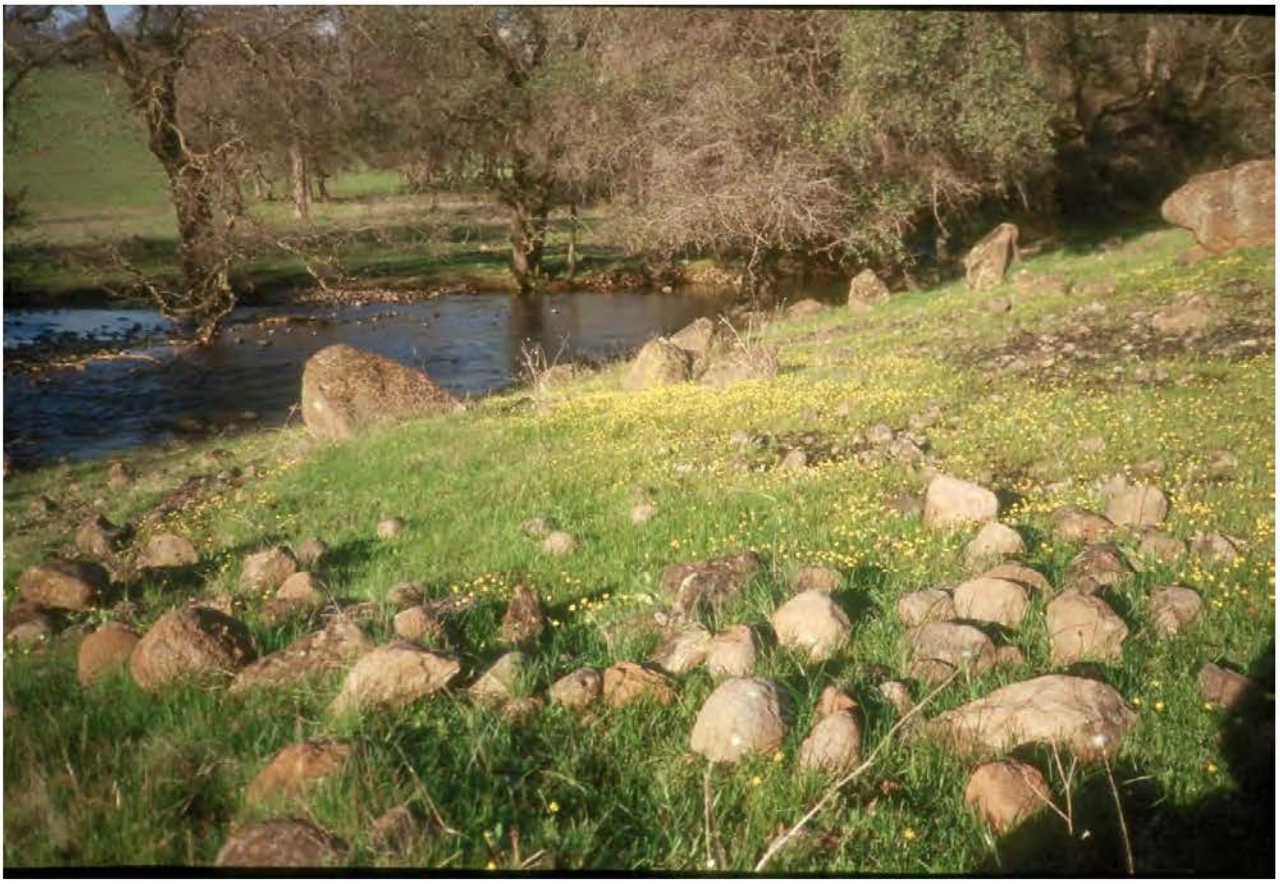
WILDERNESS: How many cities have the healing aspects of nature in their backyard? And if they do, it becomes a place of "re-creation", of "re-juvenation", of comfort and peace, accessible on a daily basis. We are lucky to have the marvelous gift of Annie Bidwell – Bidwell Park. How bereft we would be without it! And conversely, it is almost overused, and could well be augmented with another park.

But that is thinking of it for OUR HUMAN use only. What is extraordinary about this land is that it is truly still wild and pristine! It is still habitat for mountain lions, bears, coyotes, fox, wildcats, and so many other species. And so many birds! Acorn woodpeckers, bluejays, red shouldered hawks, turkey vultures, night hawks, burrowing owls, and so many migrating birds….and it's in our "back yard"! I'm increasingly aware that our human behavior assumes that we are the only species on earth that counts. I believe, rather, that we share this earth with many other species, and our failure to recognize the value of other species diminishes our own understanding and compassion. 34-9

LIGHT POLLUTION: One of the little-mentioned side effects of building a large development in a pristine area is light pollution. As I drive up Skyway from the developed and well-lit areas near the Freeway there is a decided relaxation as it gets darker. One can see the moon and the stars at night, and though it may sound romantic, it is more a sense of being at ease, and in connection with a larger reality, with the universe. With the light, there is a loss of that ease and connection, and the peace afforded those who see it at sunset or at night, without any light pollution, so that the moon and stars, the occurrences of meteor showers and lunar eclipses, which need darkness, can be fully experienced. In summer the color of the fields is flaxen, not brown, and when the moon shines on them at night they are light and reflective. 34-10

LOSS OF 1100 BLUE OAK TREES: It goes without saying that to construct housing for 2700+ units means you must clear a good amount of the area of the existing trees. Blue oaks take much longer to grow than most trees, and because this land is on lava cap, it requires special trees and plants that have adapted to this land with little soil. 34-11

THE LAND



,

This is BEC's section on Alternatives:

1. **Project Alternatives Potentially Supported**

Of the Alternatives given in the dEIR, only Alternative 1 adequately addresses the project's significant environmental impacts. Alternative 4, while it is a shift in the direction of an environmentally sound project, remains fundamentally harmful to the surrounding community and the planet. Additionally, Alternative 4 retains significantly more sprawl than in the land use projection of the General Plan. Alternative 6 rezones the property to a land use designation suited for the site's diverse sensitive species and habitat, to prioritize growth in other areas of the city (including the areas the city has designated for higher density, like the Corridor Opportunity Sites).

Alternative 5

The City of Chico needs to provide an Alternative 5, which extends the changes in Alternative 4 further and possibly incorporates other changes to achieve qualitative goals in line with the General Plan. Alternative 5 would have a more compact form with higher densities that would be supportive of transit: cumulatively between 15 and 22 dwelling units per acre. The higher density development would include more compact single-family homes and a greater diversity of other housing types by changing the zoning to allow for 90% of the dwelling units to be R2/R2-VE (Medium Density Residential), R3/R3-VE (Medium-High Density Residential), R4 (High Density Residential), and RMU (Residential Mixed Use), while 10% of the development can be zoned lower density residential. This alternative would not extend further east than the proposed collector street network. It would have increased open space, both accommodate reliable public transportation on the project site and enhance service to areas to the West; ensure on-site commercial can support basic needs in line with the Specific Plan claim to a "complete" and "20-minute" neighborhood, and ensure compliance with the Climate Action Plan and drafted Butte Regional Conservation Plan. In consultation with all relevant departments of city staff, this alternative ought to be formed in such a manner that the City would agree to adopt the basic infrastructure, obviating the necessity of an HOA and guaranteeing full public access and enjoyment of the area, as is the case with most neighborhoods.

34-12

The increase in density and open space would reduce the impact on sensitive species and protected wetlands, reduce vehicle miles traveled, and most likely reduce the level of significance for greenhouse gas emissions.

The community is unable to properly balance the needs for housing in Chico with goals like reducing dependence on automobiles, loss of habitat and biodiversity, and preservation of the foothills for public enjoyment when every alternative offered fails to do so. The focus of every project alternative on low-density residential zoning also falsely portrays this site as only capable of benefiting people of above moderate incomes,

ensuring development of this area will fail to address the city's documented housing needs.

Alternative 6
This alternative would rezone the property from Special Planning Area (SPA) to Open Space 1 (OS1) with a Resource Constraint Overlay, due to the fact that there are so many sensitive, threatened, and endangered species that would be impacted by development on this site. Open Space 1 would be better suited as a land use designation as the zone is appropriate for sites with environmental resources, including oak and riparian woodlands, wetlands, deer herd ranges, hillsides and viewshed management areas (City of Chico Land Use and Development Regulations 19.50.10). The site has all of the above sensitive habitats, and as such should be analyzed for this rezone.

Alternative 1
No Project/No Alternative would not negatively impact sensitive species, not increase greenhouse gas emissions and other air quality pollutants, there would be no changes to the scenic view, and would not increase vehicle trips. The Butte Environmental Council supports Alternative 1."

34-12 Cont.

I agree with BEC; I prefer Alternative #1 or #6.

34-13

Thank you for your consideration.

Elizabeth Devereaux

I am an architectural glass artist, and have made a living in my field for over 50 years. That artistic sensitivity to this pristine land has allowed me to understand and value the treasure this land is. (I think your DEIR Visual Resource rating would judge it a #7)

Comment Letter 35

FRAYJI DESIGN GROUP
CIVIL ENGINEERING | PLANNING | SURVEYING

MEMORANDUM

December 13, 2021

SUBJECT: Valley's Edge Specific Plan Draft EIR- Section 4.9

TO: Mike Sawley, mike.sawley@Chicoca.gov

Dear Mike,

Frayji Design Group, Inc, has reviewed the draft EIR for the Valley's Edge Specific Plan and in particular Section 4.9 and we recommend couple changes as stated below: 35-1

4.9 – Hydrology, Water Quality and Drainage Section:

1) On Figure 4.9-3 – Proposed Reach R5 Detention Basin; we recommend that the alternative detention volume be changed from 10 ac-ft to 15 ac-ft. This is based on "Drainage Report Addendum #1," which was prepared by Frayji Design Group on September 14, 2021 and provided to the City. This report has been amended as of 12/13/2021 to rectify any unclear language regarding development area within reach 6. (attached hereto) 35-2

2) Please update the notes section found on page 4.9-35 under Table 4.9-5. Replace 7.5 acre-feet with 15 acre-feet. 35-3

3) On page 4.9-36 we recommend the following edits: 35-4

    - Replace 7.5-acre-foot detention with 15-acre-foot detention under subsection "Reaches 5 and 6." And it should also be made clear that this detention is being proposed for both Reaches R5 and R6. This detention basin is sized to offset any increases from the development within Reach 5 and Northeast of Reach 6. The Development South of Reach 6 is very low density and based on the type of development we do not anticipate increased flow when comparing existing conditions to proposed conditions.

- We recommend removing all statements that detention is only required for Reach R5. Our initial study assumed detention by virtue of culvert downsizing along the road connecting the development to Honeyrun. The Memo provided in September 2021 provided the needed detention to offset any increases of runoff by the development if the roadway is not constructed. See attached amended report dated 12/13/2021 (attached hereto)

35-5

If you have any questions or comments please do not hesitate to reach out.

Sincerely,

Tony Frayji, PE
FRAYJI DESIGN GROUP, INC.

CC: Brian Spilman & Bill Brouhard

"VALLEY'S EDGE" SPECIFIC PLAN

MIXED-USE DEVELOPMENT

CITY OF CHICO, BUTTE COUNTY, CALIFORNIA

Amended Drainage Report Addendum #1

September 14, 2021

AMENDED: DECEMBER 13, 2021

REGISTERED PROFESSIONAL ENGINEER
TONY J. FRAYJI
No. 57265
Exp.
CIVIL
STATE OF CALIFORNIA

PREPARED BY:

Joseph Stebakov

UNDER THE DIRECT GUIDANCE AND SUPPERVISION OF:

Tony Frayji

FRAYJI DESIGN GROUP
CIVIL ENGINEERING | PLANNING | SURVEYING

FRAYJI DESIGN GROUP, INC.
1316 Blue Oaks Blvd
ROSEVILLE, CA 95678
(916) 782-3000

Purpose of Addendum

We are providing this report to address the potential elimination of the connecting street to Honeyrun Road and the need for alternative ways to mitigate the planning area's increased flow that was proposed to be detained with the culvert downsizing under the roadway as discussed in the drainage report dated 4/29/2020. The connecting road to Honeyrun Road shown in the Drainage report was used to detain the increased flow. However, with this road being eliminated, the detention needs to be mitigated. It is noteworthy to mention that during major events, flows from Reaches 5 and 6 are combined as they reach Honeyrun Road and inundate the area between the two sets of culverts.

Various software and tools were used to calculate the difference in flow and the amount of runoff that needs to be detained for the 100 year storm event to maintain existing condition flows.

Summary of Work Performed

The storm and Sanitary Analysis model (SSA) has been updated with shed area F2 divided into two sub shed areas (F2A & F2B). This was done for the purposes of determining the amount of runoff needed to be detained. A portion of the runoff that was initially contributing directly to Reach 6 has been diverted into Reach 5. The new discharge values produced by shed area F2 (F2A + F2B) were then input into HEC-RAS and the proposed culverts and roadway intersecting Reaches 5 and 6 have been removed. The HEC-RAS model was then updated to reflect the detention inflow required in order to account for the increase in discharge, due to the absence of the culvert downsizing. A spreadsheet was then created to represent the volume of storage required for the 100 year storm event due to the updated development. Please see sections below for more information.

Post-Dev Storm and Sanitary Analysis (SSA)

Shed area F2 was divided into sub shed areas F2A and F2B. This was done in order to determine the exact runoff going into Reach 5 (R5) and the remaining runoff directly contributing to Reach 6 (R6). Shed area F1 was adjusted as well. The CN values and areas representing those values were then updated in the model. A CN value of 98 was used for roadways and paved parking/roofs. The open space areas maintained a CN value of 83. A CN value of 79 was added to the model for the woods/trees area to match the pre-developed model. A CN value of 80 was used for all landscaping. It was also assumed that 55% of lot areas consist of landscaping while 45% of it was considered impervious parking/roofs. Please

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see Figure 1 below for CN values used. The analysis was then performed and new time series plots were generated for shed areas F1, F2A and F2B for the 2yr, 10yr and 100yr storm events. All other time series plots for the remaining shed areas were left as is. Please see **Exhibit 1 – Post-TimeSeriesPlotsR5-R6 (SSA)** for the new discharge values obtained for shed areas F1, F2A and F2B. The **Updated Storm and Sanitary Analysis (SSA)** model has also been provided for your review.

General
Subbasin ID: BASIN-F2A

Connectivity
Rain gage: Rain Gage-Butte-Cher ...
Outlet node: JUNCTION-15

Description:

Physical Properties SCS TR-55 TOC Curve Number

Composite curve number

	Area (ac)	Area (%)	Curve Number	Soil Group	Description
1	31.5500	24.94	80	D	> 75% grass cover, Good
2	25.8100	20.40	98	D	Paved parking & roofs
3	14.1100	11.15	98	D	Paved roads with curbs & sewers
4	55.0500	43.51	83	D	Brush, Poor
5					
6					

Total area: 126.520 ac Total area: 100.00 % Weighted CN: 86.98

	Subbasin ID	Area	Wt. CN	TOC	Rain Gage ID
1	BASIN-F2A	126.520	86.98	33.45	Rain Gage-Butte-
2	{Drainage-UnDEV}.D	9.518	86.98	33.45	Rain Gage-Butte-
3	{Drainage-UnDEV}.D	9.990	84.52	16.06	Rain Gage-Butte-
4	{Drainage-UnDEV}.D	10.740	84.41	17.49	Rain Gage-Butte-
5	{Drainage-UnDEV}.D	4.502	84.84	15.92	Rain Gage-Butte-
6	{Drainage-UnDEV}.D	7.555	84.43	16.01	Rain Gage-Butte-

Figure 1: Curve Numbers (CN) used for Post-Developed Shed F2A

Post-Dev (HEC-RAS)

The Post-Developed HEC-RAS model was then updated to include the new time series plots for shed Areas F1 and F2 (F2A+F2B). The berm at connection "RD (Minor) CP6" was removed as well as the initially proposed culverts. The first analysis was performed assuming no detention around Reach 5 (R5). The 2yr, 10yr and 100yr storm events were analyzed. Once the results were obtained the detention requirements were determined. The next set of runs implemented the detention inflow that would be required for mitigation. Please see Tables 1 through 6 below for a comparison of the 2yr, 10yr and 100yr discharge rates (Q's) at existing roadways (Connections) before and after detention is taken into account. As you can see, different flow values are only seen in connection "RD(Humbug)C5,C6" when comparing to the report. These are highlighted in blue within the tables. Tables 1, 2 and 3 show original discharge rates for the Pre-Developed state and new values for the Post-Developed state, assuming no mitigation. Tables 4, 5 and 6 show original discharge rates for the Pre-Developed state and new Q values for the Post-Developed state, with mitigation taken into account. Results are shown for the 2yr, 10yr and 100yr storm events. Please see the attached **Updated HEC-RAS** model for more information and the attached **Spreadsheet 1 – Detention Basin Calcs (R5+R6)** for detention requirement calculations. Discharge values are subject to change for the Post-Developed conditions during the final phases of design due to multiple factors. These values however will not exceed the Pre-Developed flow values.

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
2 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	89.4	89	Qtot =	593.3	586.6	Qtot =	276.6	269.2	Qtot =	1440.2	1535.3
C1A =	49.5	48.2	C1E =	69.1	67.7	C4A =	96.4	95.9	C5A,B =	161.9	161.8
C1B =	40	40.7	C2A,B =	197	196.2	C4B =	68.2	68	C6A,B,C =	290.9	291.9
Weir Flow =	0	0	C3A =	0	4	Weir Flow =	111.9	105.4	C6D =	166.3	170.0
			Weir Flow =	323.4	319.1				Weir Flow =	821.2	912.0

Table 1: 2yr Pre vs. Post Discharge at Existing Connections (No detention)

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
10 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	153.1	135.5	Qtot =	1027.5	930.5	Qtot =	392.2	388.1	Qtot =	2360.5	2617.5
C1A =	88.5	77.1	C1E =	94.6	86.2	C4A =	102.9	102.7	C5A,B =	165.5	167.0
C1B =	64.6	58.4	C2A,B =	221.1	215.9	C4B =	71.6	71.5	C6A,B,C =	324	329.5
Weir Flow =	0	0	C3A =	0	4.1	Weir Flow =	217.7	213.9	C6D =	202.7	211.3
			Weir Flow =	707.7	625.4				Weir Flow =	1668.4	1909.7

Table 2: 10yr Pre vs. Post Discharge at Existing Connections (No Detention)

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
100 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	306.1	241.7	Qtot =	2048.2	1624.2	Qtot =	822.3	652.3	Qtot =	4941.2	5251.8
C1A =	170.1	144.3	C1E =	139.3	121.1	C4A =	117	112.4	C5A,B =	174.5	178.1
C1B =	111.4	97.4	C2A,B =	260.5	245.8	C4B =	79.2	76.7	C6A,B,C =	375.2	377.4
Weir Flow =	24.6	0	C3A =	0	4.2	Weir Flow =	626.1	463.2	C6D =	275.4	283.5
			Weir Flow =	1644.1	1253.1				Weir Flow =	4113.3	4412.8

Table 3: 100yr Pre vs. Post Discharge at Existing Connections (No Detention)

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
2 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	89.4	89	Qtot =	593.3	586.6	Qtot =	276.6	269.2	Qtot =	1440.2	1415.4
C1A =	49.5	48.2	C1E =	69.1	67.7	C4A =	96.4	95.9	C5A,B =	161.9	161.3
C1B =	40	40.7	C2A,B =	197	196.2	C4B =	68.2	68	C6A,B,C =	290.9	286.3
Weir Flow =	0	0	C3A =	0	4	Weir Flow =	111.9	105.4	C6D =	166.3	164.2
			Weir Flow =	323.4	319.1				Weir Flow =	821.2	804.2

Table 4: 2yr Pre vs. Post Discharge at Existing Connections (With Detention)

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
10 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	153.1	135.5	Qtot =	1027.5	930.5	Qtot =	392.2	388.1	Qtot =	2360.5	2356.2
C1A =	88.5	77.1	C1E =	94.6	86.2	C4A =	102.9	102.7	C5A,B =	165.5	165.7
C1B =	64.6	58.4	C2A,B =	221.1	215.9	C4B =	71.6	71.5	C6A,B,C =	324	322.0
Weir Flow =	0	0	C3A =	0	4.1	Weir Flow =	217.7	213.9	C6D =	202.7	202.1
			Weir Flow =	707.7	625.4				Weir Flow =	1668.4	1666.4

Table 5: 10yr Pre vs. Post Discharge at Existing Connections (With Detention)

PRE VS. POST DISCHARGE AT EXISTING CONNECTIONS (HECRAS)											
100 Year Storm (cfs)											
R1			R1+R2+R3			R4+R4T			R5+R6		
RD(Dawncrest)C1A,C1B			RD(PotterN)C1-C3			RD(PotterS)C4			RD(Humbug)C5,C6		
	PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)		PRE (cfs)	POST (cfs)
Qtot =	306.1	241.7	Qtot =	2048.2	1624.2	Qtot =	822.3	652.3	Qtot =	4941.2	4892.0
C1A =	170.1	144.3	C1E =	139.3	121.1	C4A =	117	112.4	C5A,B =	174.5	176.7
C1B =	111.4	97.4	C2A,B =	260.5	245.8	C4B =	79.2	76.7	C6A,B,C =	375.2	372.6
Weir Flow =	24.6	0	C3A =	0	4.2	Weir Flow =	626.1	463.2	C6D =	275.4	274.9
			Weir Flow =	1644.1	1253.1				Weir Flow =	4113.3	4067.8

Table 6: 100yr Pre vs. Post Discharge at Existing Connections (With Detention)

Detention Basin Calculations (Reaches 5 and 6)

Time series plots produced by HEC-RAS at connection "RD(Humbug)C5,C6" were used to calculate the basin requirements for R5 and R6. An excel spreadsheet was used for calculating the volume of storage required for the 100 year event (see attached **Spreadsheet 1 – Detention Basin Calcs (R5+R6)**). An equation was set up to take the difference between the developed (unmitigated) and undeveloped Q values obtained from HEC-RAS for each 10 min time interval. This flow was then multiplied by 60 (seconds) and then by 15 (minutes) to give a volume of 605448 ft^3. This means that the amount of detention required for a 24 hour storm event is approximately 14 AC-FT. An assumed basin depth of 4 ft was applied, giving a minimum required detention acreage of 3.5 AC. Please see **Exhibit 2 – Proposed Detention Exhibit (R5+R6)**, which shows the location and acreage of the proposed detention basin area.

Proposed Mitigation Measures (Reaches 5 and 6)

In order to decrease the storm water flows at Honeyrun Road to match the undeveloped condition we are proposing the construction of a detention basin as shown on the attached **Exhibit 2 – Proposed Detention Exhibit (R5+R6)**. Additional measures may include attention measuring within the roadway and/or within individual subdivisions or phases as may be determined during the design phase and once approved by the city. Please note that data presented herein is preliminary, and the location of the detention basin is approximate. Once the planning area enters the improvement plan phase and a Storm Drainage Master Plan is submitted, it is very likely that stormwater discharge rates will be quite lower due to routing through the storm drain system and overall increase in time of concentration. Therefore, both the size and location of the basin are subject to change.

It is understood that these drainage basins will be constructed during the grading phase of construction of the relevant phase and thus mitigating any potential increases prior to any improvements being completed and/or houses being built. A more detailed inlet and outlet design will have to be provided and all permitting will have to be obtained prior to any construction moving forward.

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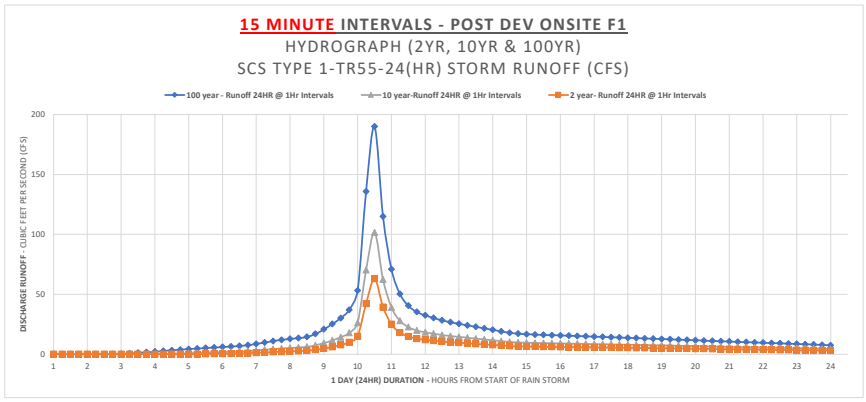
Project No.	28100 - Valleys Edge
Prepared by:	J. Stebakov
Checked by:	T. Frayji
Date:	December 13, 2021

Exhibit 1 — TIME SERIES PLOTS - Post Dev. Onsite F1 (Updated)

24hr / 2 Yr		24hr / 10 Yr		24hr / 100 Yr	
2 year- Runoff 24HR @ 1Hr Intervals		**10 year-**Runoff 24HR @ 1Hr Intervals		**100 year -** Runoff 24HR @ 1Hr Intervals	
Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)
0.2500	0.0000	0.2500	0.0000	0.2500	0.0000
0.5000	0.0000	0.5000	0.0000	0.5000	0.0000
0.7500	0.0000	0.7500	0.0000	0.7500	0.0000
1.0000	0.0000	1.0000	0.0000	1.0000	0.0000
1.2500	0.0000	1.2500	0.0000	1.2500	0.0000
1.5000	0.0000	1.5000	0.0000	1.5000	0.0000
1.7500	0.0000	1.7500	0.0000	1.7500	0.0000
2.0000	0.0000	2.0000	0.0000	2.0000	0.0000
2.2500	0.0000	2.2500	0.0000	2.2500	0.0000
2.5000	0.0000	2.5000	0.0000	2.5000	0.0000
2.7500	0.0000	2.7500	0.0000	2.7500	0.0282
3.0000	0.0000	3.0000	0.0000	3.0000	0.2540
3.2500	0.0000	3.2500	0.0000	3.2500	0.6570
3.5000	0.0000	3.5000	0.0000	3.5000	1.1300
3.7500	0.0000	3.7500	0.0000	3.7500	1.6334
4.0000	0.0000	4.0000	0.0128	4.0000	2.1560
4.2500	0.0000	4.2500	0.1276	4.2500	2.6942
4.5000	0.0000	4.5000	0.3400	4.5000	3.2374
4.7500	0.0000	4.7500	0.5830	4.7500	3.7550
5.0000	0.0000	5.0000	0.8310	5.0000	4.2393
5.2500	0.0386	5.2500	1.0790	5.2500	4.7009
5.5000	0.1459	5.5000	1.3228	5.5000	5.1492
5.7500	0.2825	5.7500	1.5623	5.7500	5.5796
6.0000	0.4272	6.0000	1.7979	6.0000	5.9980
6.2500	0.5731	6.2500	2.0298	6.2500	6.4013
6.5000	0.7263	6.5000	2.2765	6.5000	6.8453
6.7500	0.9211	6.7500	2.6326	6.7500	7.5835
7.0000	1.1690	7.0000	3.1013	7.0000	8.5967
7.2500	1.4616	7.2500	3.6447	7.2500	9.7539
7.5000	1.7863	7.5000	4.2266	7.5000	10.9440
7.7500	2.0968	7.7500	4.7476	7.7500	11.9332
8.0000	2.3852	8.0000	5.2013	8.0000	12.7259
8.2500	2.6667	8.2500	5.6295	8.2500	13.4420
8.5000	3.0070	8.5000	6.1750	8.5000	14.4042
8.7500	3.7118	8.7500	7.4170	8.7500	16.9160
9.0000	4.7989	9.0000	9.3339	9.0000	20.8145
9.2500	6.1107	9.2500	11.5667	9.2500	25.2317
9.5000	7.6718	9.5000	14.1526	9.5000	30.1787
9.7500	9.8783	9.7500	17.7473	9.7500	36.9727
10.0000	15.0489	10.0000	26.2683	10.0000	53.1854
10.2500	42.2204	10.2500	70.2223	10.2500	135.8024
10.5000	62.9913	10.5000	101.6165	10.5000	190.0770
10.7500	39.3986	10.7500	62.4158	10.7500	115.0192
11.0000	24.9718	11.0000	39.0540	11.0000	71.0117
11.2500	18.0653	11.2500	27.9561	11.2500	50.3097
11.5000	14.7429	11.5000	22.6640	11.5000	40.4852
11.7500	12.9678	11.7500	19.8135	11.7500	35.2295
12.0000	12.0124	12.0000	18.2950	12.0000	32.4044
12.2500	11.2729	12.2500	17.1230	12.2500	30.2493
12.5000	10.5945	12.5000	16.0574	12.5000	28.2951
12.7500	10.0322	12.7500	15.1750	12.7500	26.6825
13.0000	9.5592	13.0000	14.4339	13.0000	25.3340
13.2500	9.1103	13.2500	13.7302	13.2500	24.0622
13.5000	8.6634	13.5000	13.0348	13.5000	22.8085
13.7500	8.2105	13.7500	12.3364	13.7500	21.5520
14.0000	7.7527	14.0000	11.6329	14.0000	20.3014
14.2500	7.2888	14.2500	10.9224	14.2500	19.0448
14.5000	6.8493	14.5000	10.2517	14.5000	17.8556
14.7500	6.5700	14.7500	9.8235	14.7500	17.0940
15.0000	6.4277	15.0000	9.6000	15.0000	16.6893
15.2500	6.3273	15.2500	9.4405	15.2500	16.3959
15.5000	6.2387	15.5000	9.3005	15.5000	16.1384
15.7500	6.1530	15.7500	9.1634	15.7500	15.8900
16.0000	6.0668	16.0000	9.0287	16.0000	15.6430
16.2500	5.9793	16.2500	8.8927	16.2500	15.3941
16.5000	5.8921	16.5000	8.7552	16.5000	15.1460
16.7500	5.8039	16.7500	8.6166	16.7500	14.8980
17.0000	5.7137	17.0000	8.4784	17.0000	14.6473
17.2500	5.6244	17.2500	8.3388	17.2500	14.3964
17.5000	5.5334	17.5000	8.1988	17.5000	14.1464
17.7500	5.4412	17.7500	8.0572	17.7500	13.8960
18.0000	5.3486	18.0000	7.9155	18.0000	13.6440
18.2500	5.2564	18.2500	7.7731	18.2500	13.3908
18.5000	5.1628	18.5000	7.6303	18.5000	13.1370
18.7500	5.0688	18.7500	7.4865	18.7500	12.8837
19.0000	4.9739	19.0000	7.3427	19.0000	12.6302
19.2500	4.8788	19.2500	7.1984	19.2500	12.3747
19.5000	4.7822	19.5000	7.0542	19.5000	12.1202
19.7500	4.6865	19.7500	6.9079	19.7500	11.8657
20.0000	4.5898	20.0000	6.7622	20.0000	11.6102
20.2500	4.4921	20.2500	6.6159	20.2500	11.3516
20.5000	4.3944	20.5000	6.4696	20.5000	11.0961
20.7500	4.2967	20.7500	6.3213	20.7500	10.8404
21.0000	4.1976	21.0000	6.1740	21.0000	10.5840
21.2500	4.0989	21.2500	6.0267	21.2500	10.3276
21.5000	3.9992	21.5000	5.8778	21.5000	10.0701
21.7500	3.8998	21.7500	5.7285	21.7500	9.8115
22.0000	3.8005	22.0000	5.5802	22.0000	9.5531
22.2500	3.6999	22.2500	5.4309	22.2500	9.2945
22.5000	3.5988	22.5000	5.2817	22.5000	9.0360
22.7500	3.4981	22.7500	5.1320	22.7500	8.7780
23.0000	3.3964	23.0000	4.9826	23.0000	8.5190
23.2500	3.2957	23.2500	4.8323	23.2500	8.2599
23.5000	3.1940	23.5000	4.6820	23.5000	7.9989
23.7500	3.0918	23.7500	4.5307	23.7500	7.7404
24.0000	2.9896	24.0000	4.3794	24.0000	7.4810

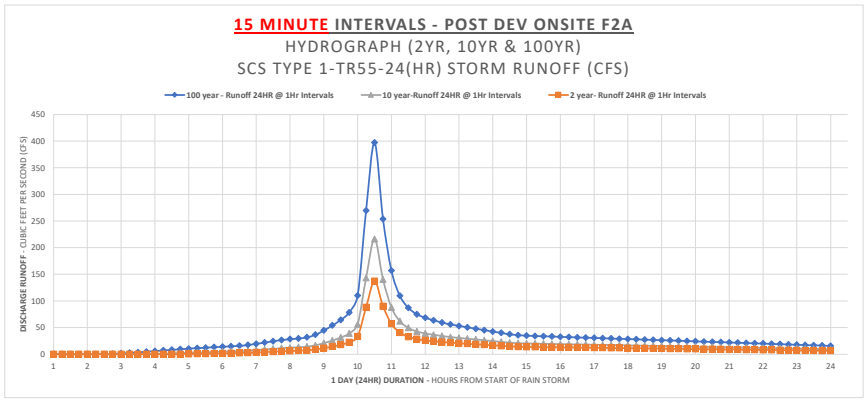


FRAYJI DESIGN GROUP
CIVIL ENGINEERING | PLANNING | SURVEYING

Project No.	28100 - Valleys Edge
Prepared by:	J. Stebakov
Checked by:	T. Frayji
Date:	December 13, 2021

Exhibit 1 — TIME SERIES PLOTS - Post Dev. Onsite F2A (Updated)

24hr / 2 Yr		24hr / 10 Yr		24hr / 100 Yr	
2 year- Runoff 24HR @ 1Hr Intervals		**10 year-**Runoff 24HR @ 1Hr Intervals		**100 year -** Runoff 24HR @ 1Hr Intervals	
Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)
0.2500	0.0000	0.2500	0.0000	0.2500	0.0000
0.5000	0.0000	0.5000	0.0000	0.5000	0.0000
0.7500	0.0000	0.7500	0.0000	0.7500	0.0000
1.0000	0.0000	1.0000	0.0000	1.0000	0.0000
1.2500	0.0000	1.2500	0.0000	1.2500	0.0000
1.5000	0.0000	1.5000	0.0000	1.5000	0.0000
1.7500	0.0000	1.7500	0.0000	1.7500	0.0000
2.0000	0.0000	2.0000	0.0000	2.0000	0.0000
2.2500	0.0000	2.2500	0.0000	2.2500	0.0000
2.5000	0.0000	2.5000	0.0000	2.5000	0.0916
2.7500	0.0000	2.7500	0.0000	2.7500	0.6187
3.0000	0.0000	3.0000	0.0000	3.0000	1.4991
3.2500	0.0000	3.2500	0.0000	3.2500	2.5163
3.5000	0.0000	3.5000	0.0035	3.5000	3.6028
3.7500	0.0000	3.7500	0.1253	3.7500	4.7260
4.0000	0.0000	4.0000	0.4934	4.0000	5.8795
4.2500	0.0000	4.2500	0.9953	4.2500	7.0548
4.5000	0.0025	4.5000	1.5507	4.5000	8.2294
4.7500	0.0794	4.7500	2.1131	4.7500	9.3410
5.0000	0.3108	5.0000	2.6656	5.0000	10.3615
5.2500	0.6123	5.2500	3.2037	5.2500	11.3274
5.5000	0.9364	5.5000	3.7333	5.5000	12.2536
5.7500	1.2628	5.7500	4.2483	5.7500	13.1419
6.0000	1.5888	6.0000	4.7568	6.0000	14.0007
6.2500	1.9120	6.2500	5.2510	6.2500	14.8263
6.5000	2.2478	6.5000	5.7776	6.5000	15.7313
6.7500	2.6920	6.7500	6.5445	6.7500	17.2430
7.0000	3.2694	7.0000	7.5878	7.0000	19.3914
7.2500	3.9524	7.2500	8.7993	7.2500	21.8586
7.5000	4.6989	7.5000	10.0947	7.5000	24.4173
7.7500	5.4053	7.7500	11.2432	7.7500	26.5407
8.0000	6.0404	8.0000	12.2229	8.0000	28.2093
8.2500	6.6514	8.2500	13.1255	8.2500	29.6793
8.5000	7.3827	8.5000	14.2543	8.5000	31.6107
8.7500	8.9225	8.7500	16.8357	8.7500	36.6459
9.0000	11.3509	9.0000	20.9837	9.0000	44.7537
9.2500	14.2868	9.2500	25.8598	9.2500	54.0639
9.5000	17.7221	9.5000	31.4037	9.5000	64.3781
9.7500	22.4791	9.7500	39.0211	9.7500	78.3381
10.0000	33.1360	10.0000	56.1782	10.0000	109.9313
10.2500	88.0644	10.2500	143.2214	10.2500	269.6555
10.5000	137.1091	10.5000	216.3783	10.5000	397.3098
10.7500	90.2021	10.7500	140.4503	10.7500	253.9293
11.0000	56.9644	11.0000	87.7133	11.0000	156.8561
11.2500	40.6323	11.2500	61.8756	11.2500	109.6670
11.5000	32.6673	11.5000	49.4585	11.5000	87.0900
11.7500	28.4393	11.7500	42.8288	11.7500	75.0640
12.0000	26.0477	12.0000	39.1185	12.0000	68.3363
12.2500	24.3809	12.2500	36.5127	12.2500	63.6458
12.5000	22.8717	12.5000	34.1935	12.5000	59.4831
12.7500	21.6191	12.7500	32.2530	12.7500	56.0101
13.0000	20.5738	13.0000	30.6436	13.0000	53.1390
13.2500	19.5928	13.2500	29.1350	13.2500	50.4455
13.5000	18.6181	13.5000	27.6508	13.5000	47.8068
13.7500	17.6409	13.7500	26.1620	13.7500	45.1896
14.0000	16.6500	14.0000	24.6650	14.0000	42.5553
14.2500	15.6537	14.2500	23.1608	14.2500	39.9280
14.5000	14.6982	14.5000	21.7272	14.5000	37.4191
14.7500	14.0661	14.7500	20.7734	14.7500	35.7470
15.0000	13.7291	15.0000	20.2612	15.0000	34.8384
15.2500	13.4995	15.2500	19.9061	15.2500	34.2001
15.5000	13.3014	15.5000	19.5978	15.5000	33.6483
15.7500	13.1113	15.7500	19.3039	15.7500	33.1235
16.0000	12.9233	16.0000	19.0132	16.0000	32.6031
16.2500	12.7339	16.2500	18.7227	16.2500	32.0827
16.5000	12.5436	16.5000	18.4290	16.5000	31.5609
16.7500	12.3508	16.7500	18.1345	16.7500	31.0419
17.0000	12.1564	17.0000	17.8391	17.0000	30.5175
17.2500	11.9612	17.2500	17.5423	17.2500	29.9921
17.5000	11.7648	17.5000	17.2441	17.5000	29.4667
17.7500	11.5667	17.7500	16.9442	17.7500	28.9423
18.0000	11.3683	18.0000	16.6442	18.0000	28.4149
18.2500	11.1674	18.2500	16.3430	18.2500	27.8871
18.5000	10.9665	18.5000	16.0396	18.5000	27.3571
18.7500	10.7647	18.7500	15.7358	18.7500	26.8280
19.0000	10.5604	19.0000	15.4312	19.0000	26.2986
19.2500	10.3572	19.2500	15.1265	19.2500	25.7650
19.5000	10.1510	19.5000	14.8196	19.5000	25.2346
19.7500	9.9450	19.7500	14.5117	19.7500	24.7030
20.0000	9.7376	20.0000	14.2037	20.0000	24.1715
20.2500	9.5293	20.2500	13.8959	20.2500	23.6340
20.5000	9.3209	20.5000	13.5859	20.5000	23.1026
20.7500	9.1113	20.7500	13.2757	20.7500	22.5670
21.0000	8.9017	21.0000	12.9641	21.0000	22.0336
21.2500	8.6903	21.2500	12.6543	21.2500	21.4964
21.5000	8.4787	21.5000	12.3423	21.5000	20.9609
21.7500	8.2673	21.7500	12.0285	21.7500	20.4252
22.0000	8.0537	22.0000	11.7155	22.0000	19.8886
22.2500	7.8413	22.2500	11.4027	22.2500	19.3500
22.5000	7.6267	22.5000	11.0887	22.5000	18.8137
22.7500	7.4123	22.7500	10.7739	22.7500	18.2752
23.0000	7.1977	23.0000	10.4583	23.0000	17.7367
23.2500	6.9823	23.2500	10.1428	23.2500	17.1984
23.5000	6.7667	23.5000	9.8281	23.5000	16.6590
23.7500	6.5503	23.7500	9.5100	23.7500	16.1217
24.0000	6.3337	24.0000	9.1943	24.0000	15.5816

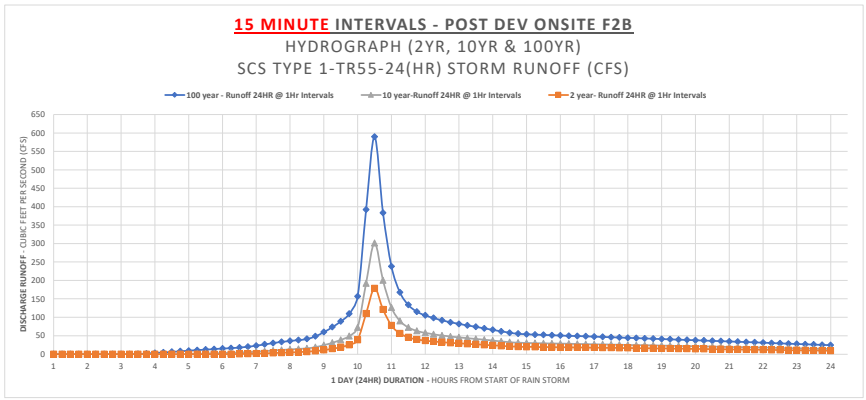


FRAYJI DESIGN GROUP
CIVIL ENGINEERING | PLANNING | SURVEYING

Project No.	28100 - Valleys Edge
Prepared by:	J. Stebakov
Checked by:	T. Frayji
Date:	December 13, 2021

Exhibit 1 — TIME SERIES PLOTS - Post Dev. Onsite F2B (Updated)

24hr / 2 Yr		24hr / 10 Yr		24hr / 100 Yr	
2 year- Runoff 24HR @ 1Hr Intervals		**10 year-**Runoff 24HR @ 1Hr Intervals		**100 year -** Runoff 24HR @ 1Hr Intervals	
Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)	Time (hrs)	Runoff (cfs)
0.2500	0.0000	0.2500	0.0000	0.2500	0.0000
0.5000	0.0000	0.5000	0.0000	0.5000	0.0000
0.7500	0.0000	0.7500	0.0000	0.7500	0.0000
1.0000	0.0000	1.0000	0.0000	1.0000	0.0000
1.2500	0.0000	1.2500	0.0000	1.2500	0.0000
1.5000	0.0000	1.5000	0.0000	1.5000	0.0000
1.7500	0.0000	1.7500	0.0000	1.7500	0.0000
2.0000	0.0000	2.0000	0.0000	2.0000	0.0000
2.2500	0.0000	2.2500	0.0000	2.2500	0.0000
2.5000	0.0000	2.5000	0.0000	2.5000	0.0000
2.7500	0.0000	2.7500	0.0000	2.7500	0.0000
3.0000	0.0000	3.0000	0.0000	3.0000	0.0000
3.2500	0.0000	3.2500	0.0000	3.2500	0.0687
3.5000	0.0000	3.5000	0.0000	3.5000	0.6797
3.7500	0.0000	3.7500	0.0000	3.7500	1.8732
4.0000	0.0000	4.0000	0.0000	4.0000	3.3096
4.2500	0.0000	4.2500	0.0000	4.2500	4.8618
4.5000	0.0000	4.5000	0.0000	4.5000	6.4800
4.7500	0.0000	4.7500	0.0722	4.7500	8.0656
5.0000	0.0000	5.0000	0.4633	5.0000	9.5891
5.2500	0.0000	5.2500	1.0872	5.2500	11.0672
5.5000	0.0000	5.5000	1.7874	5.5000	12.5024
5.7500	0.0000	5.7500	2.5032	5.7500	13.8966
6.0000	0.0180	6.0000	3.2205	6.0000	15.2650
6.2500	0.1928	6.2500	3.9356	6.2500	16.5915
6.5000	0.5429	6.5000	4.6769	6.5000	18.0109
6.7500	1.0120	6.7500	5.6449	6.7500	20.1720
7.0000	1.6088	7.0000	6.9072	7.0000	23.1273
7.2500	2.3375	7.2500	8.3901	7.2500	26.5541
7.5000	3.1764	7.5000	10.0221	7.5000	30.1882
7.7500	4.0407	7.7500	11.5760	7.7500	33.3461
8.0000	4.8901	8.0000	12.9792	8.0000	35.9698
8.2500	5.7340	8.2500	14.3279	8.2500	38.3780
8.5000	6.7106	8.5000	15.9524	8.5000	41.3989
8.7500	8.5127	8.7500	19.3112	8.7500	48.5991
9.0000	11.3226	9.0000	24.6244	9.0000	60.1554
9.2500	14.8497	9.2500	31.0621	9.2500	73.6065
9.5000	19.1738	9.5000	38.6127	9.5000	88.8351
9.7500	25.2436	9.7500	49.0761	9.7500	109.6171
10.0000	38.8799	10.0000	72.7042	10.0000	156.5343
10.2500	110.1409	10.2500	192.3901	10.2500	392.0803
10.5000	178.8282	10.5000	301.6712	10.5000	589.8563
10.7500	121.3035	10.7500	200.2783	10.7500	383.6224
11.0000	77.9340	11.0000	126.7406	11.0000	238.4420
11.2500	56.3226	11.2500	90.2504	11.2500	167.7278
11.5000	45.7257	11.5000	72.5699	11.5000	133.6111
11.7500	40.0458	11.7500	63.1438	11.7500	115.4281
12.0000	36.8520	12.0000	57.7999	12.0000	105.1966
12.2500	34.6159	12.2500	54.0987	12.2500	98.1310
12.5000	32.5800	12.5000	50.7733	12.5000	91.7990
12.7500	30.8836	12.7500	47.9833	12.7500	86.5460
13.0000	29.4716	13.0000	45.6729	13.0000	82.1852
13.2500	28.1272	13.2500	43.5007	13.2500	78.0892
13.5000	26.7920	13.5000	41.3426	13.5000	74.0821
13.7500	25.4363	13.7500	39.1781	13.7500	70.0773
14.0000	24.0521	14.0000	36.9913	14.0000	66.0414
14.2500	22.6494	14.2500	34.7720	14.2500	62.0003
14.5000	21.3046	14.5000	32.6580	14.5000	58.1506
14.7500	20.4129	14.7500	31.2459	14.7500	55.5588
15.0000	19.9522	15.0000	30.4980	15.0000	54.1661
15.2500	19.6427	15.2500	29.9886	15.2500	53.1966
15.5000	19.3761	15.5000	29.5497	15.5000	52.3574
15.7500	19.1240	15.7500	29.1276	15.7500	51.5636
16.0000	18.8711	16.0000	28.7133	16.0000	50.7772
16.2500	18.6151	16.2500	28.2957	16.2500	49.9836
16.5000	18.3552	16.5000	27.8726	16.5000	49.1932
16.7500	18.0930	16.7500	27.4458	16.7500	48.4006
17.0000	17.8260	17.0000	27.0183	17.0000	47.6009
17.2500	17.5576	17.2500	26.5851	17.2500	46.7972
17.5000	17.2846	17.5000	26.1501	17.5000	45.9950
17.7500	17.0095	17.7500	25.7110	17.7500	45.1879
18.0000	16.7314	18.0000	25.2693	18.0000	44.3794
18.2500	16.4511	18.2500	24.8270	18.2500	43.5687
18.5000	16.1666	18.5000	24.3806	18.5000	42.7524
18.7500	15.8818	18.7500	23.9291	18.7500	41.9401
19.0000	15.5928	19.0000	23.4795	19.0000	41.1235
19.2500	15.3025	19.2500	23.0268	19.2500	40.2987
19.5000	15.0093	19.5000	22.5703	19.5000	39.4789
19.7500	14.7150	19.7500	22.1116	19.7500	38.6583
20.0000	14.4176	20.0000	21.6539	20.0000	37.8323
20.2500	14.1192	20.2500	21.1913	20.2500	37.0026
20.5000	13.8176	20.5000	20.7293	20.5000	36.1769
20.7500	13.5159	20.7500	20.2625	20.7500	35.3459
21.0000	13.2115	21.0000	19.7958	21.0000	34.5162
21.2500	12.9054	21.2500	19.3285	21.2500	33.6842
21.5000	12.5979	21.5000	18.8597	21.5000	32.8481
21.7500	12.2904	21.7500	18.3860	21.7500	32.0163
22.0000	11.9786	22.0000	17.9141	22.0000	31.1806
22.2500	11.6681	22.2500	17.4423	22.2500	30.3408
22.5000	11.3546	22.5000	16.9656	22.5000	29.5027
22.7500	11.0400	22.7500	16.4887	22.7500	28.6672
23.0000	10.7244	23.0000	16.0119	23.0000	27.8230
23.2500	10.4089	23.2500	15.5331	23.2500	26.9832
23.5000	10.0900	23.5000	15.0542	23.5000	26.1424
23.7500	9.7724	23.7500	14.5723	23.7500	25.2982
24.0000	9.4527	24.0000	14.0905	24.0000	24.4554



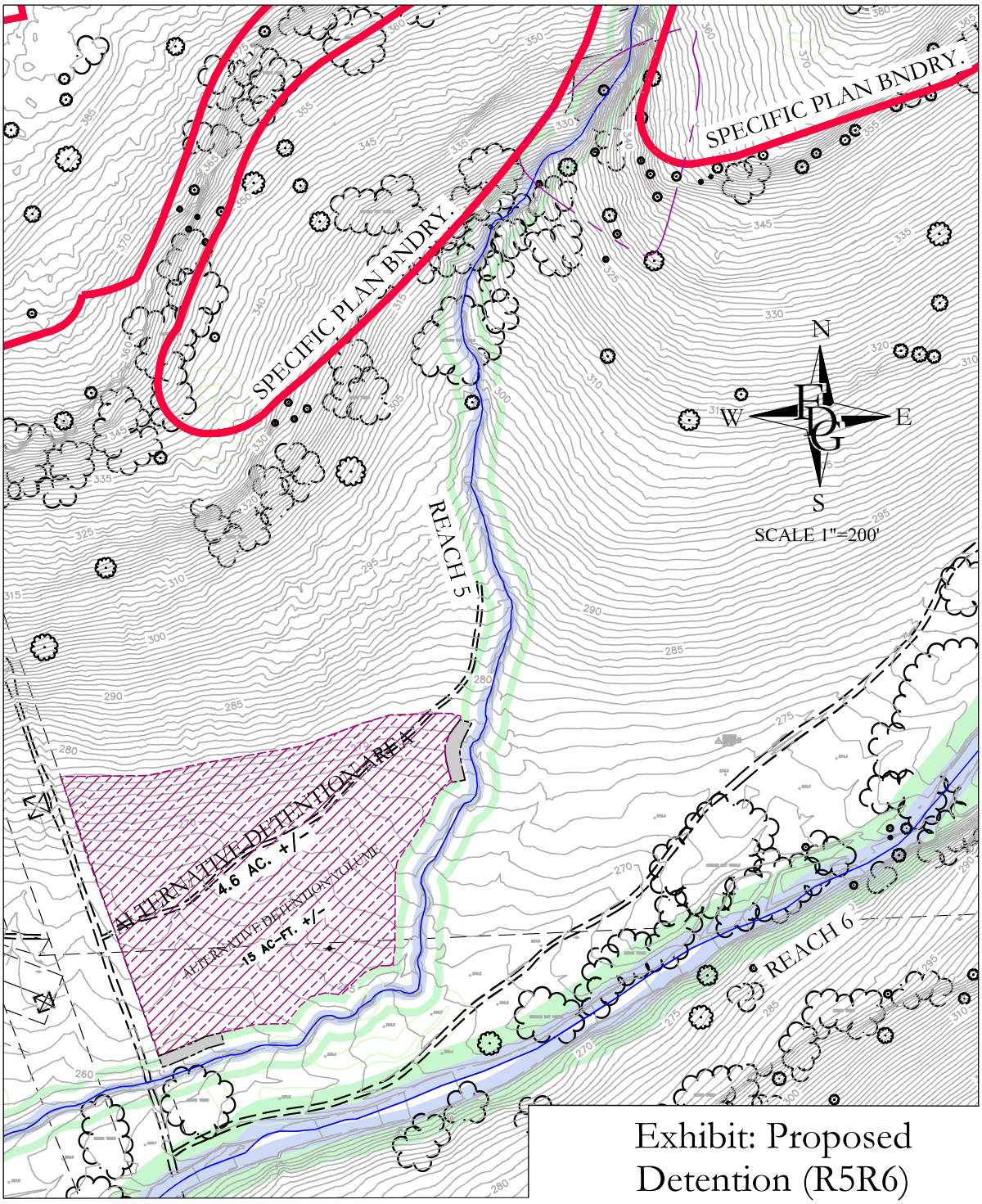


Exhibit: Proposed Detention (R5R6)
December 13, 2021

FRAYJi DESIGN GROUP
CIVIL ENGINEERING | PLANNING | SURVEYING

100 yr Basin Calculations - HEC-RAS (Assuming No Detention)

RD(Humbug)C5C6CE

Time (hrs)	Undeveloped Runoff (cfs)	Developed Runoff (cfs)	Developed - Undeveloped (cfs)	Volume Reqd. per 15 minute interval
0.000	22.18	14.96	-7.2200	-4332
0.167	79.78	61.11	-18.6700	-11202
0.333	79.98	64.96	-15.0200	-9012
0.500	79.99	64.99	-15.0000	-9000
0.667	79.99	64.99	-15.0000	-9000
0.833	80.00	65	-15.0000	-9000
1.000	80.02	64.99	-15.0300	-9018
1.167	80.03	64.99	-15.0400	-9024
1.333	80.04	65	-15.0400	-9024
1.500	80.04	65	-15.0400	-9024
1.667	80.04	65	-15.0400	-9024
1.833	80.04	65	-15.0400	-9024
2.000	80.04	65	-15.0400	-9024
2.167	80.04	65	-15.0400	-9024
2.333	80.04	65	-15.0400	-9024
2.500	80.04	65.03	-15.0100	-9006
2.667	80.04	65.11	-14.9300	-8958
2.833	80.05	65.4	-14.6500	-8790
3.000	80.05	65.86	-14.1900	-8514
3.167	80.05	66.44	-13.6100	-8166
3.333	80.04	67.13	-12.9100	-7746
3.500	80.04	67.97	-12.0700	-7242
3.667	80.05	68.74	-11.3100	-6786
3.833	80.05	70.51	-9.5400	-5724
4.000	80.05	72.1	-7.9500	-4770
4.167	80.03	73.85	-6.1800	-3708
4.333	80.04	75.65	-4.3900	-2634
4.500	80.04	77.51	-2.5300	-1518
4.667	80.04	79.26	-0.7800	-468
4.833	80.05	81.13	1.0800	648
5.000	80.41	83.21	2.8000	1680
5.167	81.66	86.32	4.6600	2796
5.333	85.30	93.23	7.9300	4758
5.500	93.02	104.29	11.2700	6762
5.667	103.75	116.93	13.1800	7908
5.833	114.61	129.16	14.5500	8730
6.000	124.85	141.55	16.7000	10020
6.167	135.65	153.38	17.7300	10638
6.333	146.11	164.97	18.8600	11316
6.500	156.93	176.29	19.3600	11616
6.667	168.02	187.94	19.9200	11952
6.833	179.47	199.56	20.0900	12054
7.000	191.47	211.57	20.1000	12060
7.167	205.24	225.42	20.1800	12108
7.333	220.79	242.83	22.0400	13224
7.500	239.87	264.06	24.1900	14514
7.667	262.57	288.24	25.6700	15402
7.833	286.93	313.51	26.5800	15948
8.000	311.99	339	27.0100	16206
8.167	338.29	365.01	26.7200	16032
8.333	362.47	388.16	25.6900	15414
8.500	385.72	410.11	24.3900	14634
8.667	408.71	430.56	21.8500	13110
8.833	430.99	451.62	20.6300	12378
9.000	453.34	485.76	32.4200	19452
9.167	489.23	539.02	49.7900	29874
9.333	551.76	609.93	58.1700	34902
9.500	633.14	698.74	65.6000	39360
9.667	728.73	805.89	77.1600	46296
9.833	843.64	932.87	89.2300	53538
10.000	992.43	1105.1	112.6700	67602
10.167	1269.02	1447.73	178.7100	107226
10.333	1713.97	2112.7	398.7300	239238
10.500	2687.55	3368.69	681.1400	408684
10.667	4081.32	4839.82	758.5000	455100
10.833	4886.96	5251.75	364.7900	218874
11.000	4941.24	4944.94	3.7000	2220
11.167	4335.76	4108.1	-227.6600	-136596
11.333	3641.78	3333.75	-308.0300	-184818
11.500	2989.36	2724.91	-264.4500	-158670
11.667	2513.32	2284.19	-229.1300	-137478
11.833	2137.68	1946.9	-190.7800	-114468
12.000	1866.46	1716.11	-150.3500	-90210

12.167	1661.31	1542.35	-118.9600	-71376
12.333	1505.55	1413.42	-92.1300	-55278
12.500	1389.06	1317.57	-71.4900	-42894
12.667	1294.98	1238.82	-56.1600	-33696
12.833	1217.91	1173.27	-44.6400	-26784
13.000	1154.17	1117	-37.1700	-22302
13.167	1099.33	1067.78	-31.5500	-18930
13.333	1052.62	1026.92	-25.7000	-15420
13.500	1010.51	990.5	-20.0100	-12006
13.667	972.42	957.05	-15.3700	-9222
13.833	938.38	924.67	-13.7100	-8226
14.000	905.58	892.82	-12.7600	-7656
14.167	873.71	861.3	-12.4100	-7446
14.333	842.39	829.94	-12.4500	-7470
14.500	811.51	798.86	-12.6500	-7590
14.667	780.61	768.25	-12.3600	-7416
14.833	751.17	739.57	-11.6000	-6960
15.000	723.87	713.26	-10.6100	-6366
15.167	699.01	690.34	-8.6700	-5202
15.333	678.64	672.13	-6.5100	-3906
15.500	662.09	657.69	-4.4000	-2640
15.667	649.43	646.66	-2.7700	-1662
15.833	639.11	637.76	-1.3500	-810
16.000	630.29	629.91	-0.3800	-228
16.167	622.51	622.75	0.2400	144
16.333	615.35	615.99	0.6400	384
16.500	608.57	609.48	0.9100	546
16.667	602.03	603.11	1.0800	648
16.833	595.64	596.86	1.2200	732
17.000	589.36	590.56	1.2000	720
17.167	583.06	584.28	1.2200	732
17.333	576.86	578.03	1.1700	702
17.500	570.66	571.84	1.1800	708
17.667	564.43	565.59	1.1600	696
17.833	558.21	559.31	1.1000	660
18.000	552.03	553.04	1.0100	606
18.167	545.76	546.75	0.9900	594
18.333	539.53	540.5	0.9700	582
18.500	533.22	534.23	1.0100	606
18.667	526.91	527.96	1.0500	630
18.833	520.68	521.68	1.0000	600
19.000	514.53	515.42	0.8900	534
19.167	508.43	509.13	0.7000	420
19.333	502.29	502.86	0.5700	342
19.500	496.63	496.54	-0.0900	-54
19.667	490.30	490.12	-0.1800	-108
19.833	483.87	484.03	0.1600	96
20.000	477.37	477.87	0.5000	300
20.167	473.55	471.6	-1.9500	-1170
20.333	467.49	465.08	-2.4100	-1446
20.500	460.21	459.02	-1.1900	-714
20.667	453.23	452.78	-0.4500	-270
20.833	446.35	446.58	0.2300	138
21.000	439.55	440.28	0.7300	438
21.167	432.51	433.88	1.3700	822
21.333	425.41	427.02	1.6100	966
21.500	418.53	419.82	1.2900	774
21.667	411.28	412.8	1.5200	912
21.833	404.42	405.94	1.5200	912
22.000	397.74	399.27	1.5300	918
22.167	391.21	392.66	1.4500	870
22.333	384.58	386.11	1.5300	918
22.500	377.86	379.68	1.8200	1092
22.667	371.20	373.5	2.3000	1380
22.833	364.63	366.67	2.0400	1224
23.000	358.15	360.61	2.4600	1476
23.167	351.55	354.13	2.5800	1548
23.333	344.95	347.65	2.7000	1620
23.500	338.45	341.25	2.8000	1680
23.667	331.86	334.78	2.9200	1752
23.833	325.19	328.55	3.3600	2016
24.000	318.75	322.1	3.3500	2010

605448	FT^3	
13.89917355	AC-FT	
3.474793388	AC	Assumes 4' Deep Basin

Comment Letter 36

gallaway ENTERPRISES

117 Meyers Street • Suite 120 • Chico CA 95928 • 530-332-9909

December 13, 2021

Mike Sawley, AICP
Senior Planner
City of Chico Community Development Dept.
P.O. Box 3420, Chico, CA 95927

RE: Valley's Edge Specific Plan EIR

Mr. Sawley;

I have had the opportunity to review the Draft EIR for the Valley's Edge Specific Plan. Please consider the following comments during your review process.

Page 4.3-19 – Vernal Pool Branchiopods
The draft document indicates potential habitat to be present for Conservancy fairy shrimp. This species requires large, deep clear pools of water of which there is no habitat of that type present within the project site. This species was dismissed from consideration in the Biological Resource Assessment developed for the proposed project. Additionally, this species was not identified during the wet and dry season surveys for invertebrates. 36-1

Figure 4.3-4 – Butte County Meadowfoam Occurrences
This figure incorrectly depicts the presence of Butte County meadowfoam (BCM) occurring in the proposed Primary open Space (P-OS). The western P-OS only contained wooly meadowfoam, not Butte County meadowfoam. 36-2

Page 4.3-51 – Tricolored Blackbird
The habitat evaluation conducted as part of the development of the Biological Resource Assessments for the proposed project did not identify suitable habitat for tricolored blackbird. The species account on page 4.3-20 states: *"Nesting habitat for tricolored blackbird on the project site is marginal to nonexistent due to a lack of standing water and thorny vegetation."*

Page 4.3-51 then contradicts this statement with the following: *"Overall, potential nesting habitat for tricolored blackbird is marginal and generally limited to the riparian woodland in the southern portion of the project site where thorny vegetation may be present in the understory."*

Based on our observations, there is no suitable nesting habitat for tricolor blackbird on-site or off-site. The potential impacts should be revised to "no impact". 36-3

Page 4.3-54 – BIO-1 On-Site Preserves
The mitigation measure described could be revised to describe the presence of wooly meadowfoam in one of the preserves (see comment above regarding Figure 4.3-4 – Butte County Meadowfoam Occurrences). The 2nd sentence should be revised to place the focus of the 250-foot buffer on the resource and not the preserve, for example: "The Butte County meadowfoam and woolly meadowfoam occurrences shall be separated from any development by a minimum of 250 feet….". 36-4

The 2nd sentence should also be revised to allow for an optional approval by the City of Chico and not only the U.S. Fish and Wildlife Service (USFWS) since the USFWS may not have an official method of consulting with the developer if there is no Section 7 Endangered Species Act consultation requirements. 36-5

Additionally, since the buffer and associated preserve will avoid direct impacts, it is suggested to remove the word direct from the 2nd paragraph. Suggested revision: "The Butte County meadowfoam and woolly meadowfoam occurrences shall be separated from any development by a minimum of 250 feet unless site-specific hydrological analysis accepted by the City of Chico or the U.S. Fish and Wildlife Service demonstrates that a reduced separation would still prevent indirect effects to Butte County meadowfoam and/or wooly meadowfoam within the preserve." 36-6

Consider revising the last sentence to "Any construction activities within 500 feet of the on-site Butte County meadowfoam and/or wooly meadowfoam occurrences shall not be allowed until the establishment of the on-site preserves associated with the meadowfoam resources." 36-7

Page 4.3-54 – BIO-2 Nesting Bird Surveys (including and not limited to Loggerhead Shrike, and Yellow Warbler)

Subsection (a) includes a narrow window of two days for conducting the nesting bird survey. This seems to be stricter than most timelines. Based on conversations with the project applicant, CDFW made a comment via consultation regarding a three day timeframe. A seven day window is suggested to be aligned with standard timeframes for conducting nesting surveys, especially since measures for burrowing owls have a 14 day prior survey and Swainson's hawk have a 15 day prior survey timeframe. 36-8

Should you have any questions and need additional information please contact me directly at kevin@gallawayenterprises.com.

Sincerely,

Kevin Sevier, Vice President
Gallaway Enterprises, Inc.

Comment Letter 37

From: jesica giannola
To: Mike Sawley
Subject: Opposing valley edge
Date: Monday, December 13, 2021 2:02:07 PM

Please reconsider the current environmental input report and consider a 5th alternative for the valley's edge plan. It is important that we build smart and protect our resources, and that means that we have to start out the projects safe and well researched from the begging. 37-1

I live in south Chico and oppose the current push for the Valley's Edge plans. Protect our our land, air, and water before it's too late. We need more studies and answers first. 37-2

Thank you,

Jesica Giannola

Valleys Edge Draft EIR Comments

Bryce Goldstein, Planning Commissioner

December 12, 2021

General/Miscellaneous Comments

1. Cover page incorrectly says City of Chino. 38-1
2. Environmental impacts of creating lakes from altering streams on the site should be discussed in the EIR along with proposed mitigation measures. Applicable to sections 4.3 Biological Resources, 4.6 Geology and Soils, 4.7 Greenhouse Gases, and 4.9 Hydrology, Water Quality, Drainage. 38-2
3. Proposed lakes should be included in all relevant project maps. 38-3
4. The term “multi-use” should not be used to describe this development as it is primarily single family homes. Very small amounts of land and units are R3, commercial, or even R2 zoning. The term is misleading. 38-4
5. The reason for having two different R1 zoning types is not explained in the EIR or the VESP. The R1-VE zoning designation has a lower density than the City’s R1 minimum of 2.1 units per acre, and therefore should not be considered R1 zoning, especially if this factors into calculations of VMT and associated GHG emissions. Please change the designation to something other than R1, or if needed, explain the reason for including and allowing this zoning. 38-5

4.7 Greenhouse Gases

GHG Compliance with local policy has issues:

1. *Table 4.7-5. Proposed Project Consistency with the City of Chico 2021 CAP Update* claims consistency with the following CAP measures, however, the Proposed Project is inconsistent with the following CAP measures. 38-6
    - T-1: The Proposed Project will only improve active transportation infrastructure on site, while contributing significant vehicle traffic to the rest of Chico, thereby potentially increasing vehicle mode share both by increasing the number of vehicle trips and by making roads less safe for bicyclists. This may hinder the City’s efforts to achieve greater than 6% bicycle mode share by 2030 and 12% bicycle mode share by 2045.
    - T-5: The Proposed Project does not promote sustainable infill development and mixed-use development in new growth areas to reduce VMT. 38-7
2. *Consistency with the BCAG’s 2016 Regional Transportation Plan*: The following statement is not explained: The 2016 RTP/SCS is not directly applicable to the project because the underlying purpose of the 2016 RTP/SCS is to provide direction and guidance on future regional growth.” Explain why the BCAG RTP/SCS is not applicable. 38-8
3. Contrary to the above statement, *Table 4.7-6. Proposed Project Consistency with Scoping Plan GHG Emission Reduction Strategies* Measure T-3 states that “To meet the goals of SB 375, the 2016 RTP/SCS is applicable to the proposed project.” 38-9

4.13 Transportation & Circulation

1. City of Chico General Plan
    a. *Action CIRC-2.2.1 (Connectivity in Project Review)* states that "New development shall include the following internal circulation features… A grid or modified grid-based primary street system. Cul-de-sacs are discouraged, but may be approved in situations where difficult site planning issues, such as odd lot size, topography, or physical constraints exist or where their use results in a more efficient use of land, however in all cases the overall grid pattern of streets should be maintained". The spaghetti streets of the proposed project only make sense along ridgelines, and there is no grid pattern maintained in the lower regions of the project. This inconsistency is not explained. 38-10
    b. *Policy CIRC-5.3 (Transit Connectivity in Projects) – Ensure that new development supports public transit*: The Proposed Project will likely not support public transit due to being too low density. This lack of compliance is not explained. 38-11
2. Impact 4.13-4: "The proposed project would construct new roadways to serve planned growth and connect to existing transportation facilities, which could create hazards related to design features (e.g., sharp curves or dangerous intersections)." It is unclear why there are no mitigation measures for increased hazards to bicyclists and pedestrians on existing roadways. 38-12
3. 4.13-6: VMT calculations rely on assumptions that may not be accurate. A detailed summary of the analysis would be helpful.
    a. Land Use Diversity: Project has very little land use diversity. Other than the school on site, almost zero trips would realistically be reduced by the minimal amount of commercial.
    b. Senior Adult Residential: This is an automobile-oriented development and nobody who lives here would be able to survive without driving, or likely even driving half as much as residents of general market housing. Further, more and more folks 55 and over will still be working and commuting for another decade if not the rest of their lives. 38-13
    c. Medium-High Density Residential (Multi-Family): The higher density residential land use with an approximate density of 18 dwelling units per acre is more walkable, but again, residents will still have to drive to most of their usual destinations including work and stores. Additionally, MHDR is a very small portion of the overall project. MHDR likely has a higher potential for VMT reductions than low density senior housing.
4. Part of the VMT reduction mitigation under mitigation measure TRAF-2 is "increase transit accessibility" and "implement subsidized or discounted transit program". If these actions depend on transit serving the site, and it does not, then the TDM may not be adequate. There should be an explanation of how VMT will be reduced in other ways if transit is not accessible/feasible. 38-14

6 - Alternatives

1. Another alternative with higher density and more open space than Alternative 4 should be provided and analyzed. The Proposed Project, Alternative 3 (Increased Commercial), and Alternative 4 (Increased Open Space and Higher Density Alternative) all have greater impacts than Alternative 2 (No Project/2030 General Plan Alternative) due to having a larger portion of the site covered by low density housing. The General Plan should be the standard for project impacts and density, not the exception. 38-15
2. Considering that Alternative 2 would reduce the potential for impacts in 14 out of 15 resource areas compared to the proposed project, the following statement on page ES-54 does not make sense: “Of the alternatives evaluated, Alternative 4 was found to be the environmentally superior alternative because it would slightly reduce the potential for impacts in seven out of 14 (half) of the resource areas evaluated. Alternative also generally meets all of the project objectives.” The ranking of alternatives needs to be re-evaluated. 38-16

Comment Letter 39

Department of Geological and Environmental Sciences

California State University, Chico
Chico, California 95929-0205

December 13, 2021

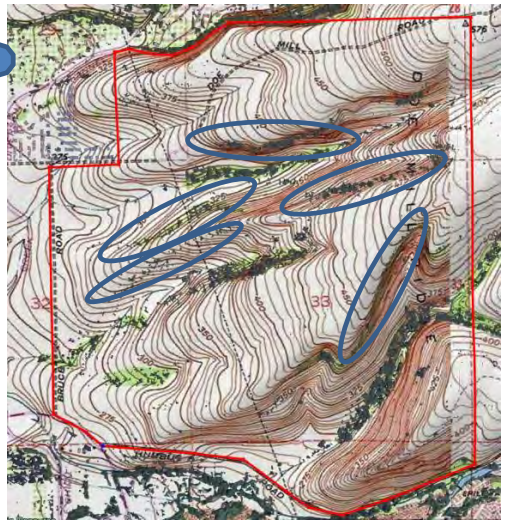
Mike Sawley
Principal Planner
Community Development Department

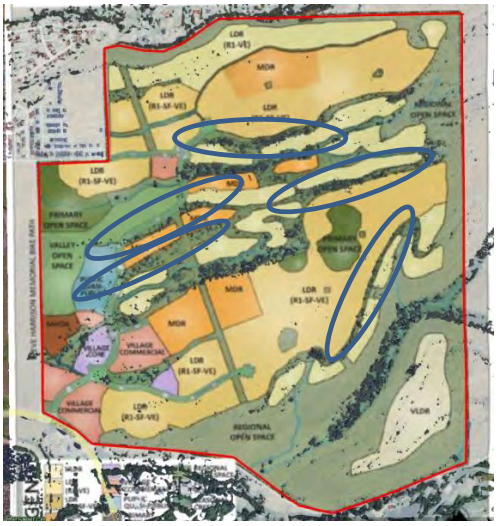
Mr. Sawley:

I am writing to voice my concerns over the Valley's Edge Specific Plan Draft Environmental Impact Report. I am a geologist and professor at California State University, Chico, in the Department of Geological and Environmental Sciences and I have been studying the Tuscan Formation both in outcrop and the subsurface for 14 years. I have conducted studies in the Tuscan Aquifer both underlying Chico in the valley, including the recently acquired Airborne Electromagnetic (AEM) study both west and south of Chico. I have also guided three Masters students through their projects within the Tuscan Formation both in Big Chico Creek Canyon and Mud Creek Canyon. Although I have not studied in detail the rocks within the Valley's Edge project area, I believe I am qualified to speculate on their potential for recharge to the Tuscan Aquifer. 39-1

In particular, I am concerned about statements made in section 4.9-10 (Hydrology, Water Quality, Drainage): "Beds of poorly cemented granular geologic material were not observed in thicknesses or bedding attitudes conducive for groundwater recharge." By simply overlying the topographic map with Google Earth imagery, it is clear that there are bands of vegetation (green blotches) that cross-cut topography and most likely follow sedimentary bedding along more porous and permeable beds (see blue ovals in the figure below). This is ***not*** the younger alluvial material along the bases of drainages, but is more likely part of the Tuscan Formation. These beds can often act as permeable pathways for recharged groundwater. By placing both MDR and LDR zones against these beds, the chance for contamination into the aquifer is enhanced. 39-2 In addition, the "great thickness of the lahars" that could protect infiltration to deeper zones is not supported by the local well completion reports or the geologic conditions. It is more likely the lahars are not greater than 20 feet thick and that more permeable sandy layers directly underlie the proposed areas of development. Consequently, even small fractures (of which there are many) would probably be able to access these more permeable layers at depth. 39-3

Todd J. Greene, Department of Geological and Environmental Sciences
CSU Chico • Chico, CA 95929-0205 • www.csuchico.edu/geos
Office: 530.898.5546 • Fax: 530.898.4363 • E-mail: tjgreene@csuchico.edu





It should also be noted that there have been recent studies on the isotopes of the groundwater in the region (Grimm, 2000). One sample (see blue circle just west of the map above) lies just to the west of the VESP but was sampled at an unknown depth below the surface. The data indicated that "while these values suggest recharge from higher elevation than local precipitation, it is sourced from a lower elevation that that of the shallower formations or *is mixed with more local precipitation*." If this is the case, the local precipitation is somehow getting to the sampled zone through localized fractures and/or porous beds. If more work was done to map out the geology of the VESP area including detailed cross-sections, I believe a more accurate risk analysis or recharge could be created and add significant value to the project.

39-4

Sincerely,

Todd J. Greene
Professor and Chair

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Comment Letter 40

DON L HANKINS, PH.D.
PO BOX 627, FOREST RANCH, CA 95942

December 13, 2021

Mike Sawley, AICP, Principal Planner
Community Development Department
411 Main Street, 2nd Floor
P.O. Box 3420
Chico, CA 95928
Email: mike.sawley@chicoca.gov

Subject: Comments on Valley's Edge DEIR

Dear Mr. Sawley:

These comments are provided in response to the subject DEIR. I have not had sufficient time to review the DEIR to provide detailed comments. However, these comments are intended to illustrate broader concerns for biodiversity conservation, water, fire, and tribal trust resources. Given the nature of the landscape involved in this project, it is evident adequate consideration of the magnitude of impacts is lacking. 40-1

Biodiversity

California is a global biodiversity hotspot. The threats to regional biodiversity concomitant with the colonization of the state and subsequent conversion of habitat has resulted in severe vulnerability to our ecosystems particularly in grassland, oak woodland, and freshwater ecosystems including the mix of blue oak, valley oak, riparian, and vernal pool ecosystems found on site. Poor land use decisions in the state have lead to a 90-99% loss of these habitats across the state, and all remaining habitats should be protected from further development. The local to global declines in biodiversity is particularly why the state and federal governments as well as the international community are focused on 30 x 30. Conservation and stewardship of underrepresented and rare ecosystems will be a critical component of such efforts, and this site represents one opportunity to make a difference. Conservation and restoration science is clear that conserving intact ecosystems is the best option for achieving conservation needs for species as well as other environmental benefits such as water storage and filtration. Once an ecosystem is destroyed it is nearly impossible to regain functionality through restoration or mitigation activities. It is best to avoid impacts altogether, and focus growth in already converted habitats (e.g., industrial agriculture or urban in-fill). 40-2

Oak woodlands in particular harbor a great richness of species. Aside from losses due to agricultural conversion and urbanization, unseasonal and high severity fires are type converting many valley and blue oak woodlands across the state. In Butte County, this is evident in the footprint of the Wall, Swedes, Camp, Humboldt, Honey, and other fires in the foothill region over the past 15 years. With the conversion of habitat, many common and rare species struggle to find alternative locations to thrive. 40-3

The DEIR inadequately addresses species impacts. While assessment of cultural resources is typically relegated to cultural artefacts, ecocultural species are an important attribute of Indigenous culture often overlooked. Ecocultural species include species of cultural importance as food, fiber, medicine, ceremonial or other significance. Many species identified as occurring or potentially occurring on the project site are of ecocultural importance, but there are many more not addressed. For instance, the site likely plays an important role in roosting, nesting, and foraging habitat for ecocultural species including bald and golden eagles. However, the direct, indirect, and cumulative impacts of this project contribute to a declining baseline for these species locally and regionally. 40-4 The lack of assessment of pollinator impacts is also concerning. Such oversight is problematic to truly understanding the significance of impacts of the proposed project. 40-5

DON L HANKINS, PH.D.
PO BOX 627, FOREST RANCH, CA 95942

The *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (USFWS 2005) outlines recovery needs for vernal pool ecosystems. While recovery plans outline voluntary actions identified to contribute to achieving conservation objectives the ability to recover a species or ecosystem necessitates conservation actions within designated core areas. This project is situated within and adjacent to the Doe Mill Core Recovery area for the Northeastern Sacramento Valley vernal pool region. The City of Chico and regulatory agencies have failed to protect this core recovery area. It is designated a core recovery area due in part to the unique suite of species occurring on site, and the functionality of habitat. The proposed project represents among the last currently undeveloped lands within this core recovery area. If this habitat is lost, the ability to recover the species is precluded, and the fulfillment of trust responsibilities cannot be achieved. Beyond trust responsibilities the Endangered Species Act requires all federal agencies contribute actions to conserve and recover species. Clearly, as one of the last undeveloped areas within this core recovery unit, this is not a situation where off-site mitigation could achieve a hope of recovery and fulfillment of trust responsibilities. 40-6

Water

Freshwater environments including riparian, emergent wetlands, and vernal pool landscapes are part of nature's water delivery and purification system. While the project may seek to fill vernal pools and other wetlands, it does not negate the fact that the project area is within a natural hydrologic system; it floods, conveys water, and provides habitat. The entirety of these attributes cannot be fully minimized or mitigated through off-site activities. As stated above, it is understood that the best approach to conserving wetlands is to focus on protection and enhancement of existing functioning systems. 40-7

Understanding paleoclimate cycles is critical to understanding the potential future climate. While the colonization of California occurred under a wetter period of time, long-term droughts have and will continue to occur. We are currently in a time of great uncertainty regarding water resources in the region. Persistent long-term drought and changing patterns of precipitation particularly over the past 20 years puts our ecosystems and society at risk. There is no certainty in surface or groundwater supply. This project not only induces demand for a limited supply of water, but also develops on top of a critical recharge area for the Tuscan Aquifer. 40-8

Federal policy may not reflect the entire scope of defining waters and jurisdiction from an Indigenous perspective, but it does recognize tribal water rights. Clean water and unaltered flows are a fundamental aspect of this right. Prior legal precedence demonstrates preeminent rights to surface and ground water (see *Winters v. United States* and *Agua Caliente v. Coachella Valley Water District & Desert Water Agency*). The DEIR should consider the impact of this project in relationship to tribal water rights. 40-9

Fire

The proposed project would develop on ecosystems and within a site that is particularly fire prone. The oak woodland and grassland ecosystems of California require fire for maintenance and ecosystem health. Recent fires to impact this site or areas nearby include the 2007 Honey Fire, 2008 Humboldt Fire, and 2018 Camp Fire. It is not a matter of if, but when fire will occur. The Camp Fire alone illustrates key issues of landscape alignment with wind flow patterns and fire propagation; community and evacuation planning; and, the need for active fire stewardship. In pre-contact times, the ecosystems of this site were fire maintained – i.e., frequent low to moderate intensity fires linked primarily to cultural burning objectives in oak woodlands and grasslands. Indigenous communities traditionally used fire to protect the 'built environment' too. Given the current state of fire suppression, it is difficult to maintain a fire resilient landscape within the wildland urban interface. As interest and support for fire stewardship grows in the state, barriers to burning include smoke impacts to sensitive receptor groups and liability. New development is particularly problematic in that new liability -to homes and infrastructure and an increase in smoke sensitive areas increase. Fire will always be part of this landscape, so it is important to identify how will this project contribute to the solutions or 40-10 40-11

DON L HANKINS, PH.D.
PO BOX 627, FOREST RANCH, CA 95942

problems of fire regionally. Following the Camp Fire, it was recognized the wildland and rangeland areas of the foothills (including this site) pose a great opportunity to protect the City of Chico from similar fires, but also the foothill communities from fires originating in the valley and foothills. Ideally, this site would remain part of that 'buffer' zone, and not contribute to the problems of structure protection and evacuation needs that limit the ability for agencies to actively engage with the fire itself. Any development in this region should strive to be a model for integration of fire use, resilience, and adaptation principles established in the National Wildfire Cohesive Strategy and Fire Adapted Communities frameworks. Fire should be part of the landscape maintenance, construction criteria, and other elements of project design. One such design element is considering how to avoid contaminant flow in the event the community burns down, design specifications should ensure contaminants are retained on site rather than into adjacent waterbodies (including the aquifer).

40-11 Cont.

The above represent some of the shortcomings identified in the DEIR. I believe the analysis is inadequate in several key areas, and do not support the proposed development for reasons identified herein.

40-2

Sincerely,

Don L. Hankins

Comment Letter 41

From: Jennifer Jewell
To: Mike Sawley
Subject: Valley's Edge Specific Plan Draft Environmental Impact Report
Date: Monday, December 13, 2021 4:53:55 PM

Dear Mike Sawley,

As a resident of Chico for the past 14 years, I am profoundly and fiercely opposed to the Valleys Edge Development as well as the Stonegate development prior to it. 41-1

In this most recent Valleys Edge Development plan there is absolutely no consideration for high density low cost housing. Chico needs low cost, high density, infill housing and not another sprawl development which will decrease our environmental quality of life. There are only 162 medium high density residential housing plots planned in this development and 1739 very low and low density housing units which will be built out as large luxury high priced houses. There is more than enough housing being built all over Chico right now especially "luxury" high price housing. 41-2 The valleys edge development will fragment and degrade, if not fully destroyed, a valuable and intact area of oak Woodland and open country in the urban wildland interface - helping to sequester carbon and mitigate our urban heat island, control stormwater runoff decreasing chances for flooding and groundwater and surface water degradation, allowing for natural wildlife corridor's, and helping to buffer us from the most damaging effects of wildfire. And this is to say nothing of the lack of oversight and mitigation potential for endangered species let alone endangered ecosystems. It is damaging our greatest biological resources for which Chico is known, beloved and valued. 41-3

Finally, water use and the traffic planning is incredibly poorly thought out in this -profit-over-community-planning endeavor. Huge traffic congestion in the southeaster part of town will ensue along with the pollution and poor air quality attendant to that. 41-4 The Development Plan has serious oversight in the way of egress and evacuation planning for this newly overbuilt/underplanned section of town in the event of emergency off of 20th and Bruce. 41-5 And the water use planning for of this continued level of low density housing with only deplete our limited water resources more. Poor planning all the way around, I very much hope the plan is reviewed and reconsidered from all angles. 41-6

Sincerely,

Jennifer Jewell
Chico, CA

Comment Letter 42

From: John Merz
To: Mike Sawley
Cc: "Elizabeth Devereaux"; "Susan Tchudi"; G Marvin; "Caitlin Dalby"; "Richard Harriman"; "Jon Luvaas"
Subject: Valley"s Edge DEIR
Date: Monday, December 13, 2021 4:44:28 PM

Hi, Mike:

I believe the Chico City Council passed a resolution several years ago that directed that all Special Planning Areas identified in the current City of Chico General Plan (GP) be postponed from further consideration in terms of development until other key elements of the GP addressing infill needs and associated infrastructure issues were implemented. Please clarify. Thanks. 42-1

Due to the size of the DEIR and the holiday season, I would also request that the public comment period be extended for at least an additional 30 days. 42-2

John Merz

P.S. Please include me in all future notices concerning the Valley's Edge project. 42-3

Comment Letter 43

From: Chris Mueller
To: Mike Sawley
Subject: Comments on the Valley"s Edge Specific Plan DEIR
Date: Monday, December 13, 2021 4:59:21 PM

Dear Mr. Sawley,

The Draft Environmental Impact Report for proposed Valley Edge Specific Plan (VESP) project fails to adequately characterize the sprawling nature of the proposed Valley Edge Specific Plan (VESP) project, which has very-low-density and low-density residential scattered throughout the 1,448-acre site. The acreage described as parklands or open space would be divided into ribbons that extend between developed areas substantially degrading the undeveloped area's value as habitat. 43-1

The discussion in Chapter 3, Land Use and Planning, finds the project to be generally consistency with the Butte County 2016 Regional Transportation Plan/Sustainable Communities Strategy 2016-2040's policy to promote "Compact Urban Form and Infill Development." This conclusion is unsupportable. This project appears more accurately to be the definition of sprawl development, the opposite of what the cited policy aims to achieve. 43-2

The analyses in many sections in Chapter 4 of the DEIR rely in part on the guiding principles, goals, and actions found in the Specific Plan itself (the subject of the DEIR) to determine that impacts will be less-than-significant. Since these aspirations identified in the VESP are not mitigation measures, who (what agency) would be responsible for ensuring that the principles, goals and actions of the VESP are in fact implemented? Without adequate oversight by a public agency, such goals and actions may simply be found by the project sponsor, during project implementation, to be "infeasible" for one reason or another. 43-3

Chico needs housing but not this kind - luxury housing in sprawl development on the edge of the city. This project would not alleviate the city's existing housing problems. It would be detrimental to existing habitat important to sensitive species, exacerbate existing traffic problems, and expose residents and workers at the project site to substantial wildfire risks, among other impacts. 43-4

The DEIR analysis identified significant unavoidable impacts from increased GHG emissions and significant unavoidable impacts on the visual character of the area and public views of the site and its surroundings. The project would not provide the kind of housing that Chico needs, as the project's luxury homes are very unlikely to be affordable to most residents in Chico or former residents of Paradise and other Ridge communities displaced by the Camp Fire. Considering the impacts identified in the DEIR as significant and unavoidable and the impacts noted above, the adverse impacts of the VESP would clearly outweigh any benefits and the project therefore should not be approved. 43-5

Thank you for this opportunity to comment.

Sincerely,

Christine Mueller
Chico, CA

Comment Letter 44

From: Chris Nelson
To: Mike Sawley
Subject: Re Draft EIR Valley"s Edge
Date: Monday, December 13, 2021 3:48:41 PM

Noted- No documentation for this project that was prepared prior to the Camp Fire should be admissible due to the environmental effects and implications of the fire.
The Chico General Plan (last updated 2017) is outdated and does not reflect the extreme crisis of climate catastrophe we all must acknowledge. To use a flawed document to guide a project of this size is irresponsible. 44-1

Aesthetics- The viewshed will be permanently altered. What will be visible are homes of very wealthy people overseeing and looking down on the more modest and plebeian Chico. This model is unacceptable in a democratic society and will further divide a divided town. 44-2

Air Quality- The sheer numbers of cars and car trips for day from this project will permanently harm the AQI of Chico which is already marginal and often poor a large part of the year due to our valley bowl sink effect. Allowing this sprawl to occur can never be mitigated. 44-3

Biological Resources/Hydrology- Butte County meadowfoam is rare and endangered.
Removing 1100 rare, hydrologically important blue oaks is not supportable.
The vernal pools are not hydrologically separated from the project. There is no scientific proof for that claim. 44-4

I am seeking the no project alternative. 44-5

Thank you, Chris Nelson
2300 B Estes Rd. Chico 95928

Comment Letter 45

From: Ann Ponzio
To: Mike Sawley
Subject: Valley"s Edge DEIR public comment
Date: Monday, December 13, 2021 1:28:21 PM

TO: Mike Sawley, Principal Planner
RE: Valley's Edge Draft Environmental Impact Report: Public Comment
DATE: 12/13/2021
FROM: Ann Ponzio

17 Arminta Court
Chico, CA 95928
annpnz@gmail.com

Issues to be addressed:

1. 'Significant and Unavoidable' increase in Greenhouse Gases. The City of Chico has committed to a GHG emissions to 0 by 2021. This is also a California State requirement. Valley Edge cannot go forward unless it is compatible with the goals required by the City and State for GHG reductions. The Final EIR must address this issue. 45-1
2. The loss of carbon sequestration by destruction of biological resources, such as 1,100 oak trees and other plant life, is not quantified. The effects of this loss of carbon sequestration on the City's goal of GHG emissions is not addressed. 45-2
3. Valley's Edge is proposed to be built in the Wildland-Urban Interface with a fire hazard of "moderate". The significance of this finding must be clarified. The risk to neighboring development and further into Chico must be quantified. The potential losses should be specified. 45-3

Thank you for your consideration.

Comment Letter 46

From: mike trolinder
To: Mike Sawley
Subject: Valleys edge EIR
Date: Tuesday, December 14, 2021 3:02:02 PM

Dear Mike

Re Valleys Edge EIR

The project does not analyze its ability to sustain its full cost to maintain its infrastructure and municipal services without further eroding existing city infrastructure and services, leading to a general decline in the cities ability to provide a usable solvent city to its citizens. Please provide how property tax revenue or other revenue sources will cover the project costs going forward. 46-1

Sincerely

Mike Trolinder

Comment Letter 47

KD Anderson & Associates, Inc.

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G ·Loomis, CA 95650
(916) 660-1555 · Fax (916) 660-1535
E-mail: wshijo@kdanderson.com

MEMORANDUM

TO: Mike Sawley, City of Chico

COPY TO: Bill Brouhard, Craig Sandberg, Law Offices of Craig Sandberg

FROM: Wayne Shijo, KD Anderson & Associates

SUBJECT: Valley's Edge Specific Plan Draft Environmental Impact Report

DATE: December 13, 2021 **PROJECT:** Valley's Edge EIR (1379-07)

As requested, KD Anderson & Associates (KDA) has completed a review of the Valley's Edge Specific Plan Draft Environmental Impact Report (Valley's Edge DEIR). KDA was asked to provide our opinion of the *Air Quality* and the *Greenhouse Gases* sections of the DEIR. The purpose of this memorandum is to present the results of our review.

The review conducted by KDA focused on the *Air Quality* and the *Greenhouse Gases* sections of the DEIR. The vehicle trip generation estimates and mitigation measures included in these two sections of the DEIR refer to the *Transportation and Circulation* section of the DEIR. As a result, portions of the *Transportation and Circulation* section of the DEIR were also included in our review.

Overall, the analysis of project-related air quality and greenhouse gas (GHG) impacts presented in the DEIR is valid and defensible. While some improvements are recommended below, the analysis appears to meet the requirements of the California Environmental Quality Act (CEQA). The following is a summary of our review: 47-1

- The analysis of air quality and GHG impacts is quite extensive. Overall, the analysis is thorough, and applies industry-standard approaches and assumptions. 47-2
- The list of potential mitigation measures is also quite extensive. The list is in the *Transportation and Circulation* section of the DEIR. Selection of specific measures is to some degree left to future development of individual phases, which is appropriate, to be responsive to changing circumstances and technologies. 47-3

OBSERVATIONS, NOTES AND RECOMMENDATIONS

As noted earlier, KDA conducted a focused review of the *Air Quality* and the *Greenhouse Gases* sections of the DEIR. The review also included portions of the *Transportation and Circulation* section of the DEIR. The following observations, notes and recommendation are based on our review.

Air Quality Section

CEQA Conclusions. The air quality assessment presented in the DEIR is primarily based on quantitative analysis. The quantitative analysis is used to form qualitative CEQA conclusions about the significance of air quality impacts. The following is a summary of the CEQA conclusions presented in the DEIR:

- The impact of the project on conflicts with implementation of air quality plans would be significant without mitigation measures, but would be reduced to a less-than-significant level with implementation of mitigation measures.
- The impact of the project on construction-related emissions would be less than significant.
- The impact of the project on operational emissions would be significant without mitigation measures, but would be reduced to a less-than-significant level with implementation of mitigation measures. Notably, the mitigation measures include purchase of offsite emissions offsets.
- Construction-related impacts of the project on toxic air contaminants (TAC) would be significant without mitigation measures, but would be reduced to a less-than-significant level with implementation of mitigation measures.
- Operational impacts of the project on TAC would be less than significant.
- The impact of the project on carbon monoxide (CO) would be less than significant.
- The impact of the project on health effects would be significant without mitigation measures, but would be reduced to a less-than-significant level with implementation of mitigation measures.
- The cumulative impact of the project on air quality would be significant without mitigation measures, but would be reduced to a less-than-significant level with implementation of mitigation measures.

47-4

Analysis Software. The air quality analysis presented in the DEIR applies version 2020.4.0 of the CalEEMod emissions model. CalEEMod is the industry-standard software used for air quality analysis of land use development projects in California, and version 2020.4.0 is the latest version of this software.

Motor Vehicle Emission Rates. The CalEEMod emissions model applies emission rates to estimate emissions generated by motor vehicles. Emission rates used in the CalEEMod model are from the EMFAC software package prepared by the California Air Resources Board (CARB). Recently, CARB has updated the EMFAC software every three or four years.

Version 2020.4.0 of the CalEEMod emissions model uses EMFAC2017. EMFAC2017 was the most recent version available at the time version 2020.4.0 of the CalEEMod emissions model was prepared. While version 2020.4.0 is the most recent version of the CalEEMod emissions model, CARB has released a newer version of EMFAC – EMFAC2021.

47-4 Cont.

According to CARB's description of the EMFAC2021 model,

> "This newest model reflects CARB's current understanding of statewide and regional vehicle activities, emissions, and recently adopted regulations such as Advanced Clean Trucks (ACT) and Heavy Duty Omnibus regulations." (https://content.govdelivery.com/accounts/CARB/bulletins/2b62927)

Lag times are unavoidable in the creation and release of new software. So, while the DEIR applies the latest version of the industry-standard software (i.e., CalEEMod), it should be noted there are identifiable improvements in vehicle emissions control that are not included in version 2020.4.0 of the CalEEMod model.

An additional unavoidable aspect of CalEEMod to note is future regulatory changes. Which regulations will be adopted in the future and the nature and magnitude of the regulations cannot be known. But it is quite likely future regulations will be adopted, and the CalEEMod model cannot account for future regulations. For example, CARB is currently considering the Advanced Clean Fleets Regulation. According to CARB's description of this regulation,

47-5

> "CARB is developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications. . . The goal of this effort is to accelerate the number of medium and heavy-duty zero-emission vehicle purchases to achieve a full transition to zero-emission vehicles in California as soon as possible." (https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about)

KDA

As the most recent version of industry-standard software, version 2020.4.0 of the CalEEMod model is appropriate for use in CEQA compliance documents. However, because of unavoidable lag times in developing software and future unknown regulations, it should be recognized that future emissions estimates, and future emissions in reality, may be different.

47-5 Cont.

Land Use Quantities. An important factor in air quality analysis of a land use development project is the set of land use quantities included in the analysis. In an EIR, it is important that the land use quantities used in the air quality analysis (e.g., used in the CalEEMod emissions model) be consistent with the quantities described in the *Project Description* section of the EIR. The land use quantities used in the air quality analysis of the Valley's Edge project are consistent with the quantities described in the *Project Description* section of the EIR.

Vehicle Mix. One of the assumptions used in the CalEEMod emissions model is referred to as "vehicle mix". The vehicle mix is a set of percentages describing the portions of the project-related trips made by various types of vehicles (e.g., automobiles, light-duty trucks, heavy-duty trucks, and busses). CalEEMod provides default vehicle mixes. In some geographic areas, for some land use types, these default values are unrealistic. The vehicle mix used in the air quality analysis of the Valley's Edge project is reasonable.

Trip Generation. Another important factor in air quality analysis of a land use development project is the number of vehicle trips generated by the project. In an EIR, it is important that the trip generation estimate used in the air quality analysis be consistent with the estimate used in the transportation analysis.

47-6

The trip generation estimate used in the CalEEMod model is 23,151.93 trips per weekday. The estimate of net new vehicle trips generation presented in Table 16 of Appendix K of the DEIR, *Traffic Study*, is 23,162 trips per day. The 0.04 percent difference between these two values might be due to rounding. The methods used to calculate and sum trips generated by various land uses might have been different. As a result, the 0.04 percent difference can be considered to be nominal, having no effect on the qualitative conclusions of the analysis.

The trip generation estimate presented in Table 16 of Appendix K of the DEIR includes adjustments for internal trips, and for external walking, bicycle and public transit trips. Based on the composition and configuration of the Valley's Edge project described in the *Project Description* section of the EIR, this appears to be reasonable.

47-7

Vehicle Miles Traveled. CalEEMod reports an annual value for vehicle miles traveled (VMT). This value includes weekdays and weekends. KDA used the data reported by CalEEMod to estimate a weekday value of approximately 170,000 VMT per day.

47-8

KDA

Table 4-13.3 of the *Transportation and Circulation* section of the DEIR reports a weekday value of 195,538 VMT per day. This value is based on the Butte County Association of Governments (BCAG) travel demand model, and includes an adjustment for travel outside of Butte County.

The VMT reported by CalEEMod is approximately 13 percent below the value reported in Table 4-13.3 of the *Transportation and Circulation* section of the DEIR. The 13 percent difference is probably due, at least in part, to the different methodologies (i.e., CalEEMod versus the BCAG model) and the adjustment for travel outside of Butte County applied in the *Transportation and Circulation* section of the DEIR.

47-8 Cont.

While it would be desirable for the VMT estimates used in the *Air Quality* and the *Transportation and Circulation* sections of the DEIR to be consistent, it is unlikely that increasing the VMT estimate used in the *Air Quality* section would change the qualitative conclusions of the analysis.

Mitigation Measures. The *Air Quality* section of the DEIR presents several mitigation measures to reduce the impacts of the project. The following is a very brief summary of the measures, described in more detail in the DEIR.

- **AQ-1.** Implement Mitigation Measures AQ-2 through AQ-5
- **AQ-2.** Idling Restrictions
- **AQ-3.** Energy Conservation
- **AQ-4.** Purchase Offsets
- **AQ-5.** Implement the Transportation Demand Management program included in Mitigation Measure TRAF-2
- **AQ-6.** Construction Equipment Emissions Reductions
- **AQ-7.** Health Risk Assessment Requirements

47-9

Mitigation Measure AQ-4, *Purchase Offsets*, requires the project developer to participate in an Offsite Mitigation Program by paying money to purchase offsite emissions offsets. The amount of money is not specified in the mitigation measure. The amount would be calculated in accordance with the Butte County Air Quality Management District prior to approval of a final map for a project phase.

KDA

Mitigation Measure AQ-5, *Implement the Transportation Demand Management program included in Mitigation Measure TRAF-2*, is addressed below in the *Transportation and Circulation* section of this memorandum.

47-9 Cont.

Greenhouse Gases Section

CEQA Conclusions. Like the air quality assessment, the GHG assessment is primarily based on quantitative analysis, which is used to form qualitative CEQA conclusions about the significance of GHG impacts. The following is a summary of the CEQA conclusions presented in the DEIR:

- The operational impact of the project on GHG emissions would be significant without mitigation measures. Because implementation of mitigation measures would not reduce this impact to a less-than-significant level, this impact is considered significant and unavoidable.

- The impact of the project on GHG plans, policies or regulations would be significant without mitigation measures. Because implementation of mitigation measures would not reduce this impact to a less-than-significant level, this impact is considered significant and unavoidable.

47-10

Analysis Software. The *Greenhouse Gases* section of the DEIR states that version 2020.4.0 of the CalEEMod emissions model was used for the GHG emissions analysis. CalEEMod is the industry-standard software used for GHG analysis of land use development projects in California, and version 2020.4.0 is the latest version of this software.

Transportation and Circulation Section

Background. KDA conducted a detailed review of the *Air Quality* and *Greenhouse Gases* sections of the DEIR. KDA was not tasked with a detailed review of the *Transportation and Circulation* section of the DEIR. However, as noted earlier in this memorandum, mitigation measures presented in the Air Quality section refer to mitigation measures presented in the *Transportation and Circulation* section – Mitigation Measure AQ-5 is *Implement the Transportation Demand Management program included in Mitigation Measure TRAF-2*. The *Transportation and Circulation* section presents a more detailed description of these measures. As a result, KDA reviewed Mitigation Measure TRAF-2, presented in the *Transportation and Circulation* section of the DEIR.

47-11

Vehicle Miles Traveled Mitigation Measure. As described in DEIR Impact 4.13-6, *The proposed project would generate an average total VMT per service population that is 86% of the average total VMT per service population for the region*. The significance threshold for VMT is a project having a VMT per service population that is 85 percent of the average for the region.

47-12

KDA

As a result, a modest one percent reduction in project-related VMT would reduce the impact of the Valley's Edge project to a less-than-significant level.

Mitigation Measure TRAF-2 presents a list of potential mitigation measures to reduce VMT. The source of the list of measures is the California Air Pollution Control Officers Association (CAPCOA) document *Quantifying Greenhouse Gas Mitigation Measures*. Mitigation Measure TRAF-2 presents 22 measures for residential land uses and 26 measures for non-residential land uses.

Mitigation Measure TRAF-2 notes that specific measures should be selected for implementation before each residential tentative map or non-residential use permit. CAPCOA measure numbers TRT-3, TRT-5, and TRT-7 are suggested, but not required.

The DEIR concludes implementation of Mitigation Measure TRAF-2 would reduce the project impact on VMT to a less-than-significant level. While Mitigation Measure TRAF-2 does not identify specific measures, it is reasonable to conclude a one percent reduction in VMT is achievable.

47-12
Cont.

KDA

Comment Letter 48

MEMORANDUM

Date: December 13, 2021	
To: Mike Sawley	**Organization:** City of Chico 411 Main Street, 2nd Floor P.O. Box 3420 Chico, CA 95928
From: Debbie Rudd, Principal (dlrudd@rrmdesign.com) Rachel Raynor, AICP (rcraynor@rrmdesign.com)	
Topic: Applicant's Reponses to Valley's Edge Specific Plan Project Draft Environmental Impact Report	

RE: Applicant's Reponses to Valley's Edge Specific Plan Project
Draft Environmental Impact Report Dated October 2021

Dear Mike Sawley,

This letter and the attachments containing comments and questions comprise the applicant's comprehensive response to the Draft Environmental Impact Report (DEIR) prepared by Dudek dated October 2021 for the Valley's Edge Specific Plan Project (VESP).

We have used a standardized template as a format to organize our questions and comments. The comments and questions are grouped together by EIR sections and issue areas are consistent with the order of topics included in the DEIR Table of Contents. Individual comments under specific EIR section and issue areas are then further identified by page number, figure/table number, and/or section heading from the DEIR document to assist reviewers to locate the source of comments.

48-1

Thank you for the opportunity to comment. Please don't hesitate to contact us if you have any questions about these comments.

Sincerely,

RRM DESIGN GROUP

cc: Bill Brouillard, Brian Spilman

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 0.0 EXECUTIVE SUMMARY		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 0.0 Executive Summary		
1	Page ES-3, Mitigation Measure AES-1	AES-1 is not clear as to whether this mitigation measure applies to single-family or multi-family residential. As noted in Chapter 4 and Appendix A of the VESP, the Valley's Edge Design Review Committee (DRC) is responsible for design guideline compliance through project review within the planning area. The VESP DRC shall have sole authority for reviewing single-family residential projects and shall utilize City staff for technical concurrence in the review and approval of commercial and multi-family residential projects. AES-1 should be revised to better clarify the appropriate review authority.
2	Page ES-36, Mitigation Measure NOI-2: Operation Noise	What is considered a 'potentially significant noise generating element' and whose discretion is it to determine when a noise study is required? Please provide additional clarification, if possible.

48-2

48-3

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 2.0 PROJECT DESCRIPTION			
Comment #	***Page # / Section / Figure Reference***	***Comment***	
Issue Area – 2.0 Project Description			
1	Page 2-14, Accessory Dwelling Units	Add reference to Junior Accessory Dwelling Units (JADUs).	48-4
2	Page 2-14, Parks, Recreation, and Open Space	Revise text to include "bikes and trails constructed for public and quasi public uses".	48-5
3	Page 2-16, Big Meadows Park	Add reference for fire suppression and stormwater drainage purpose of the pond proposed in Big Meadows Park. Revise DEIR accordingly.	48-6

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 3.0 LAND USE AND PLANNING		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 3.0 Land Use and Planning		
1	Page 3-28, Table 3-1	Remove reference to 'no man made barriers between project site and lands to the east'. This is incorrect as there is a 5 ft rock wall along the eastern boundary. Revise DEIR accordingly.

48-7

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 4.1 AESTHETICS		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 4.1 Aesthetics		
1	Page 4.1-51, Mitigation Measure AES-1	Same comment as under Executive Summary, Issue Area 1. Revise DEIR accordingly.

48-8

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 4.2 AIR QUALITY		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 4.2 Air Quality		
1	Page 4.2-23, Impacts and Mitigation Measures	It is unlikely that the commencement date of April 2022 will occur and the DEIR should acknowledge actual construction will likely be two years later and associated energy emissions are likely overstated.

48-9

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 4.5 ENERGY		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 4.5 Energy		
1	Page 4.5-8, Local Regulations	The City of Chico's Climate Action Plan (CAP) Update (2021) should be added to the various local regulations / policy documents that the Valley's Edge planning area would be subject to. The City's CAP includes Measure E-2, which mandates that natural gas be eliminated in all new building construction starting in 2025.

48-10

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 4.14 WILDFIRE			
Comment #	***Page # / Section / Figure Reference***	***Comment***	
Issue Area – 4.14 Wildfire			
1	Page 4.14-28, Non-potable and Recycled Water Supply subsection	Recommend revising subsection as follows: *Wells: There are two existing wells onsite. Any maintenance needed on either well would not result in additional temporary or permanent impacts from exacerbating wildfire risk beyond those identified in impact 4.14-2.* There is no intent to provide recycled water as part of the VESP. Recreational pond features proposed in the planning area would provide additional sources of water for wildland fire suppression and should be added to this section.	48-11
2	Page 4.14-28, WFIRE-2 Mitigation Measure (third bullet)	Clarify applicability of WFIRE-2; revise WFIRE-2 accordingly: *Ensure building materials and construction methods for all structures are in compliance with California Fire Code Chapter 49, Section 4905, for all <u>residential</u> buildings, not just those residences located along the Wildland Urban Interface perimeter lots.*	48-12

VALLEY'S EDGE DEIR RESPONSES/COMMENTS – 6.0 ALTERNATIVES		
Comment #	***Page # / Section / Figure Reference***	***Comment***
Issue Area – 6.0 Alternatives		
1	Page 6-9 (second paragraph)	Reference to natural gas; this should be evaluated / revised based on the City's CAP measure to ban / eliminate natural gas from new construction starting in 2025. This reference should be addressed for all proposed alternatives.

48-13

Comment Letter 49

December 13, 2021

FROM:
Paul & Kathy Coots
2646 E 20th Street
Chico, CA 95928
pkcoots@comcast.net
(530) 898-1799

TO:
City of Chico Community Development Dept
Mike Sawley, Senior Planner
411 Main Street
PO Box 3420
Chico, CA 95927
mike.sawley@chicoca.gov
(530) 879-6812

RE: Draft EIR for VALLEY'S EDGE

Dear Mr. Sawley,

This letter addresses our concerns about inadequacies of the *Valley's Edge Specific Plan Draft EIR (VESP dEIR)*, dated October 2021. We previously reviewed nearly every page of the *Valley's Edge Specific Plan Project* and related documents as detailed in the *Notice of Preparation* dated August 14, 2019—over 600 pages. We have now reviewed this *VESP dEIR* dated October 2021 and most of the related appendices—over 4,600 pages. 49-1

Use of Previously Prepared Environmental Documentation

We note on page 1-5 (PDF pg 79), the *VESP dEIR* used previously prepared documentation that includes the *Stonegate Final EIR*, dated August 2018. That document was prepared prior to the Camp Fire in November 2018. The significance of the Camp Fire on a variety of environmental elements considered during the environmental review cannot be ignored. If any of the findings of the *VESP dEIR* are dependent on the *Stonegate Final EIR*, the findings are likely quite inadequate. A case in point is noted under the Biological Resources section below regarding numbers of Butte County Meadowfoam located within the Stonegate footprint. 49-2

Along the same concerns, City of Chico last amended its *General Plan* in March 2017. The Camp Fire, climate change, COVID-19 have all impacted various elements of the General Plan. We realize this report cannot reach into a not-yet-updated General Plan, but a concern we hold is that the *Chico General Plan* is woefully outdated. This *Draft EIR* for Valley's Edge uses this outdated plan. In general, the accuracy or the adequacy of the current document may be compromised and therefore inadequate. 49-3

Aesthetics

The photo used to demonstrate the anticipated change in viewshed looking east along E. 20th Street from the flood control channel bridge appears incorrect. [*VESP dEIR* pg. 4.1-33, PDF pg. 191] The area where the future houses are situated in the "anticipated view" appears to be in a designated Primary Open Space (POS), rather than more easterly in an area designated as Low Density Residential (LDR). We believe this POS is due to significant drainage as well as sensitive biological assets located in that area. By incorrectly placing the houses closer to the bike path within that POS, it appears that the viewshed would not be significantly impacted. Because these before-and-after photos are so small, the actual 49-4

impact to the viewshed is difficult to determine. We also note that the Specific Plan designates the LDR continues well beyond the end of E. 20th, yet there are no houses located in the area in the 'anticipated view' photo. We believe this is an inadequate representation to the actual impact to the viewshed especially for all those traveling along E. 20th in an easterly direction, by car, by bike, and on foot and many traveling by car along Skyway and Bruce Road. If this project continues the numbers of travelers will be significant. The viewshed for all will be forever changed. We respectfully request a revision to the photo that accurately depicts the changes to the viewshed.

49-4 Cont.

Air Quality

To estimate project emissions, this *Draft EIR* assumes construction takes place 5 days per week or 22 days per month (pg. 4.2-23; PDF pg. 237). Based on the current conditions of the build out of Belvedere Heights, construction often takes place more than 5 days per week. We are uncertain how this may or may not impact the results of the analysis. Also, we note that many of the tables included in Appendix B, show a windspeed of 2.2 mph. While the windspeed may often be 2.2 mph, it often reaches much higher speeds in this area of southeast Chico. Again, we are uncertain how this may or may not impact the results of the analysis.

49-5

Additionally, the East Avenue Monitoring Station information included on pages 4.2-10 and 4.2-11 note the impact of the number of days in 2018 where Chico's air exceeded state and national standards for quality. Because this document is dated October 2021 it seems pertinent to include air quality data from 2019, 2020, and 2021. Summer and fall air quality in those years was negatively impacted by wildfires in our region. We likely can count on more very poor-quality air days due to smoke from wildfires. We believe because this *Draft EIR* does not use updated information it is inadequate.

49-6

We did not note any analysis to the air quality associated with Franklin Construction. The odors from this nearby asphalt and paving company can be noted while using the Steve Harrison Memorial Bike Path. The company is located directly south of Valley's Edge outside of Chico city limits. We realize this issue does not fit into the impact Valley's Edge would have to air quality, but it seems the design of the use of the property must consider the existing less-than-pleasing neighbor. Imagine the property owners' desire to move the asphalt plant once they are living across the street.

49-7

Biological Resources/Hydrology

The *VESP dEIR*, page 4.3-49 (PDF page 307) states, "There are thousands of Butte County Meadowfoam mapped just west of the Steve Harrison Memorial Bike Path." *The Stonegate EIR Appendix D-2* titled *Rare Plant Survey and Mapping, WRA 2018* states in the Executive Summary, page i, "Approximately 1,656 individuals of BCM were observed during the April study." Seems to be quite a leap to suggest 1,656 individual plants equal thousands. Thousands of BCM individual plants have been observed over several years. The statement is misleading. This suggests that BCM is abundant, instead it is a threatened species.

49-8

On page 4.3-49 the *VESP dEIR* states: "The vernal pool complexes where BCM occur are hydrologically separated from the project site by the bike path and rock walls, which would prevent indirect effects from the project." We have photographs of water traversing across the bike path from Valley's Edge to Stonegate. The rock walls and bike path do not prevent indirect effects. These photos were taken during two different rain periods as noted in dates.

49-9

Steve Harrison Memorial Bike Path, looking south. Valley's Edge on the left, Stonegate Preserve on the right. Water, debris scattered across bike path to and around rock wall.

Photo taken 11/30/2018

Steve Harrison Memorial Bike Path, looking north. Valley's Edge on the right, Stonegate Preserve on the left.

Photo taken 12/12/2018

49-9 Cont.

We do note that improvements to drainage from Valley's Edge to Stonegate are indicated in the proposal. Water however often makes its own path. Climate change is impacting the amount of water received with any storm. At the same time improvements to storm drainage are planned, the additional

'pavement' involved in a project of this scope will promote surface water runoff, rather than permit the water to penetrate the area.

The increased urban runoff containing fertilizers, pesticides and automobile residue from Valley's Edge eventually flows to nearby creeks—negatively impacting the water quality for aquatic creatures. This same chemical-laden water runoff significantly impacts sensitive plant species within the project footprint. Valley's Edge causes the wildlife using this corridor to be squeezed—and these critters lack voices to shout against this use of this land.

49-10

We remained confused by this map from Galloway Enterprises dated 05/14/2015, located in Appendix C, PDF page 74:

This map has white cross hairs noting the area NOT surveyed because it was inside a "Preserve Boundary." In the Aesthetics section, this area depicts houses in a LDR area, or is it POS? Also, was this area ever surveyed? The layers of reports make this difficult to determine. The *Draft EIR* does not clarify. 49-11

The lack of survey data from this cross-hatch area appears to make this *Draft EIR* inadequate regarding identification of any species located in this "preserve boundary" and associated impacts and mitigation measures. This cross-hatch area is depicted with houses as discussed in the previous section on Aesthetics. 49-12

The mitigation measures included in VESP *dEIR* to protect BCM are inadequate. The construction buffers and the recommendations for the future BCM preserves within the Valley's Edge footprint must be even more robust. In order to build 2,777 residences, the project proposes to remove 1,100 trees. The allowance for removing 1,100 oak trees is an unacceptable level of oak destruction. These are a keystone species and a critical part of our ecological and hydrological systems. 49-13

Greenhouse Gas Emissions

We are very concerned about the effects of GHG Emissions on our climate and what the future holds for our children, our grandchildren, and our great grandchildren. We want to state that all efforts to reduce GHG Emissions are necessary to protect our future quality of life. This draft EIR illustrates that this proposed project exceeds target goals.

We were advised of the availability of this *Draft EIR* by email on October 29, 2021, included in that upload was *Appendix F Greenhouse Gas*. Page 4.7-26 states: "Emissions from the operational phase … were estimated using CalEEMod Version 2016.3.2. " *Appendix F* uploaded concurrent to October 29, 2021 appears to use CalEEMod Version 2016.3.2. The pages within *Appendix F* uploaded October 29, 2021 have analysis dates in May 2020. 49-14

The 'new' *Appendix F for Greenhouse Gases* was not uploaded until November 12, 2021. The pages within this 'new' *Appendix F* are dated June 2021. These pages use CalEEMod 2020.4.0. The introductory

paragraphs state the CalEEMod Version 2020.4.0 were used to prepare this section. Yet in the Operational Phase analysis CalEEMod Version 2016.3.2 were used.

If there are 'new' analyses available to use, that were uploaded beyond the initial 45-day review start date of October 29, 2021 there are two issues.

1) This section of the *VESP dEIR* is inadequate as it either does not use updated information included in the 'new' *Appendix F* or it is misrepresenting the information.
2) Because *Appendix F*, uploaded on November 12, 2021 was not available with the *VESP dEIR* the 45-day review period is lessened by approximately 2 weeks. The public has been given an inadequate time frame to review this very critical component of any EIR.

49-14 Cont.

49-15

49-16

Noise and Vibration

Page 4.10-31 states: "The developer(s) shall fund and construct either a noise protection wall for existing off-site residences along E 20th Street or a portion of E. 20th Street shall be repaved with quiet pavement…. Between Potter and Dawncrest…." Our home along E. 20th just west of Potter and would not be included in the 'repaving' with quiet pavement. Yet the same numbers of vehicles would travel in front of our home as those located on the E. 20th. The Mitigation Measure NOI-6 is inadequate. There is no roadway between Potter and Roth that might allow from some of the vehicles to exit. Therefore, all houses along E. 20th Street, between Potter and Bruce should be included in the 'repaving' efforts. Or at the very least additional noise analysis is required.

49-17

Transportation and Circulation

We examined the tables included in *Appendix K Traffic* to understand the impact to the traffic flow along E. 20th Street immediately in front of our home. The conditions in May 2019 counted 355 vehicles traveling east and westbound, AM and PM. The conditions predicted for 2040 are 2,020 trips per day. That is a 570% increase in the numbers of vehicles traveling along E. 20th east of the Bruce Road intersection. This stretch of roadway includes a well-used bicycle path and bike lanes connecting to the Steve Harrison Memorial Bike Path. This stretch of roadway has sidewalk only on the northern edge for pedestrians. The safety of all travelers is at risk. It is already quite difficult to enter E. 20th from Roth, England, Belgium etc. The 2,020 trips per day in the future is more than north/southbound traffic logged at the Bruce Road/E 20th St intersection in May 2019.

49-18

This *Draft EIR* suggests few changes to E. 20th Street between Valley's Edge and Bruce Road—except add a right turn lane at that intersection, and the addition of noise-calming pavement. There are no suggestions or findings for the safety of all those using E. 20th Street in this area. Children walking to and from school, hard-of-hearing seniors out for a stroll, dog-walkers, bicycle riders are all at risk for safety hazards due to the increase. There are no suggestions for traffic calming, yield signs, stop signs, crosswalks. We do realize this area is outside of the boundaries of Valley's Edge, but E. 20th Street will be greatly impacted by this development. Traffic calming mitigations for the cumulative impact must be included. We view this as section of the *VESP dEIR* as inadequate.

49-19

Wildfire

We recently joined the Little Chico Creek Fire Safe Council (LCCFSC) to find ways to reduce the wildfire danger that lurks along Little Chico Creek, the Butte Creek Diversion Channel and the adjacent

49-20

neighborhoods and lands. The LCCFSC has been working with the City of Chico and Butte County Fire Safe Council to fund activities that would clear vegetation along Little Chico Creek. These areas are included in Chico's Vegetative Fuels Management Plans (VFMP), dated April 2021, but there are 'no management plans' adopted for either Hillview/Belvedere Open Space or Little Chico Creek Greenway (VFMP PDF pg. 80). Indeed, the map on PDF page 74 of the same document depicts the Little Chico Creek, Doe Mill, and Belvedere Heights neighborhoods as suffering a torching and crown fire in the event of wildfire. Valley's Edge is situated along Little Chico Creek/Stilson Canyon. While homeowners can maintain defensible space, we are unable to clear property owned by the city—sensitive biological resources could be destroyed.

49-20 Cont.

The *VESP dEIR* explains the plan for the HOA to enforce fire safe actions, yet these actions may result in sensitive biological resources being destroyed. The dilemma faced currently by the LCCFSC. We believe the current draft EIR inadequately resolves the issue of wildfire within the proposed development and importantly the cumulative effects on neighboring existing homes, including the relationship to Biological Resources (particularly BCM and vernal pools) and Transportation (particularly evacuation routes for cumulative impacts).

49-21

Closing Comments

We realize a developer can bring a proposal to the city for approval of how property is to be developed. We also know that the city has a responsibility to turn down a proposal—or at the very least send it back to the drawing board. The Environmental Impact Report is just one of many tools a city uses. We appreciate the opportunity to examine this Draft EIR for Valley's Edge. We have indicated where we believe this draft EIR falls short and is therefore inadequate.

49-22

We hate to see this quiet, aesthetically pleasing valley community, nestled against the foothills disappear and sadly become another example of urban sprawl.

Sincerely,

Paul Coots

Kathy Coots

Comment Letter 50

George T. Kammerer
Attorney At Law
P.O. Box 951
Rancho Murieta, CA 95683-0951

12/12/2021

Mr. Mike Sawley, Principal Planner
City of Chico
411 Main Street - 2nd Floor
P.O. Box 3420
Chico, CA 95928

Via E-Mail & First Class Mail

Re: Comments Upon Draft Environmental Impact Report for the Valley's Edge Specific Plan (State Clearing House # 2019089041)

Dear Mr. Sawley:

We submit these comments on behalf of our client, the Drake Revocable Trust of 2001, Virginia Drake, Trustee ("Drake"), a nearby landowner, upon the Draft Environmental Impact Report ("DEIR") for the Valley's Edge Specific Plan Project ("Valley's Edge Project", or "Project") currently released for public comment by the City of Chico ("City"). Drake has a variety of concerns about the Project, and in particular, concerns about the extensive wastewater treatment and wastewater conveyance service (sewer service) demands that the Project will make upon the South East Chico Sewer Assessment District ("SECSAD"), which the DEIR fails to analyze as required by the California Environmental Quality Act. 50-1

South East Chico Sewer Assessment District - District Formation and History

In 1981 and 1982, the City established the SECSAD for the purpose of providing wastewater treatment and wastewater conveyance service to 2,577.51+/- acres of undeveloped lands in the southeast Chico area (see **Exhibit "A" - SECSAD Service Area Map**). (The Valley's Edge Project is not within the SECSAD Service Area and it's wastewater treatment and wastewater conveyance service needs were not taken into account and not provided for as part of the SECSAD design and allocation of wastewater conveyance pipeline capacity or disposal services to be provided by the SECSAD sewer system facilities.)

At the time of SECSAD district formation, every parcel that was within the SECSAD was assigned a City-calculated wastewater flow factor based upon the City's General Plan Land Use Designation and Zoning flow needs for each of those parcels. Bonds were issued by the SECSAD and the parcels therein were assessed a fair share public benefit payment requirement. Bond fund proceeds were used to design, size and install wastewater conveyance main and trunk lines throughout the SECSAD to serve all of the identified parcels. That work was completed in the early 1990s. SECSAD landowners were assigned Assessment Nos. (Drake was No. 705 and No. 706). Over time the other SECSAD landowners and Drake paid off their fair share of the bonded indebtedness. Drake paid its share of sewer bond principal in full ($798,181.00 principal), plus over $200,000.00 in interest payments. Drake was/is the largest landowner in the SECSAD, owning 530.1+/- acres (see **Exhibit "B"- Dan J. Cook Engineer, 1981**). 50-2

South East Chico Sewer Assessment District - Installed Conveyance Capacity

The wastewater conveyance pipelines installed as part of the SECSAD were sized to accommodate the wastewater conveyance capacity needs for the urban density land development requirements of the financially participating landowners located within SECSAD district boundaries. This wastewater conveyance capacity is identified and clearly depicted within the City's Final Sanitary Sewer Master Plan Update, June 2013, by Carollo Engineers, as revised, (see **Exhibit "C" Figure 4.1 Existing Sanitary Sewer Collection System, Carollo Engineers**).

As depicted in Figure 4.1, Drake installed, at Drake's direct expense, from a point starting at Drake's land holdings south of Highway 32, an eight inch (8") sewer trunk line heading west, leading to and including an eighteen inch (18") sewer main line heading south, just west of and paralleling Bruce Road, down to 20th Street. The 18" sewer main line then turns west and runs underneath 20th Street. Nearby, at the point where the Drake-installed 18" sewer main line main meets 20th Street, a separate ten inch (10") Doe Mill trunk sewer line comes in from the east sized to serve the Doe Mill subdivisions. 50-3

This Doe Mill trunk line is the Valley's Edge Project north connection to the existing SECSAD sewer conveyance pipelines with an enlarged fifteen inch (15") trunk line as explained in Chapter 4 of the Project DEIR. This will direct wastewater into the SECSAD pipeline system from a sizable segment of the Valley's Edge Project comprised of several hundred residential units (which were not anticipated or planned for within the SECSAD district for wastewater disposal service).

Drake is quite reasonably concerned that approval of an enlarged 15" Valley's Edge Project wastewater connection at this location (Doe Mill trunk line) will adversely impact the ability of the existing 18" SECSAD wastewater conveyance main line to convey that wastewater capacity already paid for and needed by Drake to serve the Drake lands upstream when the expanded 15" Doe Mill trunk line with Valley's Edge sewage will connect to and dump into the SECSAD 18" main line. None of these highly-foreseeable potential adverse impacts were analyzed in the DEIR and must be pursuant to CEQA.

The likelihood of a significant adverse impact to the SECSAD wastewater conveyance system capacity from a Valley's Edge Project connection at the Doe Mill location is quite high, as the lands of Drake upstream already have existing engineered subdivision plans, previously submitted to the City and reviewed by City staff at length, which are being prepared for re-submittal. As acknowledged by the Chico City Manager in his letter to Drake of March 26, 2021, the "City's planning assumes development of the Drake properties at 100 percent of the capacity provided in the SECSAD Engineer's Report" which amounts to 600 +/- residential dwelling units and up to 40,000 square feet of Commercial / Office space (see **Exhibit "D" Eastgate Site Plan**). The DEIR failed to analyze these SECSAD system capacity needs. 50-4

In fact, in order for the DEIR to be legally adequate, it is imperative that the City actually conduct a SECSAD district-wide engineering study to analyze and determine the potential impact to wastewater disposal conveyance capacity pipelines throughout the entire SECSAD system to all existing SECSAD sewer lines installed by and at the expense of all SECSAD district landowners. The DEIR has some brief cursory discussion of the capacity of the City Water Pollution Control Plant (WPCP), but no meaningful quantitative discussion of potential impacts to sewer line sizing and its capacity to serve other lands within the entire surrounding growth areas that paid for the SECSAD infrastructure which Valley's Edge now plans to tap into, use and consume a very large share of SECSAD sewer conveyance capacity. It is 50-5

essential that the DEIR analyze Valley's Edge impacts to the entire SECSAD conveyance system assuming maximum development by all other SECSAD landowners per the SECSAD Engineer's Report. 50-5 Cont.

The need to conduct this analysis by Valley's Edge, before the project can be approved, is particularly acute because the large neighboring Merriam Park development project's density was dramatically increased (with a commensurate substantial increase in sewer unit hookups and use of SECSAD sewer capacity in this exact location west of Bruce Road and north of 20th Street) above and beyond the density originally assumed for the Merriam Park site by SECSAD when the district was formed. As a result, substantial additional conveyance capacity has been used in this location which will exacerbate impacts from Valley's Edge tying into the SECSAD system. New state law now allows "Granny Flat" ancillary living quarters to be built on lots and tie into sewer. Both were not and must be analyzed in the DEIR. 50-6

South East Chico Sewer Assessment District - Conveyance Capacity Owned By Drake

As the largest landowner in the SECSAD at the time of formation and thereafter, Drake paid a lion's share of the bonded indebtedness, with interest, to install the wastewater conveyance pipeline infrastructure, for the very purpose, and with reasonable investment-backed expectations, of using the maximum wastewater capacity necessary to develop of all of Drake's holdings within the SECSAD. Any excess capacity not used by Drake, based upon Drake's acreage of participation, remains the property of Drake and is saleable on the open market to others who have SECSAD sewer hook-up needs.

As noted above, the Chico City Manager in his letter to Drake of March 26, 2021, confirmed that the "City's planning assumes development of the Drake properties at 100 percent of the capacity provided in the SECSAD Engineer's Report." Drake's engineers, Rolls, Anderson & Rolls ("RAR"), agree with that conclusion after conducting a thorough analysis of the SECSAD Engineer's Report, and the City's consulting engineer, Carollo Engineers' July 26, 2020 memorandum with its new loading polygons which show all of the Drake properties south of State Highway 32 as assumed for 100% development use of SECSAD wastewater conveyance capacity. 50-7

In fact, RAR has numerically quantified the number of sewer units allocated to the Drake properties within Carollo's new loading polygons based upon parcel acreage and zoning, and Drake's bonding and construction cost participation in the SECSAD wastewater conveyance pipeline system to serve Drake's properties. RAR's precise engineered calculations confirm that Drake owns a minimum of 4,165.33 wastewater sewer hook-up units for residential and/or other development (see **Exhibit "E" RAR, April 26, 2021 Drake Owned Sewer Unit Calculation**). The DEIR failed to analyze this SECSAD capacity need. 50-8

This DEIR deficiency is particularly acute because this sewer unit calculation has been known to the City since at least April 25, 2021 (and discussed with the City in additional multiple written correspondence dating back over several years). Inexplicably, the DEIR failed to discuss or even mention the City's well known (fully foreseeable) future Drake development wastewater conveyance system needs and allocation within the City's own SECSAD Engineer's Report. To be legally adequate, the 4,165.33 sewer hook-up unit capacity owned by Drake must be taken into account in the Valley's Edge Project DEIR analysis. 50-9

Further still, this Drake 4,165.33 sewer hook-up units capacity has a priority over the Valley's Edge Project's wastewater disposal needs. The Valley's Edge Project is <u>not</u> within the SECSAD service area. The SECSAD Engineer's Report never took into account development of the Valley's Edge Project 50-10

parcels in designing and sizing adequate wastewater infrastructure conveyance capacity. It is a legal imperative that the City reserve adequate hook up and conveyance capacity within the SECSAD system to serve the entire Drake-owned allocation of 4,165.33 sewer hook-up units, before allowing Valley's Edge to connect to the SECSAD wastewater conveyance system. 50-10 Cont.

The Valley's Edge Project and DEIR are inadequate and legally insufficient to allow for project approval by the City until a SECSAD district-wide sewer system wastewater conveyance system capacity and unit allocation reservation study has been conducted and verified as accurate. This SECSAD-wide study must demonstrate conclusively that there is adequate wastewater disposal capacity in the SECSAD conveyance system to accommodate development of all lands within General Plan-approved growth areas within the SECSAD boundaries, before approving sewer service to projects, like Valley's Edge, located outside SECSAD district boundaries. The paucity of the DEIR data and discussion on this topic fails to meaningfully inform the public and meet CEQA's public information notice and disclosure mandates: 50-11

A SECSAD district-wide sewer system wastewater conveyance system capacity and unit allocation reservation study must be performed as an essential component of the Valley's Edge Project DEIR, in order to legally support any Valley's Edge Project approval that would use any SECSAD facilities. 50-12

Make no mistake, the financial damages of approving the Valley's Edge Project, without sufficient sewer hook-up conveyance capacity to serve all of Drake's holdings at 100% build out is substantial. The current value of Drake's 4,165.33 pre-paid sewer hookup units (recently valued at $1,825.46 per SFR unit and valued at $1,545.80 per MFR unit), is the following:

- 2,763 SFR sewer hookup units (R-1 and R-2) at their current fair market value of $5,044,348; plus,

- 1,400 MFR sewer hookup units (R-3) at their current fair market value of $2,164,120 = $7,208,468. 50-13

Any deprivation of Drake's ability to use and/or sell Drake's sewer units will result in immediate requests for judicial relief against the City and the project proponents. And that is solely the value of the sewer units themselves if deprived of their sale or use. This does not include fully foreseeable damages for loss of revenue to Drake for being unable to build and sell actual dwelling units served by those sewer units.

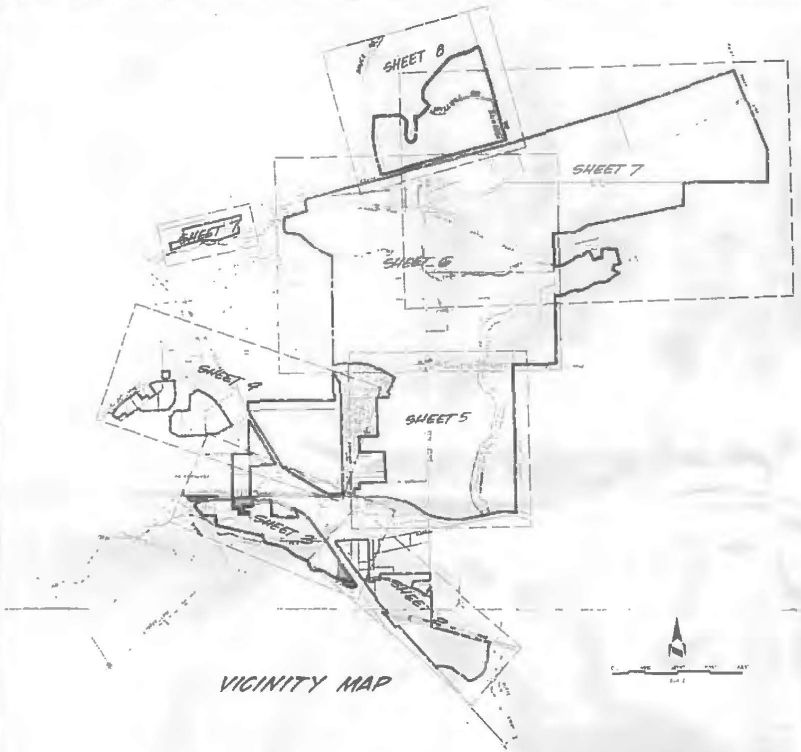
In this multitude of ways, the Valley's Edge DEIR is legally deficient and inadequate to support project approval until and unless this level of additional significant impact analysis is performed and all feasible mitigation measures are exhausted that mitigate all these significant impacts to less than significant levels. 50-14

Very truly yours,

George T. Kammerer, Attorney At Law

Exhibits A - E attached

cc: The Drake Revocable Trust of 2001, Virginia Drake Trustee
Kenneth R. Stone, Senior Litigation Attorney, Hefner Law
Rolls, Anderson & Rolls Engineers
Mark Orme, Chico City Manager
Matt Johnson, Chico City Senior Development Engineer



VICINITY MAP

LEGEND

ASSESSMENT DISTRICT BOUNDARY LINE ——— SE DST ———

ASSESSMENT NUMBERS SHOWN THUS (212)

FILED IN THE OFFICE OF THE CITY CLERK OF THE CITY OF CHICO, THIS 9TH DAY OF DECEMBER, 1981.

BARBARA EVANS, CITY CLERK
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA
Barbara A. Evans

RECORDED IN THE OFFICE OF THE DIRECTOR OF PUBLIC WORKS OF THE CITY OF CHICO, THIS 9TH DAY OF DECEMBER, 1981.

AL SAVITZ, DIRECTOR OF PUBLIC WORKS
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA
Al Savitz

AN ASSESSMENT WAS LEVIED BY THE CITY COUNCIL OF THE CITY OF CHICO ON THE LOTS, PIECES AND PARCELS OF LAND SHOWN ON THIS ASSESSMENT DIAGRAM. SAID ASSESSMENT WAS LEVIED ON THE 8TH DAY OF DECEMBER, 1981, SAID ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL WERE RECORDED IN THE OFFICE OF THE DIRECTOR OF PUBLIC WORKS OF THE CITY OF CHICO ON THE 9TH DAY OF DECEMBER 1981. REFERENCE IS MADE TO THE ASSESSMENT ROLL RECORDED IN THE OFFICE OF THE DIRECTOR OF PUBLIC WORKS FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND SHOWN ON THIS ASSESSMENT DIAGRAM.

BARBARA EVANS, CITY CLERK
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA
Barbara A. Evans

FILED THIS 10 DAY OF Dec, 1981, AT THE HOUR OF 2:29 O'CLOCK A .M. IN BOOK 2 OF MAPS OF ASSESSMENT DISTRICTS AT PAGE 44-49 IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF BUTTE, STATE OF CALIFORNIA.

CLARK A NELSON, COUNTY RECORDER
COUNTY OF BUTTE
STATE OF CALIFORNIA
/s/ D FERLAND DEPUTY

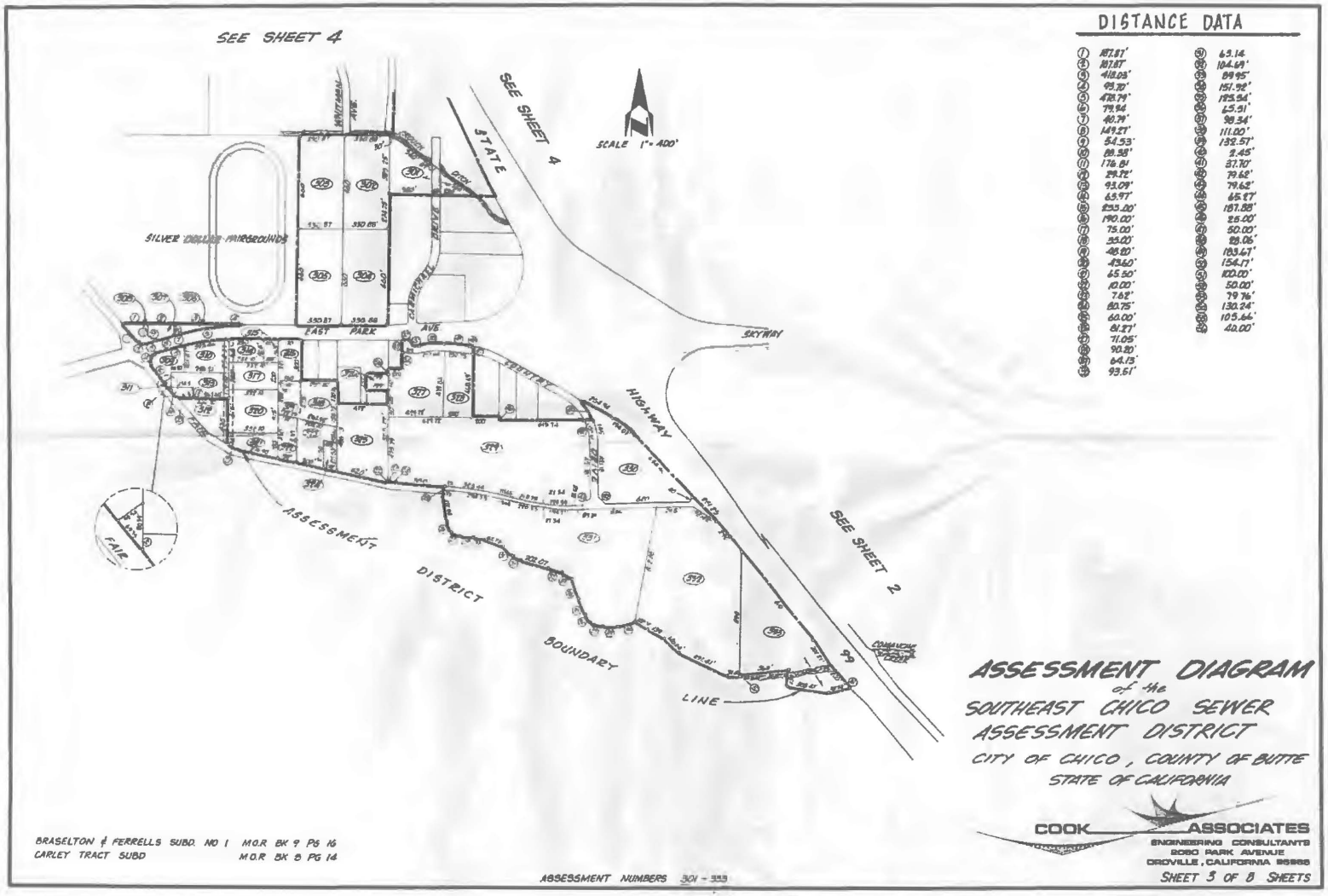
ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2060 PARK AVENUE
OROVILLE, CALIFORNIA 95965

SHEET 1 OF 8 SHEETS

ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2050 PARK AVENUE
OROVILLE, CALIFORNIA 95965

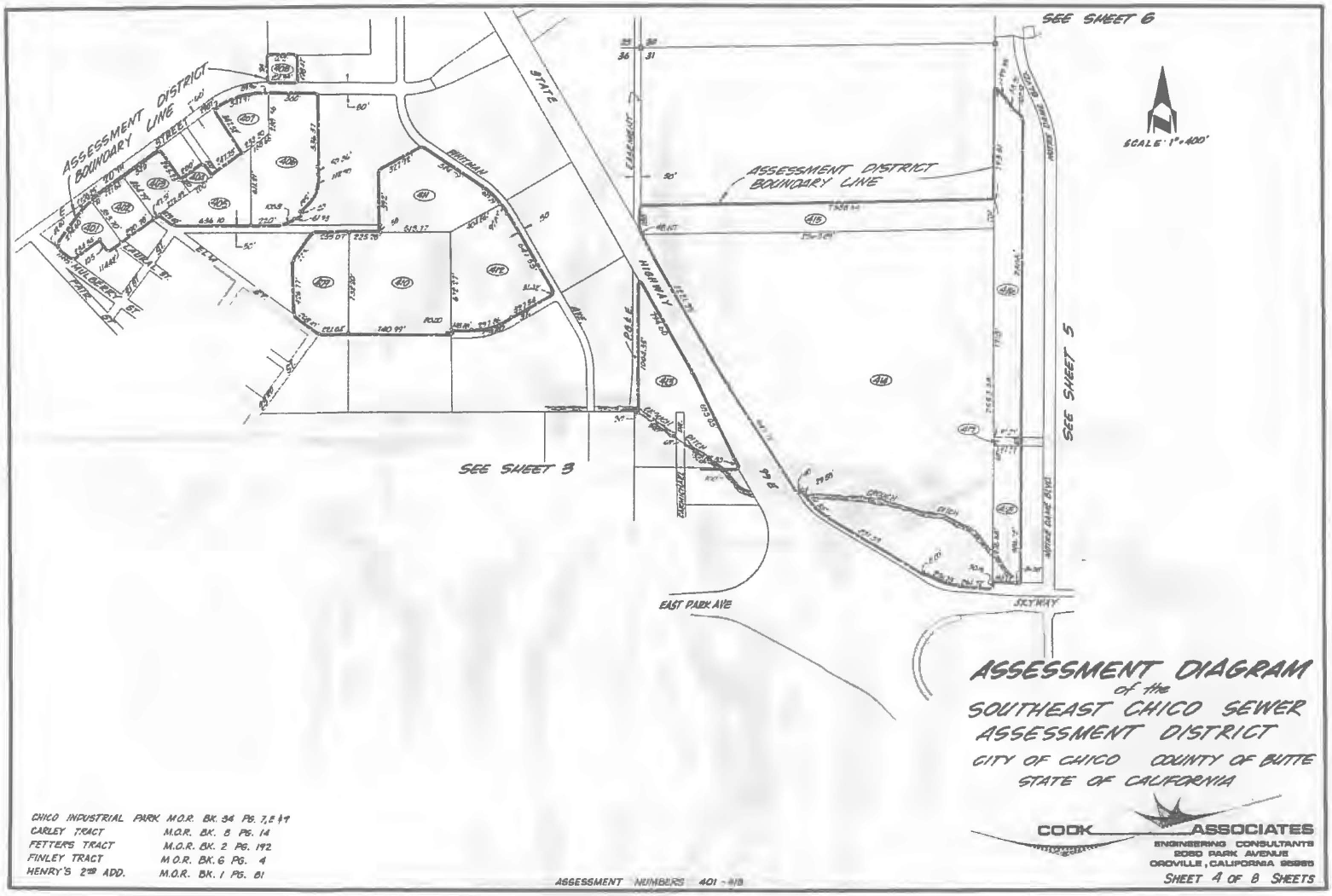


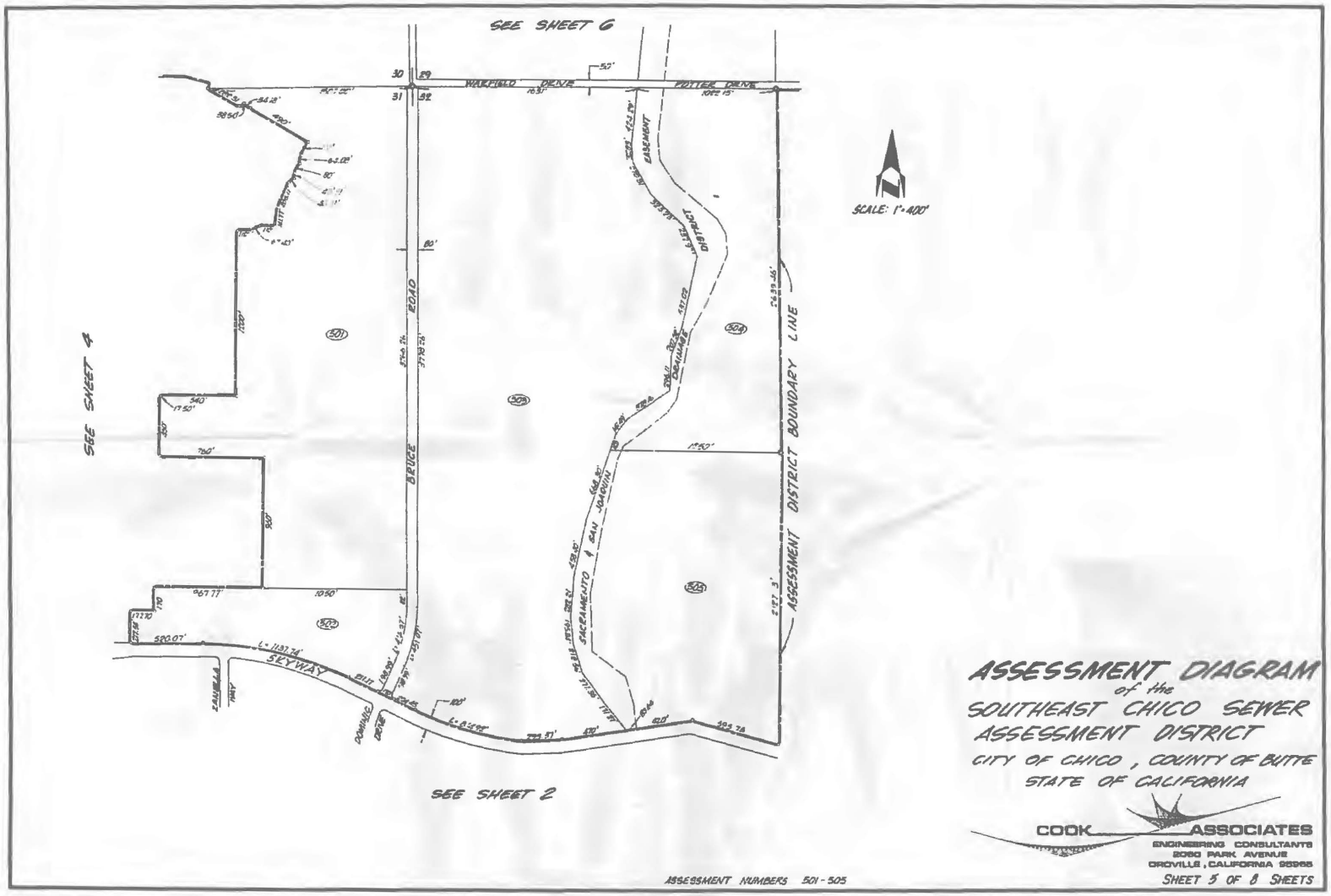
BRASELTON & FERRELLS SUBD. NO 1 M.O.R BK 9 PG 16
CARLEY TRACT SUBD M.O.R BK 8 PG 14

ASSESSMENT NUMBERS 301 - 333

ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2080 PARK AVENUE
OROVILLE, CALIFORNIA 95966

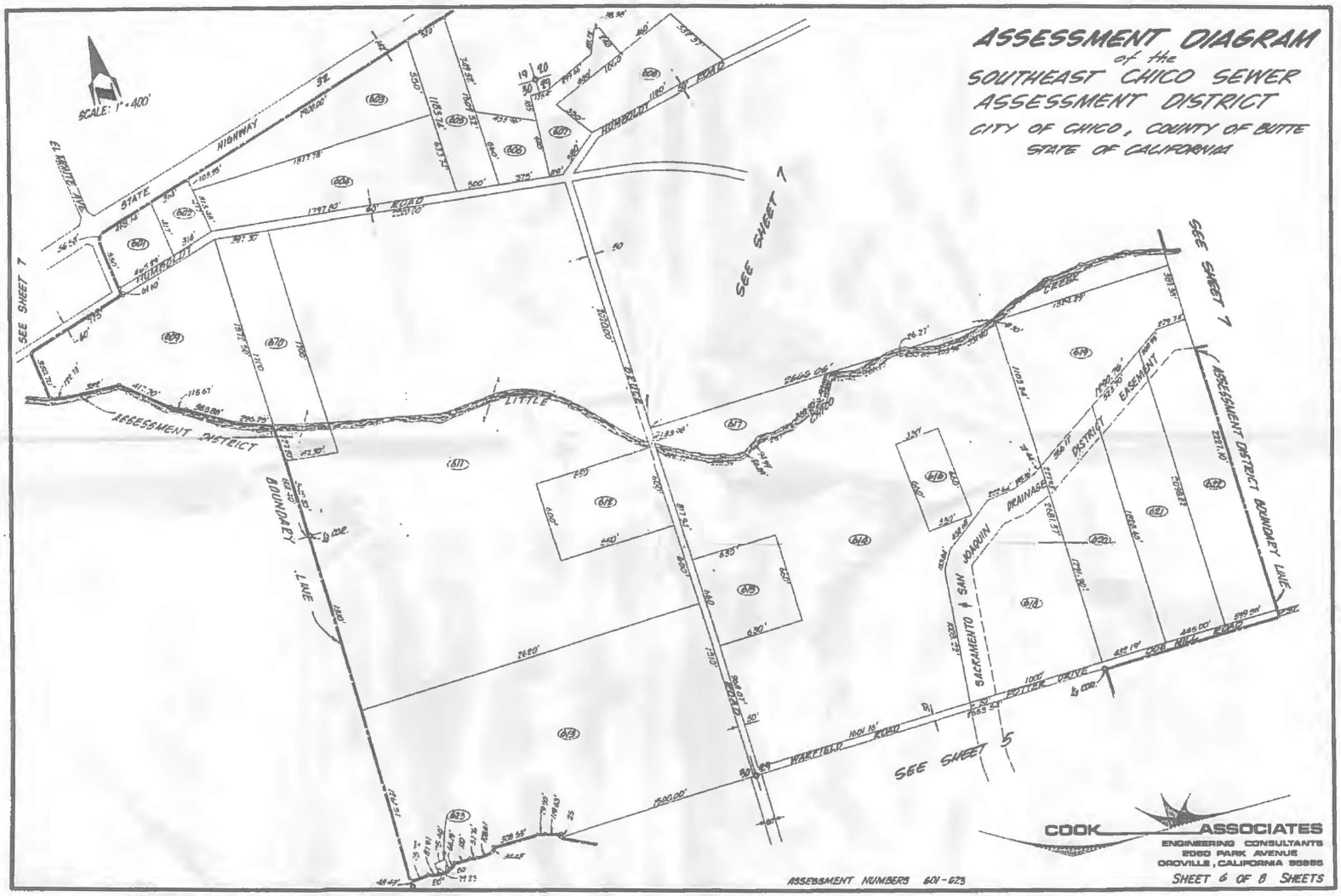

SEE SHEET 6
SCALE 1"=400'
ASSESSMENT DISTRICT BOUNDARY LINE
STREET
STATE
EASEMENT
ASSESSMENT DISTRICT BOUNDARY LINE
HIGHWAY
PG&E
SEE SHEET 3
SEE SHEET 5
EAST PARK AVE
SKYWAY
ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER
ASSESSMENT DISTRICT
CITY OF CHICO COUNTY OF BUTTE
STATE OF CALIFORNIA
COOK ASSOCIATES
ENGINEERING CONSULTANTS
2050 PARK AVENUE
OROVILLE, CALIFORNIA 95965
SHEET 4 OF 8 SHEETS
CHICO INDUSTRIAL PARK M.O.R. BK. 34 PG. 7,8 & 9
CARLEY TRACT M.O.R. BK. 8 PG. 14
FETTERS TRACT M.O.R. BK. 2 PG. 192
FINLEY TRACT M.O.R. BK. 6 PG. 4
HENRY'S 2ND ADD. M.O.R. BK. 1 PG. 81
ASSESSMENT NUMBERS 401 - 418

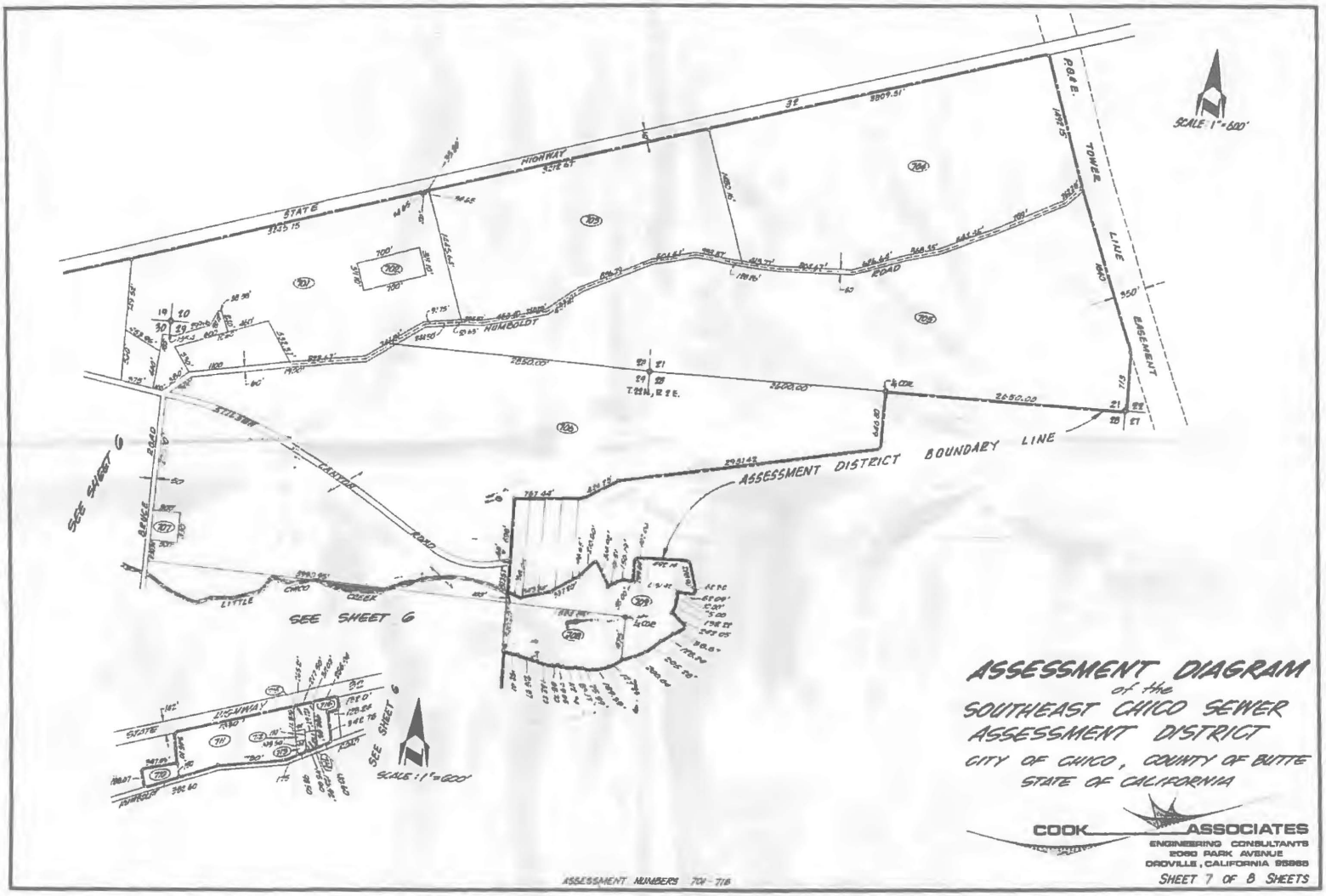


ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2060 PARK AVENUE
OROVILLE, CALIFORNIA 95965

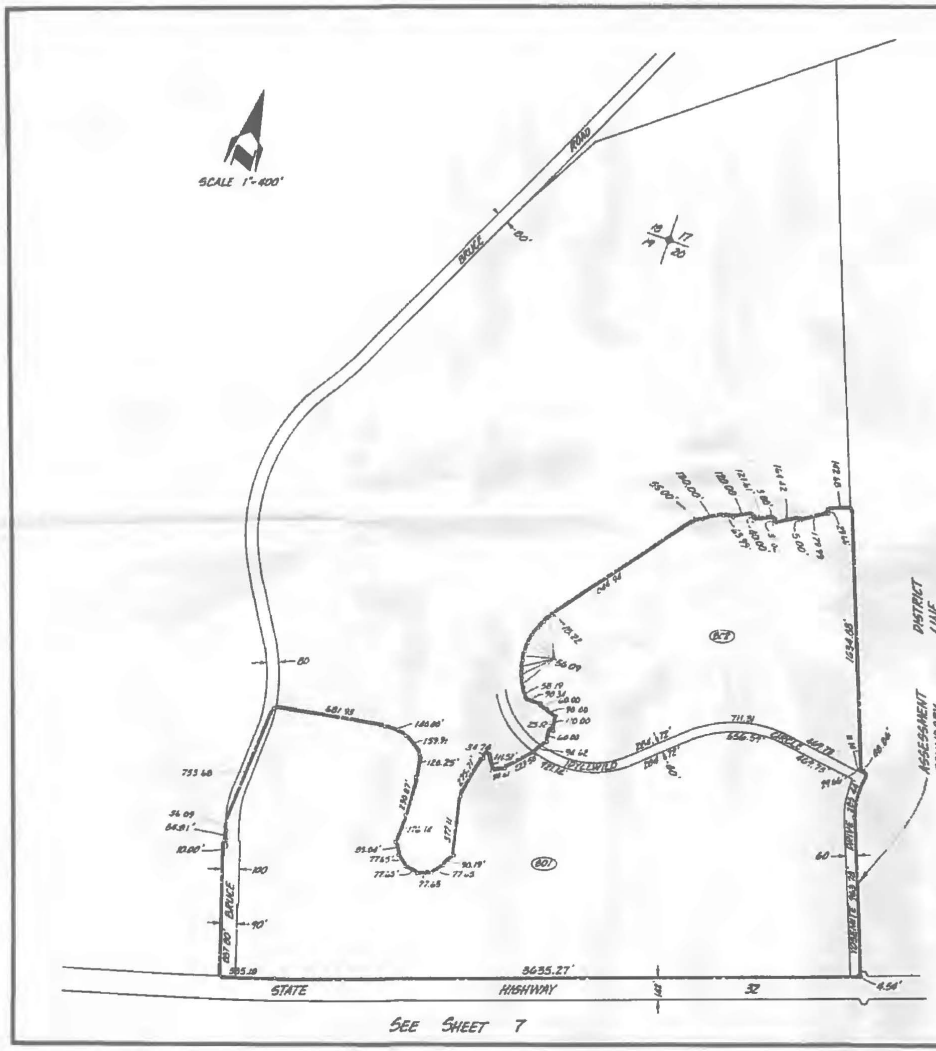
ASSESSMENT NUMBERS 501 - 505


ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER
ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA
SCALE: 1" = 400'
SEE SHEET 7
SEE SHEET 7
SEE SHEET 7
SEE SHEET 5
EL MONTE AVE.
HIGHWAY 32
STATE
HUMBOLDT ROAD
LITTLE CHICO CREEK
ASSESSMENT DISTRICT BOUNDARY LINE
SACRAMENTO & SAN JOAQUIN DRAINAGE DISTRICT EASEMENT
WARFIELD ROAD
POTTER DRIVE
COOK ASSOCIATES
ENGINEERING CONSULTANTS
2050 PARK AVENUE
OROVILLE, CALIFORNIA 95965
ASSESSMENT NUMBERS 601-623
SHEET 6 OF 8 SHEETS



ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2060 PARK AVENUE
OROVILLE, CALIFORNIA 95965



ASSESSMENT DIAGRAM

of the

SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT

CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2050 PARK AVENUE
OROVILLE, CALIFORNIA 95965

APPORTIONED ASSESMENT
AMENDING ASSESSMENT NOS. 705 AND 706
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, BUTTE COUNTY, CALIFORNIA

1. A request has been filed with the Director of Public Works of the City of Chico requesting an apportionment of assessment within Southeast Chico Sewer Assessment District to conform with a subdivision of land within the district.

2. In accordance with the application, the undersigned hereby apportions to each separate part of the original parcel of land the proportionate part of the assessment that would have been levied thereon if the parcel had been so divided at the time the original assessment was made. The undersigned has assigned a new assessment number to each parcel, as shown on the Amended Assessment Diagram attached to this apportionment.

3. The old assessment numbers, new assessment numbers and apportioned assessments (based in each case on the original amount of assessment) are as follows:

Old Assesment and Diagram No.	New Assesment and Diagram No.	Reapportionment of Original Amount	Assessor's Parcel No.
706	706-A	$199,679.60	46-36-114
705&706	706-B	$ 40,547.59	46-36-115
706	706-C	$136,339.40	46-36-116
705	706-D	$421,614.20	46-36-117 & 46-34-83
		Σ=$798,180.79	

DATED : August 27, 1985.

Cook Associates
Engineer of Work

By _____

EXHIBIT A

ASSESSMENT & DIAGRAM NO.		ASSESSMENT AMOUNT	PROPERTY DESCRIPTION	
610	$	46,107.84	46-36-02	
611		346,144.22	46-36-80	
612		26,254.90	46-36-04	
613		170,708.78	46-42-02	
614		205,618.90	46-36-85	
615		19,779.40	46-36-84	
616		6,920.78	46-36-83	
617		11,020.85	46-36-06	
618		37,649.06	46-36-31	
619		25,060.15	46-36-89 113	
620		22,236.47	46-36-86	
621		23,530.66	46-36-87	
622		23,648.31	46-36-88	
623		.00	46-42-03	DROPPED OUT
701		209,326.79	46-34-34	
702		21,626.68	46-34-16	
703		127,401.91	46-34-35	
704		163,961.62	46-34-36	
→ 705		250,277.53	46-34-38	←
→ 706		547,903.26	46-36-07	←
707		6,603.16	46-36-05	
708		13,540.66	46-36-10	
709	10,792.81	~~XXXXXXXX~~ 1/	46-55-75	
710	~~A 4,955.74 B 4,428.78~~	8,994.54	46-56-01	
711		44,971.27	46-26-69	
712		276.84	46-26-117	
713		1,920.01	46-26-116	
714		2,920.60	46-26-118	
715		3,697.77	46-26-119	
716		6,122.25	46-26-183	
801		323,926.74	46-34-58	
802		193,752.96	46-34-57	

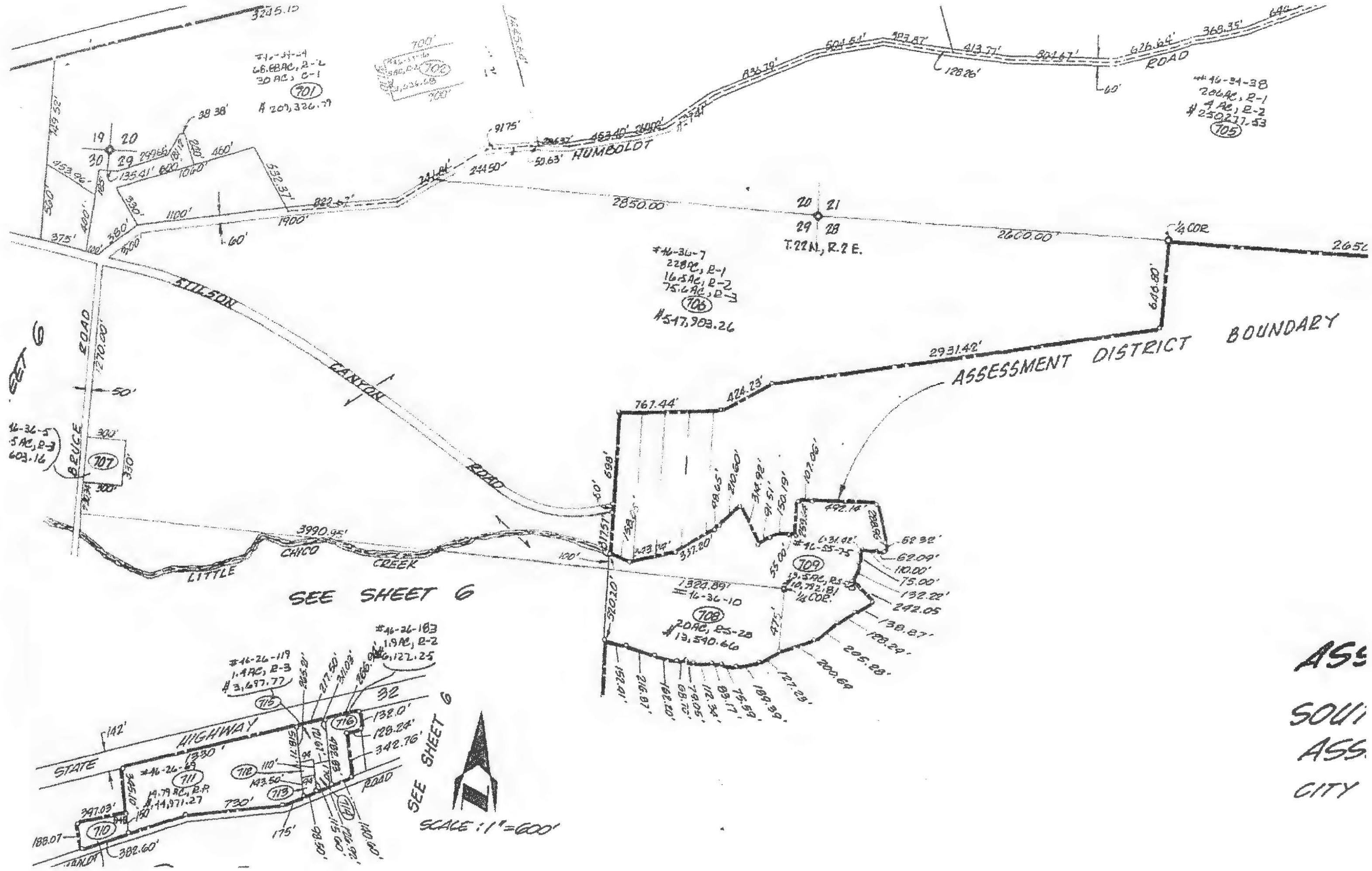
$ ~~XXXXXXXXXXX~~ TOTAL ASSESSMENT
56,952.07 REDUCTIONS 1/
$4,741,428.05 REVISED TOTAL ASSESSMENT 1/

1/ Revised in accordance with the City Council's action taken at continued protest hearing December 8, 1981.

Dan J. Cook, R.C.E. 13062
Engineer of Work

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
2	LAST	FIRST	ASMT.	BOOK	PAGE	PARCEL	LAND		GROSS	AREA	SEWAGE	FLOW	FRONTAGE	FRONTAGE	FRONTAGE	TOTAL	NET	BASE
3	NAME	NAME	NO.	NO.	NO.	NO.	USE	DUTY	ACRES	SHAPE F	FLOW	FACTOR	DISTANCE	SHAPE F	BENEFIT	COST	COST	ASSMT
4																		
91	WINN	ARLIN	609	46	27	8	R-3	3950	26.52	.9	94278.6	.0135379	1500	1	25500			89417.28
92	WINN	ARLIN	610	46	36	2	R-3	3950	15	1	59250	.0097649	387	1	6579			46748.23
93	SCHMIDBAUER	GEORGE	611	46	36	80	PC/R-1	2070	178	1	368460	.0687254	5950	1	101150			358951.8
94	GOLD EMP	BROADCAST	612	46	36	4	R-1	2070	11.7	1	24219	.0039915	600	1	10200			26619.55
95	SCHMIDBAUER	GEORGE	613	46	42	2	PC/R-1	2070	77.42	1	160259.4	.0264121	3790	1	64430			173079.7
96	SCHLAF	IRVIN	614	46	36	85	PC/R-1	2070	49.46	1	102382.2	.0168735	0	0	0		207986.4	69411.21
97	SCHLAF	IRVIN	614				PC/R-2	2950	15	1	44370	.0073126	0	0	0			30881.16
98	SCHLAF	IRVIN	614				PC/R-3	3950	35	1	138250	.0227848	0	0	0			93728.21
99	SCHLAF	IRVIN	614				NC	2250	18	1	22500	.0037082	0	0	0			15254.14
100	WHITAKER	MARCE	615	46	36	84	R-2	2950	10	1	29500	.0048758	0	0	0			20054.11
101	ALLDRIN	CHARLES	616	46	36	83	PC/R-1	2070	5	1	10350	.0017058	0	0	0			7016.904
102	DAY	DONALD	617	46	36	6	R-3	3950	8.89	0	0	0	0	0	0			11173.92
103	SCHLAF	IRVIN	618	46	36	31	PC/R-1	2070	32	.85	56304	.0092794	0	0	0			38171.96
104	SCHLAF	IRVIN	619	46	36	89	PC/R-1	2070	21.3	.85	37477.35	.0061766	0	0	0			25408.21
105	SCHLAF	IRVIN	620	46	36	86	PC/R-1	2070	18.9	.85	33254.55	.0054806	0	0	0			22545.31
106	SCHLAF	IRVIN	621	46	36	87	PC/R-1	2070	20	.85	35190	.0057996	0	0	0			23857.47
107	SCHLAF	IRVIN	622	46	36	88	PC/R-1	2070	20.1	.85	35365.95	.0058286	0	0	0			23976.76
108	CALIF.	PARK	801	46	34	58	R-1+	2950	113.72	.9	302745.4	.0498951	0	0	0			205249.8
109	CALIF.	PARK	802	46	34	57	R-1+	2950	68.23	.9	181641.9	.0299362	0	0	0			123146.3
110	ROSELLINI	ILDO	701	46	34	34	R-2	2950	68.88	1	203747.0	.0335793	1207	1	28519		211644.6	158631.7
111	ROSELLINI	ILDO	701				C-1	2250	30	1	67500	.0111246	460	1	7820			53582.42
112	JOHNSON &	WATSON	702	46	34	16	R-2	2950	5	1	14750	.0024375	700	1	11900			21927.85
113	ROSELLINI	ILDO	703	46	34	35	PC/R-1	2070	182.27	.9	190529.0	.0314008	0	0	0			129171.4
114	ROSELLINI	ILDO	704	46	34	36	PC/R-1	2070	148.87	.8	245203.9	.0404117	0	0	0		506187.8	166238.9
115	DRAKE	JOHN	705	46	34	38	R-1	2070	206	.85	362457	.0597361	0	0	0		252940.1	245732.8
116	DRAKE	JOHN	705				R-2	2950	4	1	11832	.0019500	0	0	0			8021.643
117	DRAKE	JOHN	706	46	36	7	R-1	2070	228	1	471960	.0777831	0	0	0		553732.2	319970.8
118	DRAKE	JOHN	706				R-2	2950	16.5	1	48807	.0080438	0	0	0			33089.28
119	DRAKE	JOHN	706				R-3	3950	75.6	1	298620	.0492152	0	0	0		806672.3	282452.9
120	JOHNSON	ELMER	707	46	36	5	R-3	3950	2.5	1	9875	.0016275	0	0	0			6694.872
121	SCHLAF	IRVIN	708	46	36	10	RS-20	1350	20	.75	20250	.0033374	0	0	0			13728.72
122	SCHLAF	IRVIN	709	46	55	75	RS-20	1350	32	.7	30240	.0049838	0	0	0			20501.56
123	ALLEN	MARVIN	710	46	56	1	NC	2250	1.71	1	3847.5	6.341E-4	383	1	6511			9119.458
124	HIGNELL	FRED	711	46	26	69	RP	2250	14.79	1	33277.5	.0054844	1355	1	23035			45595.87
125	STEINSIEK	DONALD	712	46	26	117	R-1	2070	.2	1	414	6.823E-5	0	0	0			280.6762
126	STEINSIEK	DONALD	713	46	26	116	R-1	2070	.2	1	414	6.823E-5	98	1	1666			1946.676
127	WALSVICK	IRVING	714	46	26	118	R-2	2950	.4	1	1183.2	1.958E-4	127	1	2159			2961.164
128	STEINSIEK	DONALD	715	46	26	119	R-3	3950	1.4	1	5530	9.114E-4	0	0	0			3749.128
129	KEMP	MARI AN	716	46	26	183	R-2	2950	1.9	1	5620.2	9.263E-4	141	1	2397	(3)		6207.280
138	TOTALS								2577.51		6067642.				532382.2			4668551

Dan J. Cook
Engineer of Work



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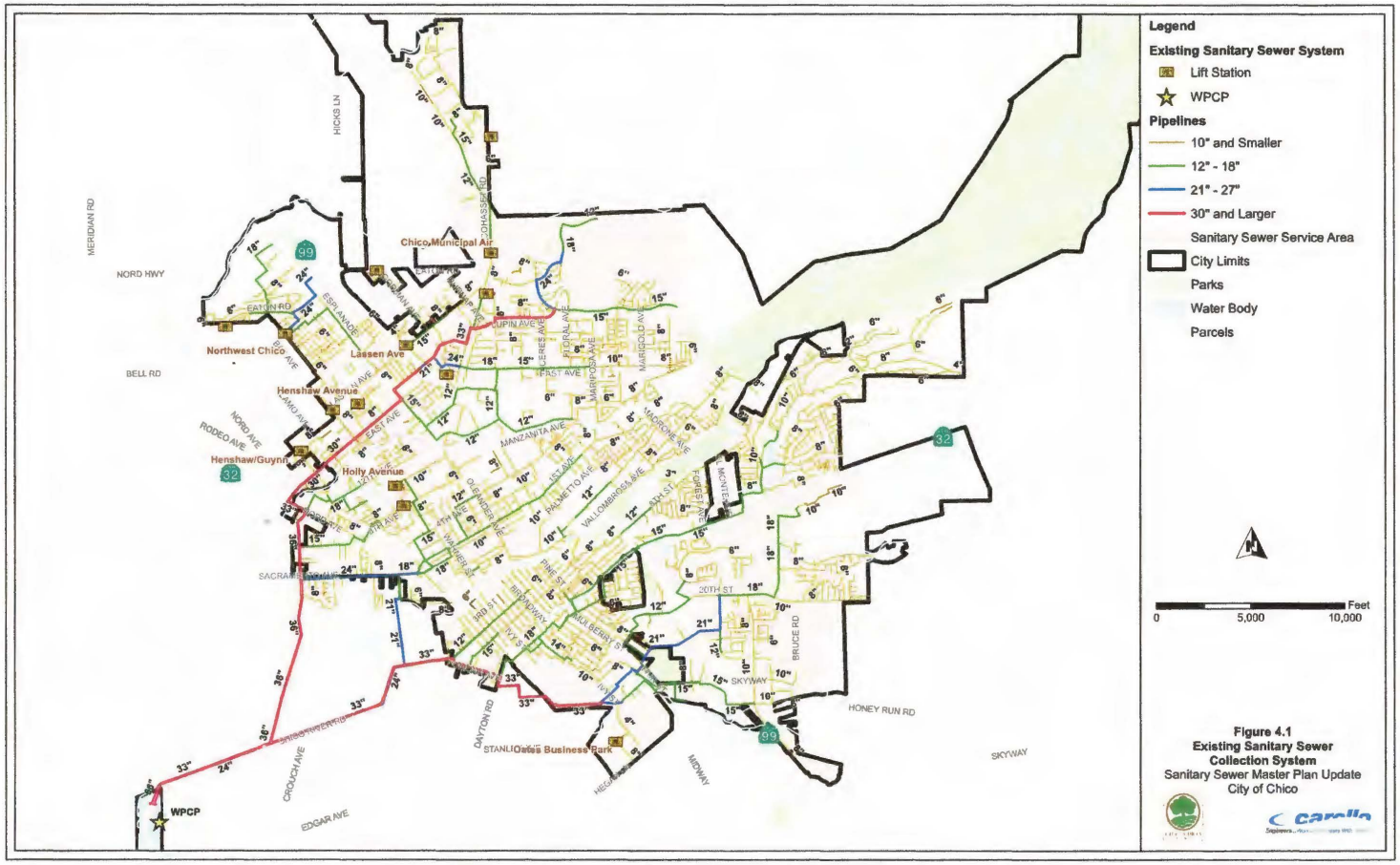
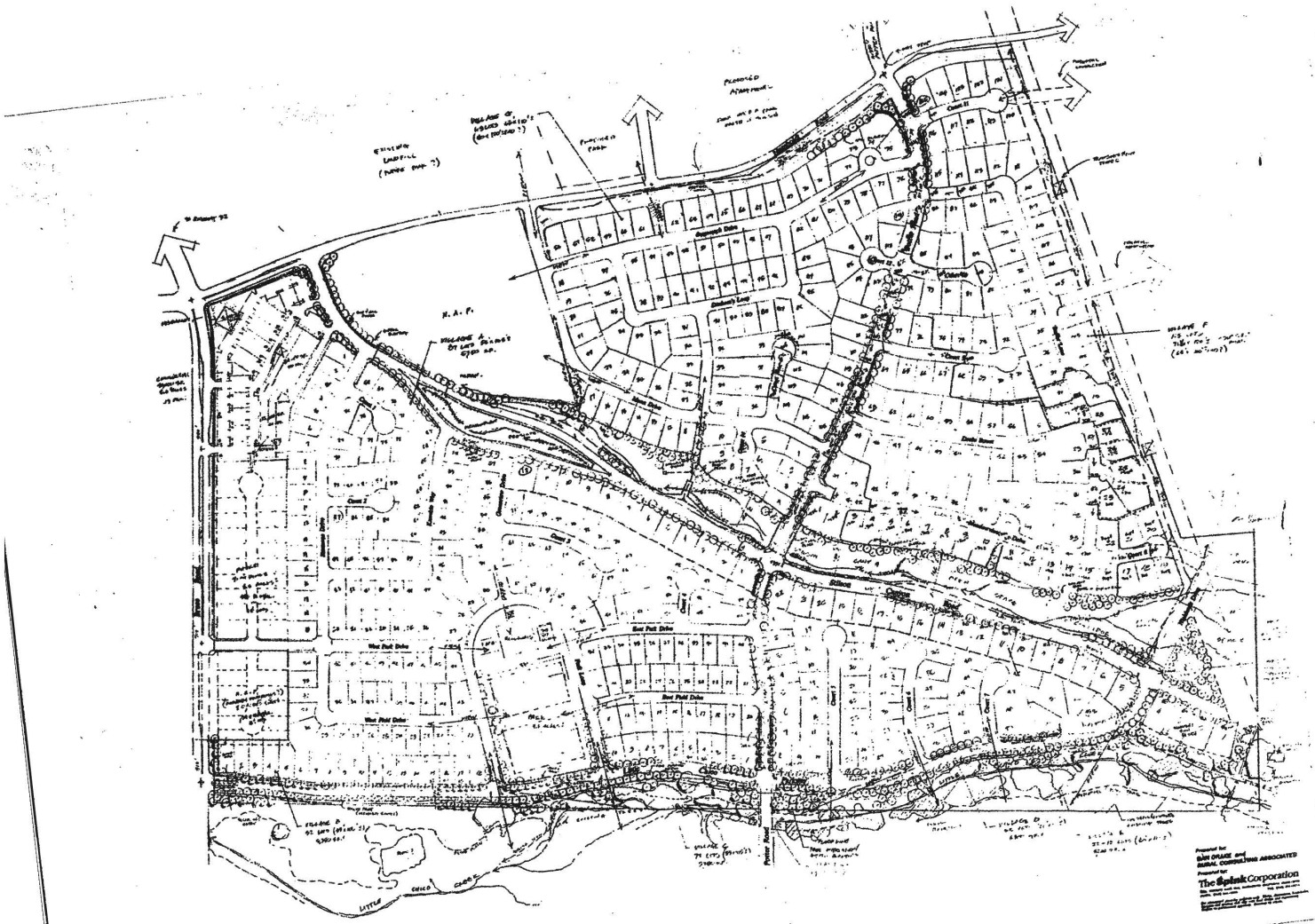

Legend
Existing Sanitary Sewer System
Lift Station
WPCP
Pipelines
10" and Smaller
12" - 18"
21" - 27"
30" and Larger
Sanitary Sewer Service Area
City Limits
Parks
Water Body
Parcels
Feet
0
5,000
10,000
Chico Municipal Air
Northwest Chico
Lassen Ave
Henshaw Avenue
Henshaw/Guynn
Holly Avenue
WPCP
MERIDIAN RD
NORD HWY
BELL RD
EATON RD
ESPLANADE
RODEO AVE
NORD AVE
HICKS LN
LUPIN AVE
FIRST AVE
MANZANITA AVE
SACRAMENTO
20TH ST
SKYWAY
BRUCE RD
HONEY RUN RD
DAYTON RD
CROUCH AVE
EDGAR AVE
MIDWAY
SKYWAY
Figure 4.1
Existing Sanitary Sewer
Collection System
Sanitary Sewer Master Plan Update
City of Chico


8"
10"
10"
18"
18"
8"
8"
18"
8"
10"



Conceptual Site Plan

Simmons Ranch – Chico, California

EASTGATE PROJECT
Conceptual Site Plan

LAND USE SUMMARY

Area/ Symbol	Description (lot size)	Units or Sq. Ft.	Gross Acres	Density du/ac or FAR
A	Single Family Residential (55' x 105'± = 5,750 s.f.)	87	18.4	4.7
B	Single Family Residential (55' x 105'± = 5,750 s.f.)	52	10.8	4.8
C	Single Family Residential (55' x 105'± = 5,750 s.f.)	77	16.2	4.7
D	Single Family Residential (60' x 110'± = 6,500 s.f.)	53	13.6	3.9
E	Single Family Residential (80' x 110'± = 8,750 s.f.)	34	11.1	3.1
F	Single Family Residential (65' x 110'± = 6,500 s.f.)	125	34.6	3.6
G	Single Family Residential (72' x 110'± = 8,500 s.f.)	119	29.6	4.0
TH	Townhome (Half plex units?)	48	4.5	12.0*
CO	Commerical/Office	40,000 sf	5.4	.17 FAR
OS	Open Space	-	31.8	-
P	Park	-	5.0	-
	Total	595 +40,000sf	181.0	-

Note: Acreages and unit counts are approximate and based on Conceptual Plan. *Asterisk indicates townhomes were calculated on a net acreage.

115 YELLOWSTONE DRIVE • CHICO, CALIFORNIA 95973-5811 • TELEPHONE 530-895-1422 • www.rarchvil.com
RAR ROLLS ANDERSON & ROLLS CIVIL ENGINEERS

April 26, 2021

Ms. Ginger Drake
P.O. Box 1448
Chico, CA 95927

SUBJECT: SECSAD ASSESSMENT DISTRICT SEWER UNITS OWNED BY DRAKE

Dear Ginger:

We have reviewed the letter from City Manager, Mark Orme, of the City of Chico (City) to George Kammerer dated March 26, 2021, and the included Southeast Chico Sewer Assessment District (SECSAD) Sewer Capacity Analysis report dated July 16, 2020 prepared by Carollo Engineers (Carollo) for the City. Additionally, we have reviewed a portion of the original property owner assessment sheets prepared by the City for the SECSAD.

The City's March 26 letter states, "the City's planning assumes development of the Drake properties at 100 percent of the capacity provided in the SECSAD Engineer's Report". The Drake properties within the SECSAD include APN's 018-390-009, 018-390-014, 018-390-017, 018-390-018, 018-390-019 and 018-500-083. The Carollo report provides a summary of the updated results of their analysis of the City's sewer system. It accounts for future anticipated development, including the Drake properties. Based upon our review of the Carollo report, the actual capecity allocated to the Drake properties is not listed numerically but its location is shown in Figure 2 of what Carollo calls a "New Loading Polygon" south of State Highway 32 containing the Drake holdings between Humboldt Road, Little Chico Creek, Bruce Road and the high-powerline lattice steel towers, as shown on Sheet 7 of 8 of the SECSAD Engineer's Report. (ATTACHED)

In order to numerically determine the amount of sewer units within this "New Loading Polygon" allocated to the Drake holdings, we reviewed portions of the original SECSAD district property owner assessment sheets prepared by the City which have been freely available to the public for several years. (ATTACHED)

On that assessment sheet, the Drake properties are shown in five separate rows numbered # 115, 116, 117, 118 and 119. The assessment sheet dates to 1981 when the sewer bonds were first issued and the sewer line infrastructure installed. As a result some of the Drake APN numbers listed have been changed by the assessor's office. Particularly relevant information on the assessment sheet includes the following:

From Assessment Sheet					
Row "A"	Assessment No. "D"	Land Use "I"	Gross Areas "J"	Sewage Flow "L"	Base Assessment
115	705	R-1	237	490,590	631,272.1
116	705	R-2	4	11,832	15,224.96
117	706	R-1	222.15	721,987.5	929,025.4
118	706	R-2	16	45,434.88	58,463.84
119	706	R-3	70	276,500	355,789.4
			Sum =	1,546,344.38	1,989,775.70

Additionally, this assessment sheet includes hand written notes that identify the precise number of sewer units assumed and allocated by the City for the different land use/zoning categories used for

the SECSAD assessment calculations. (ATTACHED) Relevant to the Drake properties are the following three land use/zoning categories: R-1 at 5.5 Units/Acre, R-2 at 12 Units/Acre and R-3 at 20 Units/Acre. Utilizing that information we were able to determine that in the SECSAD the City allocated the following number of sewer units to the Drake properties:

From Assessment Sheet					Calculated
Row "A"	Assessment No. "D"	Land Use "I"	Gross Areas "J"	Allocated Density	Number of Units
115	705	R-1	237	5.5	1,303.5
116	705	R-2	4	12	48
117	706	R-1	222.15	5.5	1,221.83
118	706	R-2	16	12	192
119	706	R-3	70	20	1,400
				Sum =	4,165.33

Based upon the City of Chico's SECSAD assessment sheet, the Drake properties were allocated a total of 4,165.33 sewer hook-up units, equivalent to a total sewage flow of 1,546,344.38 gallons per day. The Drake sewer unit hook-up allocation of 4,165.33 units is the "special benefit" conferred upon Drake commensurate with the seven figure sewer line infrastructure installation cost paid for by Drake in full along with substantial interest on the bonds for nearly a decade.

It is incumbent upon the City of Chico to acknowledge in writing the City's long-standing allocation of these 4,165.33 sewer units to Drake dating back to 1961 when Drake was first assessed to pay for them, and thereafter Drake did pay for them in full with interest.

Please contact me if you have any questions or desire additional information.

Sincerely,

ROLLS, ANDERSON & ROLLS

Keith Doglio

Keith Doglio, P.E.

	B LAST NAME	C FIRST NAME	D ASMT NO	E BOOK NO.	F PAGE NO.	G PARCEL NO.	H LAND USE	I DUTY	J GROSS ACRES	K AREA SHAPE F	L SEWAGE FLOW	M FLOW FACTOR	N FRONTAGE DISTANCE	O FRONTAGE SHAPE F	P FRONTAGE BENEFIT	Q TOTAL COST	R NET COST	S CASE ASSMT
66	KASSEBAUM	HARRY	415	46	36	79	R-1	2070	5.2	1	10764	.0017676	0	0	0			13850.70
67	KASSEBAUM	HARRY	415				R-1	2958	7	1	20706	.0034003	1220	1	36600			63243.68
68	COLBY	LEE	416	46	41	16	R-3	3950	6.82	1	26939	.0044239	0	0	0			34664.06
69	COLBY	LEE	416				C-1	2250	4	1	9000	.0014780	0	0	0			11500.85
70	CHICO	CITY OF	417	46	41	17	C-1	0	.2	1	0	0	0	0	0			0
71	AUSTINS	HOME FUR	418	46	41	19	C-2	2750	8.4	.9	20790	.0034141	0	0	0			26751.76
72																		
73	EASTWOOD	PROPERTIE	502	46	41	22	C-2	2750	21.74	1	59785	.0098178	0	0	0			76929.01
74	SCHMIDBAUER	GEORGE	501	46	41	21	PC/R-1	2070	45	1	93150	.0152969	0	0	0			119961.8
75	SCHMIDBAUER	GEORGE	501				PC/R-2	2958	25	1	73950	.0121439	0	0	0			95155.98
76	SCHMIDBAUER	GEORGE	501				R-3	3950	21.45	1	84727.5	.0139138	0	0	0			109024.1
77	SCHMIDBAUER	GEORGE	503	46	36	92	PC/R-1	2070	79.31	1	164171.7	.0269599	0	0	0			211249.8
78	SCHMIDBAUER	GEORGE	503				PC/R-2	2958	27	.93	74275.38	.0121973	0	0	0			95574.67
79	SCHMIDBAUER	GEORGE	503				R-3	3950	50	1	197500	.0324330	0	0	0			254135.3
80	SCHMIDBAUER	GEORGE	504	46	36	33	PC/R-1	2070	54.9	.88	100005.8	.0164227	0	0	0			128683.6
81	SCHMIDBAUER	GEORGE	505	46	36	43	PC/R-1	2070	58.5	.93	112618.4	.0184939	0	0	0			144912.9
82																		
83	MULKEY	LOUISE	601	46	26	28	R-P	2250	4.88	1	10980	.0018031	465	1	13950			28078.64
84	MULKEY	LOUISE	602	46	26	59	R-P	2250	2.93	1	6592.5	.0010826	314	1	9420			17902.97
85	MASON	MCDUFFY	603	46	34	58	R-3	3950	4.6	1	18170	.0029838	104	1	3120			26500.45
86	PLEA. VAL	ASSEM/GOD	604	46	34	33	R-3	3950	18.5	1	73075	.0120002	313	1	9390			103420.1
87	CITY OF	CHICO	605	46	34	12	C-1	0	10	1	0	0	0	1	0			0
88	MULKEY	DONALD	606	46	34	13	C-1	2250	4.02	1	9045	.0014854	375	1	11250			22888.75
89	DUNN	EARL	607	46	34	14	C-1	2250	5	1	11250	.0018475	100	1	3000			17476.06
90	SCOTT	GEORGE	608	46	34	15	R-3	3950	10	1	39500	.0064866	0	0	0			50827.06
91	CHICO CR.	LIMITED	609	46	27	8	R-3	3950	26.52	.81	84850.74	.0139340	1944	1	58320			167502.6
92	CHICO CR.	LIMITED	610	46	36	2	R-3	3950	15	.99	58657.5	.0096326	0	0	0			75478.19
93	SCHMIDBAUER	GEORGE	611	46	36	80	PC/R-1	2070	202.78	.94	394569.3	.0647953	3350	1	100500			608216.5
94	GOLD. EMP	BROADCAST	612	46	36	4	R-1	2070	11.7	1	24219	.0039772	600	1	18000			49164.07
95	SCHMIDBAUER	GEORGE	613	46	42	2	PC/R-1	2070	77.42	1	160259.4	.0263174	2540	1	76200			282415.6
96	SCHLAF	IRVIN	614	46	36	85	PC/R-1	2070	49.46	1	102382.2	.0168130	2700	1	81000			212741.4
97	SCHLAF	IRVIN	614				PC/R-2	2958	15	.92	40820.4	.0067034	0	0	0			52526.10
98	SCHLAF	IRVIN	614				PC/R-3	3950	35	1	138250	.0227031	0	0	0			177894.7
99	SCHLAF	IRVIN	614				NC	2250	10	1	22500	.0036949	0	0	0			28952.12
100	GORDON &	MELINE	615	46	36	84	R-2	2958	10	1	29580	.0048576	150	1	4500			42562.39
101	ALLDRIN	CHARLES	616	46	36	83	PC/R-1	2070	5	.99	10246.5	.0016827	330	1	9900			23084.80
102	DAY	DONALD	617	46	36	6	R-3	3950	8.89	.31	10885.81	.0017876	0	0	0			14007.43
103	SCHLAF	IRVIN	618	46	36	31	PC/R-1	2070	32	.86	56966.4	.0093549	0	0	0			73302.15
104	SCHLAF	IRVIN	619	46	36	89	PC/R-1	2070	21.3	.84	37036.44	.0060820	1350	1	40500			88157.05
105	SCHLAF	IRVIN	620	46	36	86	PC/R-1	2070	18.9	.94	36775.62	.0060392	0	0	0			47321.44
106	SCHLAF	IRVIN	621	46	36	87	PC/R-1	2070	20	.95	39330	.0064587	0	0	0			50608.31
107	SCHLAF	IRVIN	622	46	36	88	PC/R-1	2070	20.1	.95	39526.65	.0064910	0	0	0			50861.36
108	CAL	WATER CO	623	46	42	3	R-1	0	.13	1	0	0	0	0	0			0
109																		
110	ROSELLINI	ILDO	701	46	34	34	R-2	2958	68.86	1	203747.0	.0334589	900	1	27000			289173.8
111	ROSELLINI	ILDO	701				C-1	2250	30	1	67500	.0110847	990	1	29700			116556.4
112	JOHNSON	RUTH	702	46	34	16	R-2	2958	5	1	14790	.0024288	700	1	21000			40031.20
113	ROSELLINI	ILDO	703	46	34	35	PC/R-1	2070	102.27	1	211698.9	.0347647	0	0	0			272405.9
114	ROSELLINI	ILDO	704	46	34	36	PC/R-1	2070	148.07	1	306504.9	.0503336	0	0	0			394398.6
115	DRAKE	JOHN	705	46	34	38	R-1	2070	237	1	490590	.0805636	0	0	0			631272.1
116	DRAKE	JOHN	705				R-2	2958	4	1	11832	.0019430	0	0	0			15224.96
117	DRAKE	JOHN	706	46	36	7	R-1	2070	222.15	1	721987.5	.1185632	0	0	0			929025.4
118	DRAKE	JOHN	706				R-2	2958	16	.96	45434.88	.0074612	0	0	0			58463.84
119	DRAKE	JOHN	706				R-3	3950	70	1	276500	.0454062	0	0	0			355789.4
120	JOHNSON	ELMER	707	46	36	5	R-3	3950	2.5	1	9875	.0016217	0	0	0			12706.77
121	SCHLAF	IRVIN	708	46	36	10	RS-20	1350	20	.85	22950	.0037688	0	0	0			29531.17
122	SCHLAF	IRVIN	709	46	55	75	RS-20	1350	32	.94	40608	.0066686	0	0	0			52252.79
123	ALLEN	MARVIN	710	46	56	1	NC	2250	1.71	1	3847.5	6.318E-4	383	1	11490			16440.81
124	HIGNELL	FRED	711	46	26	69	RP	2250	14.79	1	33277.5	.0054648	730	1	21900			64720.19
125	STEINSIEK	DONALD	712	46	26	117	R-1	2070	.2	1	414	6.799E-5	0	0	0			532.7191
126	STEINSIEK	DONALD	713	46	26	116	R-1	2070	.2	1	414	6.799E-5	98	1	2940			3472.719
127	WALSVICK	IRVING	714	46	26	118	R-2	2958	.4	1	1183.2	1.943E-4	127	1	3810			5332.496
128	STEINSIEK	DONALD	715	46	26	119	R-3	3950	1.4	1	5530	9.081E-4	0	0	0			7115.789
129	KEMP	MARI AN	716	46	26	183	R-2	2958	1.9	1	5620.2	9.229E-4	.141	1	4230			11461.85
130	TOTALS																	
131									2613.19		6089473.				927690			9143185.
132	CAL PARK		800															
133								0	181.95	1	576000	.0945895			0			379798

* R-1 (5.5 units/acre)(3 p/unit)(80 gal/cap/day) + 750 = 2070 gal/ac/day
* R-2 (12 units/acre)(2.5 p/unit)([illegible] gal/cap/day) + 750 = 2958
* R-3 (20 units/acre)(2.0 p/unit)(80) + 750 = 3950
C-1 1500 gal/ac/day + 750 gal/ac/day = 2250
C-2 2000 gal/ac/day + 750 = 2750
RP 1500 + 750 = 2250
NC 1500 + 750 = 2250
RS-20 (2.5 units/acre)(3 p/unit)(80) + 750 = 1350
Rural ([illegible] units/acre) 3.1 p/unit)(80) + 750 = 17[illegible]0
Public 500 + 750 = 12[illegible]

M-1 [illegible] + 750 = 3750
* M-2 3000 + 750 = 37[illegible]

Transcription of the hand written notes at the bottom of page 2 of the PDF from the:

Southeast Chico Sewer Assessment District
Assessment Spread of August 7, 1981 - $9,143,185.00 Gross Amount Spread

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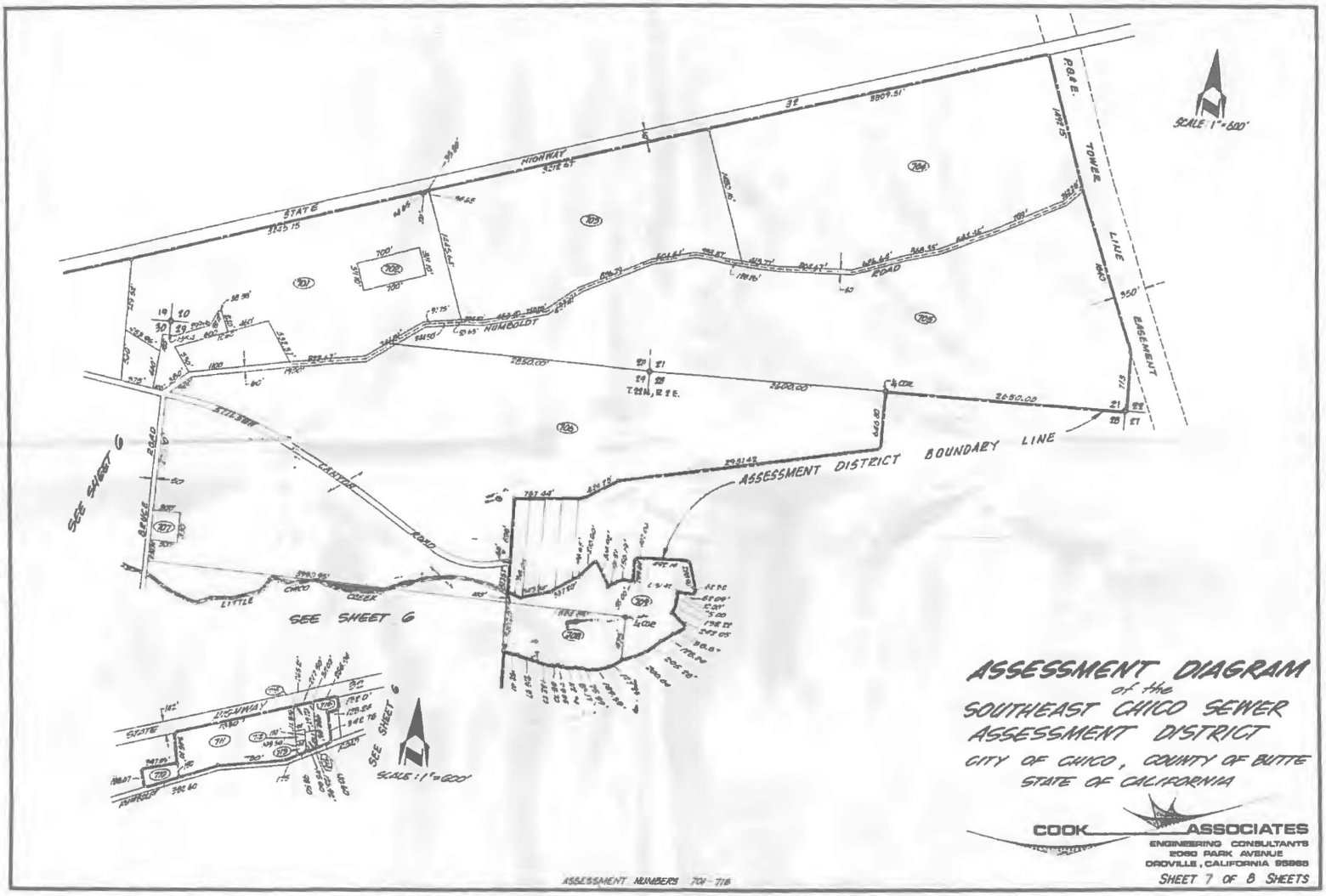
R-1 (5.5 units/acre)(3 p/unit) 80 gal/cap/day + 750 = 2070 gal/acre/day
R-2 (12 units/acre)(2.3 p/unit)(80 gal/cap/day) + 750 = 2958
R-3 (20 units/acre)(2.0 p/unit)(80) + 750 = 3950
C-1 1500 gal/ac/day + 750 gal/ac/day = 2250
C-2 2000 gal/ac/day + 750 = 2750
RP 1500 + 750 = 2250
NC 1500 + 750 = 2250
RS-20 (2.5 units/acre)(3 p/unit)(80) + 750 = 1350
Rural (4 units/acre)(3.1 p/unit)(80) + 750 = 1750
Public 500 + 750 = 1250
M-1 _____ + 750 = 3750 *(portion not legible)*
M-2 3000 + 750 = 3750



ASSESSMENT DIAGRAM
of the
SOUTHEAST CHICO SEWER ASSESSMENT DISTRICT
CITY OF CHICO, COUNTY OF BUTTE
STATE OF CALIFORNIA

COOK ASSOCIATES
ENGINEERING CONSULTANTS
2060 PARK AVENUE
OROVILLE, CALIFORNIA 95965

Comment Letter 51

Law Offices of
Richard L. Harriman
1078 Via Verona Drive
Chico, California 95973-1031
Telephone: (530) 343-1386
Email: richardharrimanattorney@gmail.com

December 13, 2021

VIA EMAIL TRANSMISSION
[mike.sawley@chicoca.gov]

City of Chico Community
Development Department
411 Main Street, P.O. Box 3420
Chico, CA 95927

Attention: Mike Sawley, Principal Planner

Re: Valley's Edge Specific Plan Draft
Environmental Impact Report
Comments of Northern California
Environmental Defense Center

Dear Mr. Sawley:

Please be informed that the undersigned is submitting the following Comments, regarding the above-referenced Project on behalf of the Northern California Environmental Defense Center, having its principal place of business in Palermo, California.

1. Request for Written Notice of Availability of the Final EIR.

I attended the Scoping Session, signed in on the Sign-in List, and submitted Comments regarding the proposed project, but I was not notified of the availability of the DEIR by mail or email at the address or email address on the letterhead above. PLEASE SEND ME WRITTEN NOTICE OF THE PUBLIC AVAILABILITY OF THE FINAL EIR WHEN IT IS AVAILABLE TO THE PUBLIC AND THE DATE OF ANY PUBLIC HEARINGS INVOLVING THIS MATTER. 51-1

2. The NCEDC joins in all public Comments made regarding the DEIR and/or in opposition to the proposed Project by all other environmental organizations or groups, including, without limitation, the Butte Environmental Council, the Yahi Group of the Motherload Chapter of the Sierra Club of California, Smart Growth Advocates, the California Native Plant Society, 51-2

the Altacal Audubon Society, the Planning and Conservation League, AquAlliance, and all other individuals raising objections to the proposed Project.

51-2 Cont.

3. The DEIR for the proposed Special Plan and other Project entitlements fails to provide a stable, finite, and accurate Project Description, due to the failure to disclose, quantify, discuss, and analyze the legal and physical effects of the new state statute adopted by the Legislature as SB 9 and signed into law by the Governor, with respect to the number of Single Family Residential dwellings that may be developed as a matter of right pursuant to this statute. Specifically, neither the City of Chico nor the County of Butte will be allowed to deny the permitting and construction of a total of four (4) dwelling units for every lot and/or parcel which is approved in the Specific Plan and any other zoning, subdivision maps and/or other entitlements that are granted pursuant to the application for the Specific Plan proposed for the Valley's Edge Project. This omission in the DEIR needs to be corrected and included in the Final EIR (FEIR).

51-3

4. As a result of the deficiency in the DEIR referred to in Comment No. 3 above, for the proposed Specific Plan and other land use entitlements sought in for the Project will cause potentially significant adverse effects to the physical environment due to the large increase in the actual number of SFR dwelling units that will be allowed and/or permitted for to the proposed Project, which will result in at least three times more impacts per dwelling unit analyzed in the DEIR, including amount of water required for the Project, adverse environmental impacts to Air Quality, Traffic, Green House Gasses ("GHGs"), and all other adverse environmental impacts identified and analyzed in the DEIR. Also, the Jobs/Housing balance identified and calculated In the DEIR will need to be revised and re-analyzed in the FEIR or, preferably, a Revised DEIR which addresses all of the above-referenced deficiencies in the DEIR and commented on by other Commentators, as a result of the inaccurate and inadequate Project Description set forth hereinabove.

51-4

5. Since the Project Application seeks a Resolution from the City to initiate an Annexation of the proposed Project into the City of Chico, NCEDC notes that one of the Findings that will be required by the Butte County LAFCo for the proposed Project is that the Project be consistent with the City of Chico's General Plan. However, unless the Project Description is changed to disclose the potentially significantly larger number of SFR dwelling units allowed by SB 9, or there are more dwelling units allowed, so that there is substantially greater density per acre in the Project, LAFCo will be unable to approve the City's Application for annexation of the Proposed Project. This inconsistency and defect needs to be addressed and resolved prior to the City's certification of the FEIR and prior to its application to LAFCo for annexation. Otherwise, it would be recommended that the Applicant pursuant development in the County of Butte.

51-5

6. NCEDC's Comments submitted at the Scoping Meeting and after the Scoping Meeting included the issue of requiring all public transportation provided by BCAG and other public providers should be required to by electric busses and/or shuttles, or passenger vans. The City of Santa Barbara has been providing electric shuttle service since 2017 and the

51-6

cost of such electric shuttle vehicles was reported as being $388,000. Santa Barbara's use of such vehicles constitutes substantial credible evidence that such a Mitigation Measure or Condition of Approval is both readily available and also economically feasible. Therefore, they should be included as such in the FEIR and Specific Plan documentation.

51-6 Cont.

For the foregoing reasons, NCEDC respectfully recommends to, and requests the City, as the lead agency for this CEQA review process, to prepare a Revised DEIR for circulation and review by the responsible agencies and the public, in order to correct the procedural and substantive defects and inadequacies in the DEIR for the Project and to give the public a meaningful opportunity to review a legally adequate EIR for the Project, pursuant to CEQA Guidelines Section 15201 and other provisions that require the FEIR to be legally complete and adequate.

51-7

Thank you for the opportunity to submit the foregoing comments for inclusion in the record of proceedings.

Very truly yours,

RICHARD L. HARRIMAN
General Counsel

cc: Butte County LAFCo
Butte County Counsel
Clients
Other Organizations

Comment Letter 52

JASON R. FLANDERS
T: 916-202-3018
jrf@atalawgroup.com

December 13, 2021

City of Chico Community Development Department
Attn: Mike Sawley, Principal Planner
411 Main Street, P.O. Box 3420
Chico, California 95927
mike.sawley@chicoca.gov
530-879-6812
Sent via electronic mail

Re: Valley's Edge Specific Plan Draft Environmental Impact Report

Dear Mr. Sawley,

We submit the following comments on behalf of our client, the Sierra Club Motherlode Chapter, in opposition to the Valley's Edge Specific Plan Draft Environmental Impact Report and project. As noted in this letter and in comments separately submitted by other organizations and members of the public, the proposed Project should be thoroughly revised and reconsidered due to its significant, unanalyzed, undisclosed, and unmitigated impacts to the rare and endangered biological communities in the Project area, among other key issues of concern. 52-1

Given the unique environmental and cultural significance of the proposed project site, the current state of housing supplies and demands in the region, and the ill-planned low-density design of the proposed project, the City should adopt the No Project Alternative, and deny the proposed Project. We thank you in advance for your careful consideration of the numerous public comments and opposition you will receive regarding the Project, and we look forward to working with the City in this regard. 52-2

A. CEQA Overview

An EIR is an "informational document" meant to "provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment" and "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered" the environmental impacts of a project. *Center for Biological Diversity v. Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 245 (citations omitted). As an informational document, CEQA "requires full environmental disclosure." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 88; *see also* Cal. Code Regs., tit. 14, § 15121, subd. (a) (hereafter "Guidelines"). Although "technical perfection" is not required, an EIR must be "adequa[te], complete[], and a good-faith effort at full disclosure," with "informed and balanced" decisionmaking. Guidelines, § 15003, subds. (i)-(j). "[A]n agency must use its best efforts to find out and disclose all that it reasonably can." *Id*. § 15144. For each of the reasons discussed below, the DEIR falls short of CEQA's informational and substantive requirements, and should be revised and recirculated. 52-3

B. Biological Resources

The EIR fails to properly disclose, analyze, and mitigate impacts to biological resources. The Project Area contains rare and unique biological resources with federal, state, and local protections. Critically, the Project Area contains vernal pool habitat, which supports the federally-endangered Butte County meadowfoam ("BCM") and Conservancy fairy shrimp, and the federally-threatened vernal pool fairy shrimp and vernal pool tadpole shrimp. The EIR discounts the unique significance of these populations and proposes inadequate, undeveloped, or nonexistent mitigation measures to attempt to make up for the disturbance and destruction of these habitats. 52-4

i. Butte County Meadowfoam

a. The DEIR Impermissibly Defers Formulation of Mitigation Measure BIO-1

The DEIR recognizes that "Butte County meadowfoam is a federal and state endangered and CRPR 1B.1 species that was identified on the project site during protocol-level rare plant surveys conducted in 2008, 2010, and 2016," that "[w]etlands on the project site, such as vernal pools and swales, provide habitat for Butte County meadowfoam," and that the "proposed project implementation has a potential to directly impact [Butte County meadowfoam]." DEIR at 4.3-18, 4.3-34, 4.3-36. The DEIR elsewhere notes that BCM was "mapped on the project site during protocol-level rare plant surveys conducted in 2010, 2016, and 2018." DEIR at 4.3-49. As a preliminary matter, the City should clarify whether such surveys were conducted in 2008 and/or 2018 in order to ensure the City is not relying upon outdated information. 52-5

The DEIR states that "[i]mplementation of the proposed project has the potential to impact special-status species through permanent conversion of habitat, temporary construction-related impacts, and/or operation and maintenance activities," including BCM. DEIR at 4.3-49. In order to "prevent direct project effects" to BCM, the DEIR relies on establishment of two preserves: "According to the [Valley's Edge Specific Plan], approximately 20 acres of land surrounding the mapped Butte County meadowfoam populations would be set aside as two of the three environmental preserves. The Butte County meadowfoam preserves would be managed by a qualified land trust for resource conservation purposes. No recreational access to these areas would be allowed." DEIR at 4.3-49. However, the DEIR states, "[t]he VESP notes that preserves would need to be established to protect Butte County meadowfoam, however, the plan sets no clear parameters for the meadowfoam preserves, including timing for establishment or management or monitoring requirements." DEIR at 4.3-50. 52-6

In an attempt to rectify the glaring inadequacies of preserve establishment, management, and monitoring as described in the Valley's Edge Specific Plan ("VESP"), the City sets forth Mitigation Measure BIO-1 as the sole mitigation measure relied upon to "reduce potential impacts" to BCM and its "habitat to less than significant." DEIR at 4.3-54. BIO-1 consists of two paragraphs comprised of a vague directive to create the preserves at some later, unspecified date: "The developer shall prepare a Habitat Mitigation and Monitoring Plan, record easements, and complete other requirements, as necessary, to establish the two Butte County Meadowfoam preserves and the other preserve on the VESP project site in compliance with all applicable state and federal resource agency permits. The preserves shall be separated from any development by 52-7

a minimum of 250 feet unless site-specific hydrological analysis . . . demonstrates that a reduced separation would still prevent direct or indirect effects to Butte County meadowfoam within the preserve. The VESP Habitat Mitigation and Monitoring Plan shall include at a minimum: management techniques to be used on the preserves; monitoring methods and frequencies to detect changes in Butte County Meadowfoam and allow for adaptive management; and a funding strategy to ensure that prescribed monitoring and management would be implemented in perpetuity to ensure efficacy of the preserves. Management methods shall include controls on introduction and spread of invasive plant species, and requirements for fencing to control public access and pet entry into preserves. No development shall be approved by the City within 500 feet of the avoidance area until the preserves are established." DEIR at 4.3-54.

52-7 Cont.

BIO-1 as drafted constitutes an impermissible deferral of mitigation measures. "Formulation of mitigation measures should not be deferred until some future time." Guidelines § 15126.4(a)(1)(b). "An EIR is inadequate if 'the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.'" *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92, quoting *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670. "Numerous cases illustrate that reliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decision making; and consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Id*. at 92.

52-8

BIO-1 constitutes precisely the type of deferral of mitigation measures that is prohibited by CEQA. The City relies exclusively on BIO-1 to mitigate direct impacts of the Project on BCM, but fails to provide decisionmakers or the public with any specifics regarding how the preserves will be established, managed, or monitored in such a way that significant impacts will, in fact, be avoided. First, BIO-1 itself does not provide a specific acreage requirement for the preserves, leaving the actual acreage of the "approximately 20 acre" preserves to be determined at a later date. DEIR at 4.3-54. The directive that the Habitat Mitigation and Monitoring Plan ("Mitigation Plan") include "management techniques to be used on the preserves" is so vague as to constitute no mandate at all, offering no specific criteria regarding what such techniques will entail and how they will be effective in achieving the goal of managing the preserves such that BCM will not suffer significant impacts. The requirement that the Mitigation Plan include "monitoring methods and frequencies to detect changes in Butte County Meadowfoam and allow for adaptive management" is similarly deficient in providing any substantive detail that would allow for meaningful analysis, public comment, or informed agency decisionmaking. What monitoring method will be used? At what frequency? What evidence will be relied upon to ensure it will be effective in "detect[ing] changes in Butte County Meadowfoam?" If changes are detected indicating BCM populations are in decline or otherwise adversely affected, what mitigation or "adaptive management" will then be required? On what studies or evidence will the methodology be based?

52-9

52-10

52-11

The required "funding strategy" that will purportedly "ensure that prescribed monitoring and management would be implemented in perpetuity to ensure efficacy of the preserves" is exceedingly ambiguous and constitutes no more than a plan to make a plan, and lacks any

52-12

specific performance standards to ensure it will be effective despite being relied upon to "ensure efficacy of the preserves." DEIR at 4.3-54. Finally, the referenced "[m]anagement methods" that "shall include controls on the introduction and spread of invasive plant species" is equally deficient. What will the controls be? How will their efficacy be determined? What will be done if the controls are found to be insufficient and invasive plant species propagate in spite of such controls? 52-12 Cont.

All of these questions go unanswered for decisionmakers and the public. The Mitigation Plan should be drafted during the DEIR stage, when the document is subject to public review and comment and the agency is required to respond. Given the DEIR does not require the developer to submit the Mitigation Plan to the City Council for approval, the developer has carte blanche to create a Mitigation Plan it deems sufficient. Regardless, even if the Mitigation Plan was required to obtain City Council approval, the actual terms of the mitigation measure are insulated from further environmental review, depriving the public of the opportunity to meaningful review mitigation relied upon to reduce impacts to an endangered species to less than significant. BIO-1 must be revised and recirculated to address such deficiencies and comply with CEQA's mandates. To "set out a handful of cursorily described mitigation measures for future consideration" that "are nonexclusive, undefined, untested and of unknown efficacy" violates CEQA because mitigation measures are not developed in "an open process that also involves other interested agencies and the public." *Communities for a Better Environment, supra*, 184 Cal.App.4th at 93. In *San Joaquin Raptor*, the Court rejected a similar mitigation measure for improper deferral of its development. There, the EIR required "a management plan" to be prepared 'by a qualified biologist to 'maintain the integrity and mosaic of the vernal pool habitat.'" *San Joaquin Raptor, supra*, 149 Cal.App.4th at 669. The court held that the "mitigation measure was deficient because it merely included a 'generalized goal of maintaining the integrity of the vernal pool habitats,' placing the onus of mitigation to the future plan and leaving the public 'in the dark about what land management steps will be taken, or what specific criteria or performance standard will be met." *Communities for a Better Environment, supra*, 184 Cal.App.4th at 93, quoting *San Joaquin Raptor, supra*, 149 Cal.App.4th at 670. Similarly here, BIO-1 simply includes a generalized goal of establishing, maintaining, and monitoring the two BCM preserves, and "plac[es] the onus of mitigation to the future plan." *Id.* 52-13 52-14 52-15

Deferred development of the "specific details of a mitigation measure" under CEQA is permissible in the following narrow circumstance: "when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will [be] considered, analyzed, and potentially incorporated in the mitigation measure." Guidelines § 15126.4(a)(1)(B). In short, "for kinds of impacts which mitigation is known to be feasible, the EIR may give the lead agency a choice of which measure to adopt, so long as the measures are coupled with specific and mandatory performance standards to ensure that the measures, as implemented, will be effective." *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th at 94. 52-16

Deferred development of the specific details of BIO-1 is impermissible because (1) it is not impractical or infeasible to develop the Mitigation Plan now; and (2) the City has not adopted 52-17

any specific and mandatory performance standards to ensure that the measures, as implemented, will be effective. Accordingly, BIO-1 must be revised and recirculated prior to the final EIR stage with specific and mandatory performance standards such that the public will not be left "in the dark about what land management steps will be taken, or what specific criteria or performance standard will be met." *San Joaquin Raptor, supra*, 149 Cal.App.4th at 670.

52-17 Cont.

b. The DEIR Lacks Sufficient Information or Analysis to Support the Conclusion That Effects to Butte County Meadowfoam Will Be Less Than Significant

Even if BIO-1 were not fundamentally deficient as a mitigation measure, the DEIR lacks sufficient information or analysis to support the conclusion that effects to BCM will be less than significant with implementation of BIO-1.

The DEIR acknowledges that "A total of 0.004 acre of [Butte County meadowfoam] were observed in the survey area during the protocol-level survey conducted," and that "[t]hese occurrences represent an approximate total of 30 individual plants." Appendix C, Valley's Edge Project 2017 Rare Plant Survey 2014-108, p. 3. However, the DEIR leaves out a key detail: that the Butte County Meadowfoam ("BCM") surrounding the City of Chico are genetically unique from populations north and south of the City. (See generally Christina Sloop, Application of Molecular Techniques to Examine the Genetic Structure of Populations of Butte County Meadowfoam (Limnanthes floccose ssp. california) (2009).) This information is critical to an understanding of the environmental setting and the project's impacts, as well as the feasibility and adequacy of any mitigation measures or alternatives. The failure to include it stunts the analysis required by the EIR and fails to adequately inform both the City and the public with regard to the impacts of the project.

52-18

The DEIR also fails to discuss the way in which the Project Site correlates to or is affected by the U.S. Fish and Wildlife Service's ("USFWS") 2006 Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon ("Recovery Plan"). While Appendix C, p. 11 notes that there is no USFWS critical habitat present in the biological survey area, the DEIR fails to discuss that there is designated critical habitat for both Butte County meadowfoam and Vernal pool fairy shrimp within approximately 1 mile of the Project Site, both of which are included in the Recovery Plan, and whether any indirect effects from the Project may impact such habitat. Appendix C, Figure 4. The DEIR fails to discuss whether the Project Site is designated as a Zone 1, 2, or 3 core habitat area for BCM and/or Vernal pool fairy shrimp, or is not designated as a core habitat pursuant to the Recovery Plan. Provision of this information in the EIR is essential, as the Recovery Plan recognizes:

52-19

> Designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Some areas within Zone 1 and Zone 2 core areas were excluded from critical habitat for economic reasons (U.S. Fish and Wildlife Service 2005), creating a discrepancy between the core area boundaries and critical habitat. We anticipate that some lands in recovery core areas outside of the areas designated as critical habitat will be necessary for recovery.

Recovery Plan at I-2 – 3. Therefore, although the Project Area is not designated BCM "critical habitat," this does not diminish the area's importance to the species' recovery. If the Project Area is Zone 1, 2, or 3 core habitat for BCM, the City must disclose this information in the EIR and consider it when assessing the project's effects, and proposing mitigation measures and alternatives. 52-19 Cont.

Further, the DEIR failed to discuss whether the Project Site has prime soil type for BCM recovery. In a 2015 letter to the City of Chico regarding the adjacent Stonegate project, the California Department of Fish and Wildlife noted, "[t]he Draft Butte County Regional Conservation Plan (BPRC) . . . conducted an extensive analysis of the soil types known to support BCM, and used this to define primary and secondary modeled habitat for BCM." (CDFW Letter at 3.) The analysis determined that "[t]he Project site is located on primary modeled habitat for BCM." (*Ibid*.) The DEIR must disclose, evaluate, and consider this important information if it is also applicable to the VESP project site. 52-20

The City's failure to disclose the genetic uniqueness of the BCM populations affected by the Project and the area's prime habitat characteristics are violations of CEQA, which requires an agency to "use its best efforts to find out and disclose all that it reasonably can." Guidelines § 15144. As a result, the public and decisionmakers cannot fully evaluate and consider the Project's true impacts on BCM. "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives." *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1348, 1454. By not disclosing the unique characteristics of these BCM populations and their habitat, the City has inaccurately described the existing environmental baseline, and the Project's environmental effects. 52-21

Further, the omission from the DEIR of any discussion of the Recovery Plan becomes particularly problematic with regard to the purported requirement in the VESP that "approximately 20 acres of land surrounding the mapped Butte County meadowfoam populations" on the project site to be "set aside as two" environmental preserves. DEIR at 4.3-49. The DEIR relies on the establishment of the preserves pursuant to BIO-1 to mitigate impacts to BCM to less than significant. *Id.* at 4.3-54. However, the DEIR is entirely devoid of *any* evidence or analysis to support the conclusion that two approximately 20-acre preserves are sufficient to avoid impacts to BCM located on the project site. Given the lack of analysis, a preserve size of 20 acres appears to be arbitrary and untethered from any of the habitat requirements of BCM. There is no analysis regarding whether the 20 acre preserves comport or are consistent with the Recovery Plan. Further, given that the DEIR notes that the preserves, according to the VESP, are "*approximately* 20 acres," it is possible that the preserves are smaller than 20-acres each. *Id.* at 4.3-49. The impact of two preserves smaller than 20 acres each on BCM is also not discussed. 52-22

Similarly, Appendix C states "[t]he location of the [Butte County Meadowfoam] population within the [biological survey area] is depicted in Figure 6. This population of [Butte County Meadowfoam] is proposed to be completely avoided with a minimum of 200-250 foot buffer from planned construction activities. Therefore, the Project will have no effect on [Butte 52-23

County Meadowfoam].” C-17. However, the EIR fails to set forth evidence to support the assertion that a 200-250 foot buffer is sufficient to prevent any adverse effects to BCM, including, but not limited to, the Recovery Plan or any other expert opinion or studies. This statement directly contradicts the statement in the main EIR document that “[p]reserve establishment to protect the on-site Butte County meadowfoam would prevent direct project effects, but project construction and operation could potentially cause indirect effects to the Butte County meadowfoam including but not limited to runoff, dust, or introduction of invasive plant species. These are considered potentially significant impacts.” EIR 4.3-49 – 50. There is no mitigation measure designed to address this identified potentially significant impact to the BCM. The only mitigation measure that comes remotely close to addressing the issue of indirect dust impacts is found in a document not included in the DEIR, the Butte Regional Conservation Plan, and simply states, “Water will be spread on work sites consistent with the Butte County Air Quality Management District’s requirements and as needed to minimize spread of dust to habitat on adjacent lands.” BRCP at 6-9. This mitigation measure, if even applicable to the project (applicability is discussed in further detail below) lacks any meaningful detail that would facilitate mitigation of the identified potentially significant impact.

52-23 Cont.

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The failure of the DEIR to meaningfully analyze impacts of the Project to Butte County Meadowfoam renders the DEIR deficient as an informational document. The DEIR must be revised and recirculated in order to cure this failure.

52-25

ii. Conservancy fairy shrimp, Vernal Pool Fairy Shrimp, & Vernal Pool Tadpole Shrimp

The DEIR acknowledges that the project site provides potential habitat for the federally endangered conservancy fairy shrimp and the federally listed vernal pool fairy shrimp and vernal pool tadpole shrimp: “Although vernal pools on the project site provide potential habitat for listed branchiopods (i.e., conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp), none were identified during protocol-level wet and dry season surveys of the proposed site. However, 22 of the 53 total vernal pools surveyed were only surveyed during the dry season. Of these 22 vernal pools, only 9 were determined to provide marginally suitable habitat for listed branchiopods; the remaining 13 were determined to lack sufficient water to support these species’ lifecycles. The 9 vernal pools that provide marginal habitat are located within areas proposed as environmental preserves or as regional open space and would not be directly impacted by the project.” DEIR at 4.3-50. The DEIR concludes that as a result, “no impacts to listed branchiopods, including conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp, are anticipated,” and as such, no mitigation is required for impacts to these species. *Id*.

52-26

The DEIR fails to engage in any discussion of the indirect edge effects to the 9 vernal pools that are “located within areas proposed as environmental preserves or as regional open space” that may occur from the change in the surrounding environment. Vernal pools that were previously located on over a thousand acres of undeveloped land will now be located within either a 20 acre preserve or a “regional open space” that is otherwise surrounded by commercial and residential development. The DEIR should note whether the vernal pools are located within the 20-acre preserve or the regional open space, and the different indirect effects associated with

52-27

each. Absent from the DEIR is any analysis regarding impacts to the 9 vernal pools resulting from being completely surrounded by development, including impacts to hydrology and impacts from noise and other human activity in the area. This analysis should be included in the DEIR. 52-27 Cont.

Further, the DEIR does not explicitly state the fate of the remaining 44 surveyed vernal pools, nor does it discuss the fact that while "Gallaway biologists mapped 81 vernal pools on the project site," only 53 "total vernal pools [were] surveyed." *Id*. at 4.3-7, 4.3-50. The DEIR should provide the public and decisionmakers with detailed information and analysis as to why the remainder of the mapped vernal pools were not surveyed, beyond the extremely general statement that "[m]ost vernal pools on the project site exhibit flashy, or short ponding durations and therefore provide poor to marginal habitat for these species," particularly given that the federally listed branchiopods have a very short lifespan. *Id*. at 4.3-19. 52-28

The DEIR notes that "a total of 17.43 acres of aquatic resources have been mapped and delineated within the project site," including "0.997 acres of vernal pools, 3.212 acres of vernal swales, 0.211 acre of seasonal wetlands, 0.615 acre of wet meadows, 1.212 acres of seasonal swales, and 11.183 acres of drainages." DEIR at 4.3-61. "Based on the VESP Land use Plan [], permanent development areas *appear to avoid* approximately 5 of the approximately 6.25 acres of wetlands mapped on the project site. Although the VESP directs development away from biological resources where possible, absolute wetland avoidance *may not be feasible*. Impacts to drainages and wetlands (i.e. aquatic resources) as a result of project roadways and development are considered potentially significant impacts." *Id*. (emphasis added). 52-29

First, in order to fulfill its obligation as an informational document, the DEIR should explicitly state: (1) whether permanent development areas actually avoid, rather than "appear to avoid," 5 of the 6.25 acres of wetlands mapped on the project site; (2) whether absolute wetland avoidance is or is not feasible; and (3) whether whether the approximately 1.25 acres of wetlands mapped on the project site that will be not be avoided by development contain potential habitat for conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and Butte County meadowfoam. 52-30

Second, the analysis provided in DEIR is insufficient to support a finding of no significant effects to these listed species. As with Butte County meadowfoam, there is no discussion of the Recovery Plan and how it relates to the project site and the potential habitat of the listed branchiopods located thereon, and how any destruction of potential habitat will affect the ability of the species to recover. As noted above, while Appendix C, p. 11 states that there is no USFWS critical habitat present in the biological survey area, the DEIR fails to discuss that there is designated critical habitat Vernal pool fairy shrimp within approximately 1 mile of the Project Site, and whether any indirect effects from the Project may impact such habitat. Appendix C, Figure 4. The DEIR fails to discuss whether the Project Site is designated as a Zone 1, 2, or 3 core habitat area for Vernal pool fairy shrimp, conservancy fairy shrimp, or Vernal pool tadpole shrimp, or is not designated as a core habitat for any of these species pursuant to the Recovery Plan. Provision of this information in the EIR is essential, and the DEIR should be revised to include this information and recirculated in order to comply with its obligations pursuant to CEQA. 52-31 52-32

iii. Other Special-Status Species

The DEIR's analysis regarding impacts to other special-status species is similarly deficient.

a. Western Spadefoot

With regard to the Western Spadefoot, a "CDFW Species of Special Concern with a moderate potential to occur on the project site," for which "[v]ernal pools and other temporary wetlands are considered optimal for breeding," the DEIR notes that while none "were observed during site surveys," "no focused surveys for western spadefoot were conducted and this species is nocturnal, cryptic and unlikely to be detected during general biological surveys." DEIR at 4.3-19, 4.3-50. Regardless, the DEIR states that because the "only portion of the project site that has potential habitat for the western spadefoot [is] designated as an environmental preserve in the VESP," "no impacts to western spadefoot are anticipated." *Id.* This analysis fails to address and analyze the edge effects of surrounding potential habitat with residential and commercial development. 52-33

b. Swainson's Hawk, Bats, Burrowing Owl, and Other Raptors

The "proposed project would permanently convert roughly 570 acres of marginal, potential foraging habitat for Swainson's hawk, burrowing owl, bats, and other raptors." DEIR at 4.3-66. The analysis and mitigation measures for these species set forth in the DEIR is insufficient to (1) determine whether the project will significantly impact these species; and (2) mitigate any impacts to less than significant. While the DEIR focuses mitigation measures primarily on identification and relocation of species located within construction zones, absent is any analysis of the impacts to the species from 570 acres of habitat loss. This impact is potentially significant, may require mitigation beyond simply relocation of species identified in construction zones, and should be discussed in the DEIR. The cursory analysis provided in the cumulative impacts section regarding "maximum allowable removal thresholds" for these species' habitat types under the BRCP, which may or may not eventually apply to the project, is insufficient to satisfy CEQA's informational disclosure requirements. *Id*. at 4.3-66. 52-34

The Swainson's hawk is a state threatened species. *Id.* at 4.3-27. The DEIR states that "Swainson's hawk has not been documented on the project site; however, no focused surveys for this species have been conducted." Despite failing to conduct a focused survey, and failing to provide an explanation as to why a survey was deemed unnecessary despite the conversion of "roughly 570 acres of . . . habitat for Swainson's hawk," the DEIR concludes that there is "a low potential for Swainson's Hawk presence on the project site." *Id*. The DEIR goes on to state that "[a]lthough large trees on the project site provide marginal potential nesting habitat for Swainson's hawk, this species was not detected during prior site surveys," and concludes that impacts to the Swainson's hawk are "anticipated to be less than significant." *Id*. at 4.3-51. First, this statement contradicts the previous DEIR statement that no surveys have been conducted, and should be clarified. Second, the DEIR's statements that "there are no recent nesting occurrences within 10 miles of the project site," and "[n]est records in the region are generally limited to the valley where agricultural lands for foraging are abundant" are extremely general and fail to 52-35 52-36

provide the reader with any details or specifics to support the DEIR's finding of less than significant impacts. *Id*. 52-36 Cont.

Mitigation Measure BIO-4 for the Swainson's Hawk both proposes to improperly defer key elements to a later date, and lacks enforceability. For example, it lacks provisions for continued monitoring by a qualified biologist, making enforcement difficult. DEIR at 4.3-56. Without continued monitoring, the City will be unable to know "if the nest becomes inactive (e.g., the young have fully fledged)," and work can continue. *Id*. BIO-4 also improperly defers mitigation to a later date. The DEIR states that if an "active Swainson's hawk nest is identified within 0.25 miles of the project site, an exclusion buffer shall be established in consultation with the biologist and [CDFW]." *Id*. Yet the DEIR does not specify the minimum buffer size, leaving the reader to wonder whether it is 0.25 miles, or some other distance. Given the City knows the one species this measure refers to and the type of construction planned, it should have at least a minimum no disturbance buffer size, which would allow for some flexibility depending on the conditions. If developing this measure is not practical at this stage, the City must commit itself to specific performance criteria for evaluating the efficacy of mitigation. *See POET, LLC v. Cal. Air Resources Board* (2013) 218 Cal.App.4th 681, 738. 52-37

The Western Red Bat "is a CDFW Species of Special Concern with a moderate potential to occur on the project site." DEIR at 4.3-29. Like the Swainson's hawk, the City found it unnecessary to conduct "focused surveys for bats [] within the project site," and failed to provide an explanation as to why. *Id*. In fact, the DEIR failed to perform a "formal roost assessment or focused surveys" for *any* bats on the project site, including the "Pallid Bat, Western Red Bat, and other roosting bats." *Id*. at 4.3-51. The DEIR notes that "construction-related activities," "tree removal," and "permanent development" could "reduce roosting habitat" and "fragment foraging and roosting habitat for bats. These are considered potentially significant impacts." *Id*. at 4.3-52. However, the DEIR fails to provide an analysis as to the impacts of habitat fragmentation and reduction on bats in the project area. 52-38

Mitigation Measure BIO-5 is insufficient to address these potentially significant impacts, and impermissibly defers development of key elements to a later date in violation of CEQA. BIO-5 states that "[i]f a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for CDFW review and approval. Potential measures to be included in the plan are restrictions of timing of activities, placement of exclusion barriers when bats are foraging away from the roost, and replacement of roosting structures." *Id*. at 4.3-56. This constitutes impermissible deferral of development of mitigation measures. "An EIR is inadequate if 'the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.'" *Communities for a Better Environment, supra*, 184 Cal.App.4th at 92, quoting *San Joaquin Raptor Rescue Center, supra*, 149 Cal.App.4th at 670. There is no reason that the requisite monitoring and mitigation plan cannot be developed and subject to review and analysis in the DEIR. 52-39

The Burrowing Owl is "a CDFW Species of Special Concern with a high potential to occur on the project site." DEIR at 4.3-20. In order to avoid potentially significant impacts to the burrowing owl, the DEIR relies on mitigation measure BIO-3. However, BIO-3 lacks provisions 52-40

for continued monitoring by a biologist, making enforcement of the measure difficult. BIO-3 provides, "[o]nce the breeding season is over and young have fledged, passive relocation of active burrows may proceed as described [] above." *Id*. at 4.3-55. However, without continued monitoring, the City will be unable to know if "young have fledged," and work can continue. Including continued biological monitoring provisions in BIO-3 could alleviate this problem.

52-40 Cont.

c. Loggerhead Shrike, Yellow Warbler, and Other Nesting Birds

Loggerhead Shrike and Yellow warbler are both "CDFW Species of Special Concern with a moderate potential to occur on the project site," and have "been recently documented near the project site." DEIR at 4.3-27, 4.3-51. The DEIR notes that potential impacts to these species, and other native or migratory birds, "would be related to nest failure or abandonment due to disturbance during construction. These are considered potentially significant impacts . . . ." *Id*. To mitigate these impacts, the DEIR relies on mitigation measure BIO-2. As with the mitigation measures discussed above, BIO-2 lacks Mitigation Measure impermissibly defers development of key elements to a later date in violation of CEQA: "If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance buffer from the active nest" "typically rang[ing] from 50 to 300 feet" and determined "based on factors such as the species of bird, topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule." *Id*. at 4.3-54. Given the City knows at least two species this measure refers to and the type of construction planned, it should have, at the least, a minimum avoidance buffer size, which would allow for some flexibility depending on the conditions. If developing this measure is not practical at this stage, the City must commit itself to specific performance criteria for evaluating the efficacy of mitigation. *See POET*, supra, 281 Cal.App.4th at 738. This mitigation measure also impermissibly defers formulation of the mitigation measure with regard to "[l]imits of construction to avoid active nests," which "shall be established in the field with flagging, fencing, or other appropriate barriers." *Id*. There is no reason that the manner in which limits of construction will be established in the field cannot be decided upon now. Further, BIO-2 lacks continued monitoring by a qualified biologist, making enforcement difficult. DEIR at 4.3-56. Without continued monitoring, the City will be unable to know when "the chicks have fledged and the nests are no longer active," and work can continue. *Id*. Finally, BIO-2(d) impermissibly defers formulation of the mitigation measure with regard to identification of an active nest in or adjacent to the construction zone after construction has started. Where this occurs, "work in the vicinity of the nest shall be halted until the qualified biologist can provide appropriate avoidance and minimization measures to ensure that the nest is not disturbed by construction. Appropriate measures may include a no-disturbance buffer until the birds have fledged and/or full-time monitoring by a qualified biologist during construction activities conducted in close proximity to the nest." *Id*. This constitutes impermissible deferral of development of mitigation measures. "An EIR is inadequate if 'the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.'" *Communities for a Better Environment, supra*, 184 Cal.App.4th at 92, quoting *San Joaquin Raptor Rescue Center, supra*, 149 Cal.App.4th at 670. There is no reason that the requisite avoidance and minimization measures cannot be developed and subject to review and analysis in the DEIR.

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d. Western Pond Turtle

Western Pond Turtles "are a SSC with a low potential to be present on the project site . . . . There is one CNDDB occurrence of western pond turtle within close proximity of Comanche Creek, located approximately 0.9 mile southwest of the project site." DEIR at 4.3-29. "Within the off-site utilities area, the habitat assessment noted the potential for western pond turtle to be present in Comanche Creek . . . ." *Id*. at 4.3-33. Further, "The wetland fringes [of Comanche Creek] are suitable areas for western pond turtles to find refuge and food." *Id*. at 4.3-52. "[B]ecause there is a potential the [Western pond] turtles could be present this is considered a potentially significant impact." *Id*. To mitigate this potentially significant impact, the DEIR relies on mitigation measure BIO-6, which requires that if "western pond turtles are identified in an area where they could be impacted by construction activities, [] a biologist trained in relocating western pond turtles shall relocate the turtles outside of the work area or create a species protection buffer (determined by the biologist) until turtles have left the work area. If a nest is found, a species protection buffer (determined by the biologist] shall be established and avoided until the young have hatched or the eggs proven non-viable, as determined by the biologist." *Id*. at 4.3-57. Again, this mitigation measure impermissibly defers development of key elements to a later date in violation of CEQA. Given the City knows the species this measure refers to and the type of construction planned, it should have, at the least, a requirement to either relocate the turtles or create a species protection buffer where turtles are found. If developing this measure is not practical at this stage, the City must commit itself to specific performance criteria for evaluating the efficacy of mitigation. *See POET*, supra, 281 Cal.App.4th at 738. Further, the mitigation measure lacks provisions for continued monitoring by a qualified biologist, making enforcement difficult. DEIR at 4.3-56. Without continued monitoring, the City will be unable to know if "turtles have left the work area," or "the young have hatched or the eggs are proven non-viable," and work can continue.

52-43

e. Elderberry Shrubs

The DEIR notes that "[w]ithin the off-site utilities area, the habitat assessment noted several valley elderberry shrubs which provide habitat for the valley elderberry longhorn beetle (VELB), were recorded immediately adjacent to the utility corridor." DEIR at 4.3-33. The VELB is a federally threatened species. *Id*. at 4.3-29. "The beetle is found only in association with its host plant, elderberry." *Id*. The DEIR further states that "[f]ive elderberry shrubs were identified adjacent to segments B and C of the proposed off-site utilities corridor . . . . All of the shrubs have large multiple stems and occur in riparian habitat and appear to have exit holes . . . . due to the proximity of the shrubs to the proposed utility corridor there is the potential construction activities could indirectly impact the plant. This is considered a potentially significant impact." *Id*. at 4.3-52.

52-44

To mitigate this potentially significant impact, the DEIR relies on mitigation measure BIO-7. BIO-7 suffers from the same inadequacies as the mitigation measures discussed above. BIO-7 instructs that the "following avoidance and minimization measures shall be implemented" prior to and during construction: "Activities that may damage or kill an elderberry shrub *may* need an avoidance area of at least 6 meters [] from the dripline, depending on the type of activity." *Id*. at 4.3-57 (emphasis added). This mitigation measure essentially constitutes a

suggestion, not a mandate, and does not include any specific performance criteria to ensure its efficacy. It defers determination of whether to implement an avoidance area to seemingly anyone, as it does not require the opinion of a qualified biologist. BIO-7(d) requires that a biologist "monitor the work area at appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of the monitoring shall depend on the construction specifics and, if required, the biologist shall consult with the U.S. Fish and Wildlife Service." *Id.* The measure fails to define what constitutes an "appropriate interval," and despite the fact that the City knows what the construction activities of the project are, it defers formulation of a mitigation monitoring plan for a different day, insulated from CEQA review. *Id.* BIO-7(d) states that "[t]o the extent feasible, all activities that could occur within 50 meters [] of an elderberry shrub" be conducted outside of March – July. *Id.* A mitigation measure suggesting something be done "to the extent feasible," with no specific performance criteria or ability to determine efficacy of the measure, is tantamount to no mitigation at all.

52-44 Cont.

iv. Use of the Butte Regional Conservation Plan as Alternative Mitigation for Biological Resources

The DEIR states, "The Butte County Association of Governments is preparing the Butte Regional Conservation Plan (BRCP). The final BRCP documents were submitted to the USFWS, National Marine Fisheries Service (NMFS), and CDFW for final review on June 28, 2019. If approved, the BRCP would provide streamlined state and federal endangered species act and wetlands permitting for covered activities for a term of 50 years." DEIR at 4.3-42. The DEIR goes on to note, "The proposed project site is designated within an Urban Permit Area (UPA) in the BRCP and could be a covered activity under the BRCP . . . . Any party seeking coverage under the BRCP for permanent development projects would need to comply with relevant conditions of the BRCP for covered species and natural communities . . . . To see full descriptions of the following mitigation measures, see pages 6-2 through 6-10 of the BRCP (Butte County 2019)." *Id.* What follows is a truncated synopsis of nineteen "mitigation measures," each approximately 1-2 sentences, that are apparently being relied upon to mitigate the significant impacts of the Project in the event the BRCP is adopted prior to project development and future project developers opt to seek coverage under the BRCP. *Id.* at 4.3-43 – 45. In the "Mitigation Measures" portion of the Biological Resources section, the DEIR goes on to state,

52-45

> "If future project developers proceed to implement the proposed project as a 'permanent development project' as defined by and covered under the BRCP, once it is adopted, they would be required to comply with the Butte Regional Conservation Plan AMM 1 through 19 [] for the two covered species present onsite [] and four covered species with a moderate potential to occur on the project site []. In addition to these AMMs that would avoid and reduce project impacts to species and species habitat, the BRCP would establish a range of biological goals and objectives that must be achieved by the BRCP Permittees over the proposed 50-year permit term. By payment of fees into an adopted BRCP program, the proposed project would contribute to regional scale habitat preservation, restoration, and creation that would mitigate for impacts to biological

> resources identified in this EIR. Participation in the BRCP, if it is adopted, would satisfy mitigation requirements under CEQA for species covered under the BRCP.
>
> If future project developers opt not to seek coverage under the BRCP, or if the BRCP is not adopted prior to development, then the following mitigation measures would be implemented to avoid and/or substantially lessen impacts to special-status plant and wildlife species. With the implementation of the BRCP AMM measures or mitigation measures listed below, the proposed project would reduce potential impacts to special-status species and their habitat to less than significant."

52-45 Cont.

Id. at 4.3-53 – 54. The manner in which the DEIR sets forth alternative mitigation measures for biological resources violates CEQA for a number of reasons.

First and foremost, despite the fact that the Butte Regional Conservation Plan AAM 1 through 19 are relied upon, in the alternative, to mitigate impacts to biological resources to less than significant, the DEIR *does not include* the BRCP in either the main document or any of the appendices. This omission renders the DEIR fundamentally deficient as an informational document. CEQA requires that an EIR should "be organized and written in a manner that will make [it] meaningful and useful to decision-makers and to the public." Pub. Res. Code § 21003(b). Where an EIR fails "to include relevant information [and] precludes informed decisionmaking and informed public participation," it "thwart[s] the statutory goals of the EIR process" and constitutes an abuse of discretion. *Kings Cty. Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712. Here, the EIR's cursory synopsis of nineteen potentially applicable mitigation measures, with no accompanying analysis whatsoever and without even including the full language of the mitigation measures themselves, let alone the BRCP in its entirety, constitutes a blatant violation of CEQA's informational disclosure requirements. In order to understand mitigation measures proposed to avoid significant impacts to threatened and endangered species, the reader is referred to a document that is entirely separate and apart from the DEIR. Further, because any meaningful analysis of the BRCP is omitted from the DEIR, the extent to which the BRCP has addressed the Project's potentially significant effects and reduced them to less than significant is unclear. To the extent the DEIR intends to rely on the BRCP to mitigate project impacts to biological resources to less than significant, the DEIR must be revised to include the full language of such mitigation measures, accompanied by the requisite environmental assessment of the efficacy of such measures, supported by substantial evidence.

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Further, and as discussed in detail above, "[a]n EIR is inadequate if 'the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.'" *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92, quoting *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670. "Numerous cases illustrate that reliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decision making; and consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Id*. at 92. The BRCP has yet to be approved and finalized, and the mitigation measures contained therein and relied upon in the DEIR to mitigate significant effects to less than significant are not even included in the DEIR, much less subject to

52-47

analysis and review. Accordingly, reliance on BRCP mitigation measures constitutes a violation of CEQA. The DEIR must be revised and recirculated to reflect inclusion of BRCP mitigation measures in their entirety, along with the requisite accompanying analysis of their efficacy. 52-47 Cont.

Likewise, the statement that the BRCP will "establish a range of biological goals and objectives that must be achieved by the BRCP Permittees over the proposed 50-year permit term," and that "by payment of fees into an adopted BRCP program, the proposed project would contribute to regional scale habitat preservation, restoration, and creation that would mitigate for impacts to biological resources identified in this EIR" constitutes impermissible deferral of mitigation measures in violation of CEQA. Again, this constitutes a plan to make a plan and lacks "specific and mandatory performance standards to ensure that the measures, as implemented, will be effective." *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th at 94. To "set out a handful of cursorily described mitigation measures for future consideration" that "are nonexclusive, undefined, untested and of unknown efficacy" violates CEQA because mitigation measures are not developed in "an open process that also involves other interested agencies and the public." *Communities for a Better Environment, supra*, 184 Cal.App.4th at 93. 52-48

v. The DEIR Lacks Sufficient Information, Analysis, and Mitigation to Support the Conclusion That Effects to Oak Trees Will Be Less Than Significant

The DEIR acknowledges that the "proposed project would involve oak tree removal to support permanent development." DEIR at 4.3-58. "Based on the VESP, an estimated 200 acres of blue oak foothill pine woodland may be converted to permanent development to accommodate the project." *Id*. The DEIR finds that the "removal of trees is considered a potentially significant impact," but will be reduced to less than significant via the implementation of mitigation measure BIO-9, which requires the developer to "implement the below measures *in addition to those required for compliance with the goals and policies of . . . the Oak Woodland Mitigation and Management Plan, and AMM 11 of the BRCP* []." *Id*. at 4.3-60 (emphasis added).

As with reliance upon the BRCP to mitigate impacts to biological resources, the DEIR relies *entirely* on the VESP Oak Woodland Mitigation and Management Plan ("Oak Mitigation Plan") to mitigate impacts from the removal of trees to less than significant, but *does not include* the Oak Mitigation Plan in either the DEIR main document or any of its appendices. This omission renders the DEIR fundamentally deficient as an informational document. CEQA requires that an EIR should "be organized and written in a manner that will make [it] meaningful and useful to decision-makers and to the public." Pub. Res. Code § 21003(b). Where an EIR fails "to include relevant information [and] precludes informed decisionmaking and informed public participation," it "thwart[s] the statutory goals of the EIR process" and constitutes an abuse of discretion. *Kings Cty. Farm Bureau, supra,* 221 Cal.App.3d at 712. Here, the EIR offers "example[s]" of the sole mitigation measure employed to reduce impacts from the removal of trees to less than significant, but omits inclusion of the measure from the text of the DEIR, and fails to provide substantive analysis of such "examples" or the efficacy of the mitigation. *Id*. at 4.3-58. CEQA requires more than a cursory discussion of examples of mitigation measures in an EIR – the purpose of an EIR is to facilitate informed decisionmaking, and that purpose is fundamentally undermined by the type of discussion, or lack thereof, offered here. The DEIR 52-49

notes that the Oak Mitigation Plan "requires specific procedures to be followed to protect avoided trees if roots are cut down as part of the construction process," but fails to describe or analyze for the reader what those procedures actually are. *Id*.

52-49 Cont.

This truncated synopsis of mitigation relied upon to reduce project impacts to less than significant, with no accompanying analysis and without including the full language of the mitigation measures themselves, constitutes a blatant violation of CEQA's informational disclosure requirements. In order to understand the mitigation measure, the reader is referred to a document that is entirely separate and apart from the DEIR. Further, because any meaningful analysis of the Oak Mitigation Plan is omitted from the DEIR, the extent to which the Oak Mitigation Plan has addressed the Project's potentially significant effects and reduced them to less than significant is unclear. To the extent the DEIR intends to rely on the Oak Mitigation Plan to mitigate project impacts to protected trees to less than significant, the DEIR must be revised to include the full language of such mitigation measures, accompanied by the requisite environmental assessment of the efficacy of such measures, supported by substantial evidence.

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Further, the DEIR states that the project developers "shall appropriately mitigate for trees removed and/or damaged by the project in accordance with the [Oak Mitigation Plan] (such as planting onsite, off site, or paying an in-lieu fee)." As with BIO-1, this constitutes an impermissible deferral of development of mitigation measures, as it fails to set specific performance criteria to ensure that the measures, as implemented, will be effective. Will planting onsite be required? In what circumstances? At what ratio? When will planting off site be permitted? When is it appropriate to pay an in-lieu fee rather than plant onsite or off site? What are the effects associated with choosing one type of mitigation over the other? Will monitoring be required to ensure the mitigation is effective? All these questions are left unanswered, in violation of CEQA. *See, e.g*., Guidelines § 15126.4(a)(1)(b); *Communities for a Better Environment, supra*, 184 Cal.App.4th at 92; *San Joaquin Raptor Rescue Center, supra*, 149 Cal.App.4th at 670. To the extent these questions may be answered in the Oak Mitigation Plan, this is insufficient for the purposes of CEQA. Required mitigation measures must be discussed in the CEQA document itself.

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Regardless, the Oak Mitigation Plan does not answer these questions. It states, "Mitigation to oak resources in the Plan Area shall be addressed with the following replacement *options*," and goes on to list either on-site planting, off-site planting, or payment of an in-lieu fee, with no requirements or specifics as to when which type of mitigation is required. Oak Mitigation Plan at E-7. For example, with regard to the on-site planting option, "If any replacement trees die or fail within the first three years of their planting, then the applicant can either pay an in-lieu fee as established by a fee schedule adopted by the City Council, inquire with the Homeowner Association (HOA) to see if any regeneration tree credits are available, or provide a replanted tree in place of the dead or failed tree.Off-site. (*Sic*.) If it is not feasible or desirable to plant replacement trees on site, payment of an in-lieu fee as established by a fee schedule adopted by the City Council shall be required." *Id*. There is no analysis regarding when it is appropriate to require which type of mitigation – the type of mitigation depends not on the most efficacious way to mitigation significant impacts, but rather what is "desirable." This constitutes deferral of mitigation measures and a failure to set specific performance criteria to ensure the measures will be effective, in clear violation of CEQA. Further, a mitigation measure

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that requires payment of in-lieu fee where onsite tree replacement is not feasible has been held to be inadequate to avoid significant impacts. *Save the Agoura Cornell Knoll v. City of Aguora Hills* (2020) 46 Cal.App.5th 665. 52-52 Cont.

The DEIR fails to adequately analyze or mitigate significant project impacts from removal of trees. It must be revised and recirculated to address the above deficiencies. 52-53

C. The Project Would Have Significant Unmitigated Effects to Groundwater.

The DEIR fails to align its analysis with its own stated threshold of significance. The DEIR states that an impact to groundwater resources would be significant if it would "[s]ubstantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin." (DEIR 4.9-25.) The DEIR then admits that groundwater levels in the affected basin are decreasing, that the proposed project would add demand to the basin, and thereby increase the rate of groundwater depletion. The Vina Subbasin is designated by DWR as a "high priority" basin and under the Sustainable Groundwater Management Act. Remarkably, "the proposed project would represent an approximately 7% increase in water demand in Cal Water's Chico District service area." (DEIR 4.9-31.) Nevertheless, the DEIR inappropriately injects new vague considerations in its conclusion that "Because the Vina subbasin is not in a state of critical overdraft, continued annual groundwater declines of less than 1.0 feet per year would not be substantial or unreasonable. Therefore, the potential of the proposed project to substantially decrease groundwater supplies in a manner that would interfere with the sustainable management of the groundwater basin would be less than significant." (DEIR 4.9-32.) The DEIR's conclusion that this impact would not be "unreasonable" is vague, subjective, wrong, and not a factor included in its threshold of significance. Similarly, the threshold of significance does not limit significant effects to basins in a state of "critical overdraft," yet the DEIR adds this as a reason it concludes effects would be insignificant, inappropriately adding more factors and misconstruing the threshold of significance. Moreover, the DEIR offers no support for its proposition that adding to the rate of groundwater decrease would not interfere with sustainable groundwater management. The DEIR admits that the basin is a high priority, and that its rate of drawdown is faster than its rate of recharge. While offering no additional recharge, water supply, or conservation efforts, how can this incremental added demand do anything *but* interfere with the sustainable management of a groundwater basin that already suffers from unsustainable demand? The DIER's conclusions are improper as a matter of law, and unsupported by fact or reason. 52-54 52-55 52-56

The DEIR fails to assess loss of recharge for perched and seasonal groundwater. The DEIR acknowledges that "trees located along certain slope breaks are indicative of seasonal groundwater flows, and also indicates that perched groundwater may occur on the project site" (4.9-31) but the DEIR wholly disregards these site features in its assessment of recharge loss (4.9-30). This impact should be assessed. 52-57

The Water Supply Assessment relies on unsupported projections that demand will increase in near-term future years, but will decrease on a longer horizon. (Table 5.) This kicking the can down the road clearly serves to minimize project effects. Instead, the DEIR must now 52-58

reconcile the growing demands with diminishing supplies, which its analysis fails to do. The Water Supply Assessment further skews its findings by looking at groundwater decreases over averaged periods of 2005-2013 and 2014-2018. By segmenting and then averaging these periods, the DEIR ignores entirely the significant adverse effects that specifically occurred during the 2013-2015 drought; effects that would only be exacerbated by the proposed project, which the DEIR completely fails to analyze or disclose. 52-58 Cont.

Finally, public comments on the draft Butte Subbasin Groundwater Sustainability Plan, incorporated fully here by reference, plainly demonstrate the severity of groundwater mismanagement in this subbasin, and provide a clearer picture of the baseline and future conditions that will be affected by the proposed project. Given the past and ongoing depletion of groundwater supplies, and the ongoing inadequacies in the GSP proceedings, the only responsible and defensible course of action here is approval of the no project alternative. 52-59

D. The No Project Alternative, or another Feasible Alternative, Must be Adopted if the Project is to Proceed.

Owing to the numerous significant and unavoidable impacts of the proposed project, the City should certainly adopt the no project alternative. (*See*, *Las Lomas Land Co., LLC v. City of Los Angeles* (2009) 177 Cal. App. 4th 837, 848-852.) Under any alternative, the massive environmental losses clearly contemplated by the project would not be in the public interest, and cannot support the required findings for a statement of overriding considerations. As such, the no project alternative is the best alternative presented by the DEIR. 52-60

If any iteration of the project is to be approved, CEQA requires that the City pursue only an increased density and increased open space alternative. CEQA requires agencies to adopt all feasible alternatives and mitigation measures that would reduce a project's significant environmental impacts. Pub Res Code, § 21002–21002.1, 21004; 14 Cal Code Regs §§ 15002(a), (h), 15021(a), 15096(g)(2). Here, the DEIR itself asserts that Alterative 4 would prevent significant and avoidable damage to the environment and protect biological resources by increasing the acreage of open space and shifting the residential land uses to other areas within the project site. Alternative 4 was also determined to be the environmentally superior alternative because it reduces the potential for impacts in seven out of fourteen of the resource areas evaluated. Public comments on the DEIR, however, propose additional alternatives that are feasible and would be superior even to Alternative 4, and as such should be adopted. 52-61

The Draft EIR found that Alternative 4 would essentially achieve all the project objectives. *See*, 14 Cal Code Regs §15126.6(a). Under Alternative 4, the commercial development remains the same—2,777 residential units and the total amount of commercial space would remain at 447,155 sf. This Alternative would provide the same amount of residential and non-residential uses as the proposed project and would therefore achieve those project objectives to the same extent. Housing diversity would be the same as the proposed project since it is assumed that Alternative 4 would include the same number of senior housing units. However, Alternative 4 would do this while also increasing the open space area to preserve and protect resources to a 52-62

greater extent than the proposed project. The additional Alternatives submitted in public comment concurrently herewith will similarly meet project objectives. 52-62 Cont.

Alternative 4 would retain the same level of commercial development, and is not infeasible because it would not require extravagant economic, environmental, social, technological, or legal measures to be accomplished. Pub Res C §21061.1; 14 Cal Code Regs §15364. Therefore, Alternative 4 should be adopted because it will feasibly avoid or substantially lessen the project's significant environmental effects while at the same time attain most of the basic project objectives. 52-63

The DEIR acknowledges that Alternative 4 is also feasible because it does not require excessive steps to be accomplished. The term "feasible" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Pub Res C §21061.1. The Guidelines add the term "legal" to the list of factors to take into account. 14 Cal Code Regs §15364. Under Alternative 4 the wastewater generation from residential uses in Alternative 4 would generally be similar to the proposed project and would not necessitate expansion of new facilities or exceed treatment capacity. Alternative 4 would be served by PG&E for electric and natural gas service, which is required by the CPUC to update existing systems to meet any additional demand, would comply with applicable solid waste diversion, reduction, and recycling mandates, and would not exceed capacity at the Neal Road Recycling and Waste Facility. Additional mitigation measures are not necessary. Again, the DEIR analysis of Alternative 4 should be applied equally to the similar but additional alternatives submitted herewith in public comments, that would feasibly reduce or avoid the project's adverse effects to a larger degree. 52-64

Finally, as discussed below, a feasible alternative would help to protect on-site features in the southern open areas, preserve sensitive habitat, provide additional safeguards for natural drainages, allow for increased wildlife movement, and protect wetlands and other aquatic features. 52-65

Biological Resources Impacts

An increased open space and higher density alternative would reduce and avoid significant impacts to biological resources by moving the 65 residential units from the southeastern area of the site to the other planning areas within the Specific Plan. The elimination of all Very Low Density Residential (VLDR) uses in the southeastern portion of the plan will increase the open space buffer along Skyway and Honey Run Road, which would result in a better-defined urban edge to the central portion of the plan area. This is in part because there would be less vegetation and tree removal required within the area. The protection of additional oak woodlands as open space would help further reduce impacts to sensitive species and habitat within the area. The elimination of the VLDR uses will also prevent resources in those areas from being impacted by construction and operation. The amount of ground disturbance would be less compared to the proposed project as there would be no construction on the slopes of the Equestrian Ridge area which would require less grading activity and prevent potential soil erosion impacts. There would be no construction associated with the road connection to Honey Run Road included in the proposed project. 52-66

Traffic Impacts

An increased open space and higher density alternative would reduce significant impacts by decreasing traffic. The roadway connection from Honey Run Road to the Equestrian Ridge area as well as proposed roadways along the creek in the southern portion of the site would no longer be required. This would reduce the need for creek crossings in sensitive areas, reducing impacts to wetlands and riparian habitat. This Alternative would, in turn, result in a reduction in mobile GHG emissions, as compared to the proposed project, due to less travel distance required for residents to visit commercial areas and the rest of the City. 52-67

Density Impacts

By increasing the residential density in the North area, an increased open space and higher density alternative reduces the overall environmental impacts. EIRs often include an alternative involving increased project density or intensity. *See, e.g., Tracy First v City of Tracy* (2009) 177 Cal.App.4th 912; *Sequoyah Hills Homeowners Ass'n v City of Oakland* (1993) 23 Cal.App.4th 704. Alternatives that increase the density of a residential development project usually do so because it may reduce the pressure to develop on other, more environmentally sensitive sites. *Village Laguna of Laguna Beach, Inc. v Board of Supervisors* (1982) 134 Cal.App.3d 1022 (holding that an EIR that discussed a reasonable range of alternative densities for a major development was not defective because it failed to consider other reasonable intermediate density alternatives in addition to those that were studied); *see also City of Maywood v Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 417 (school district's decision to exclude reduced project alternatives was supported by state school siting policies relating to density of students per acre). Alternative 4 reduces significant impacts in the southern portion of the plan by increasing the residential density from 4.1 units/acre to 4.7 units/acre in the north. This will result in a reduction in the overall development footprint. Such an alternative would also result in a reduction in impacts to existing views of the site as compared to the proposed project and would help to reduce impacts to important visual resources such as mature trees and rock outcroppings. 52-68

In conclusion, if the project is to proceed, which it should not, an increased open space and higher density alternative must be adopted because it will avoid or substantially lessen the project's significant environmental effects better than the proposed project while at the same time feasibly attaining most of the basic project objectives. 52-69

Respectfully,

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AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS

October 31, 2021

Butte County Department of Water & Resource Conservation
308 Nelson Ave
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RE: Comments on the draft Butte Subbasin Groundwater Sustainability Plan

Dear Butte County Water Department:

AquAlliance, the California Sportfishing Protection Alliance, and the California Water Impact Network (hereinafter AquAlliance) submit the following comments and questions on the draft Butte Subbasin Groundwater Sustainability Plan ("Butte GSP" or "Plan"). There are serious weaknesses in the Plan that require ***significant*** changes to the document, without which the public and policymakers are truly left in the dark and dangerous consequences are obfuscated.

The information and analysis provided in Section A discuss the future changes described in the draft Butte GSP for the Butte Subbasin groundwater system and the overlying surface waters, as well as the implications of the proposed sustainability objectives and minimum thresholds. The draft Plan presents a rosy scenario, suggesting that future precipitation, evapotranspiration, and surface water supplies will adjust to the 2070 Central Tendency climate change scenario provided by DWR and keep groundwater levels stable. However, elsewhere in the Plan is material that indicates the proposed GSP management of the subbasin under the 2070 Central Tendency scenario will cause detrimental changes to both surface waters and groundwater. The 2070 scenario sustainable management of the subbasin assumes that annual average groundwater pumping will increase 29% to possibly 48%, while allowing declines in groundwater level of as much as twice the historical low. The groundwater storage will be sustained by increases in seepage from overlying streams and a reduction in groundwater accretion to the streams. Additional losses to the groundwater system may also occur through increased subsurface outflow along the western subbasin boundary.

Section B demonstrates the serious deficiencies in definitions of and plans to resolve conflicts. This failure will lead to escalating costs to residents, farms, and businesses to protect access to groundwater by deepening wells or drilling a replacement, plus likely legal expenses. Adam Keats and Chelsea Tu discussed this at length in 2016: "[i]f a medium or highpriority [sic] groundwater basin becomes a multi-use basin that includes imported water rights, overlying

rights, and interconnected instream rights, the relationship between those rights, and the priority given to each of the rights-holders, remains unresolved by the Act. The responsibility for identifying and addressing the foreseeable legal and use conflicts between imported water, overlying use, and/or in-stream use where groundwater interconnects with surface water is thus left to the GSAs, or ultimately, the courts."[1]

Section C provides historic information on some of the destructive planning and practices that have transpired in the Sacramento Valley that have caused groundwater basins to become private assets, as opposed to public commons elsewhere in California. It is a tragedy in the making to have local government, the cities of Biggs and Gridley, and the counties of Butte and Glenn promote a Plan that accepts groundwater levels that drop up to 100 percent of the historic range and the failure of 7 percent of the domestic and very deep aquifer supply wells.

A. Sustainability objective and threshold for undesirable results

1. The Draft Butte GSP breaks the groundwater monitoring network into four parts: Primary Aquifer, Very Deep Aquifer, Interconnected Surface Water, and Groundwater Quality. Wells in the Primary Aquifer have screen depth less than 700 feet below ground surface (bgs). The Very Deep wells are screened greater than 700 feet bgs (pages 4-13 and 4-14, pdf pages 210 and 211). The summary discussion of the monitoring network is given in Section 4.3.1 (pdf pages 210 through 230). Table 4-1 lists the Primary Aquifer monitoring wells (pdf page 215 and 216), Table 4-2 lists the Very Deep Aquifer wells (pdf page 220), Table 4-3 lists the Interconnected Surface Water wells (pdf page 230), and Table 3-3 lists Water Quality wells (pdf page 189).

Section 4.3.1.1 (pdf page 211) describes the Primary Aquifer MTs as:

> *Minimum thresholds (MTs) for primary aquifer groundwater level representative monitoring wells were calculated using a process designed to be protective of domestic wells while also allowing for conjunctive use and groundwater extraction by agriculture.*
>
> *The MT for each well in the primary aquifer was calculated based on the following process and criteria:*
>
> *1. Determine the shallower of:*
>
> *a. The shallowest 7th percentile of nearby domestic wells.*
>
> *b. The range of measured groundwater levels or 20 feet (whichever is greater) below the observed historic low.*
>
> *2. If the resulting value is shallower than the observed historic low, set the MT as 10 feet deeper than the observed historic low.*

Section 4.3.1.6 (pdf page 216) describes the Very Deep Aquifer MTs as (underlines added):

[1] Keats, Adam et al., 2016. *Not All Water Stored Underground is Groundwater: Aquifer Privatization and California's 2014 Groundwater Sustainable Management Act*. p. 98.

Setting minimum thresholds using this methodology is protective of the Beneficial Uses of the very deep groundwater aquifer, including agricultural, municipal, and domestic uses, because the minimum threshold is calculated to be at a level that allows for adequate flexibility to compensate for drought periods (e.g. 2015) while protecting up to 93% of supply wells greater than 700 feet deep (the minimum depth of the very deep aquifer representative monitoring network), thereby avoiding undesirable results.

2. A technical report in the Appendix 4A, dated June 11, 2021, discusses the MT criteria differently and gives hydrographs for almost all the monitoring wells (Appendices pdf pages 1045 and 1046). The MT criteria are said to be:

To protect the beneficial use by domestic wells, groundwater levels need to remain higher than the bottom depth of domestic wells. After reviewing the hydrographs, the Butte Advisory Board (BAB) suggested that the effects of declining groundwater levels would become significant and unreasonable when groundwater levels dropped below the depth of more than 7% of domestic wells. Consequently, the BAB determined that MT exceedances at more than 7% of domestic wells would constitute an undesirable result. This is described as an MT calculation method to determine the shallowest 7^{th} percentile of domestic well depths, and results in an MT that would protect 93% of the domestic wells. [emphasis added]

To protect the health of vegetation in GDEs, shallow monitoring wells will be installed in GDEs that are used to monitor GDEs. This allows MTs outside of GDEs to be set without regard to the GDE criteria, so the MTs in this set of hydrographs do NOT consider the GDE criteria.

To protect the conjunctive use of groundwater for agricultural production, groundwater levels must be able to fluctuate, lowering during droughts, when groundwater pumping increases to augment reduced surface water availability, and increasing during years when surface water is available for recharge. For agricultural conjunctive use, the effects of declining groundwater levels are expected to be significant and unreasonable when groundwater levels drop below the lowest historical groundwater elevation by more than 100 percent of the historical range in groundwater levels or by 20 feet, whichever is greater. Consequently, MT exceedances occurring at the greater of these levels would constitute an undesirable result. [emphasis added]

Depending on the depths of domestic wells, the need for lower ground water levels during droughts could cause some domestic wells to go dry if the MTs are set based on the conjunctive use beneficial use alone. Conversely, setting MTs based solely on domestic well depths may impact the ability of agricultural beneficial users to pump groundwater during droughts. Local stakeholders must agree on a balance between these two beneficial uses. [emphasis added]

Considering the MT exceedances described above, in the primary and very deep monitoring networks the MT of each well was calculated based on the shallowest of the following criteria: [emphasis added]

1. *Shallowest 7^{th} percentile of domestic well depths to protect at least 93% of the domestic wells in DWR's well completion database, and*

2. *100% of historical range or 20 feet, whichever is greater, to protect conjunctive use of groundwater.* [emphasis added]
3. *If the shallowest value from the two criteria above is shallower than the deepest observed groundwater level, the MT is set 10 feet deeper than the deepest observed groundwater level.* [emphasis added]

By selecting the shallowest value, these criteria are protective of the beneficial use most vulnerable to undesirable results. Undesirable Results (UR) Detection = 25% fall below the minimum threshold for 24 consecutive months (i.e., 11 of 41 wells in primary aquifer representative monitoring network, 3 of 10 wells in very deep aquifer representative monitoring wells)) [emphasis added]

The use of the term *shallowest* in selection of the MTs raises the question of the GSPs meaning of *shallowest*. The modification of criteria number 2 in the GSP main text from the Appendix 4A text with the addition of *below the observed historic low* seems to create a conflict with MT criteria number 3 and brings into question what *shallowes*t means. AquAlliance interprets *shallowes*t to mean the *shallowest depth*, i.e., the least distance between the ground surface and the water level. But maybe the GSP means *shallowest elevation*, i.e., lowest elevation? How can an MT value set at 100% of the historical range or 20 feet (whichever is greater) below the observed historic low be shallower than the historic low? If 100% of the range is less than 20 feet, the MT uses 20 feet. How can 20 feet below the historical low be shallower than 10 feet below the historic? If the depth for the shallowest 7th percentile of domestic wells is below the observed historical low, then it's not the shallowest of the MT criteria, so criteria number 2 would set the *shallowest* MT. This may make sense if the GSP is referring to an elevation rather than depth. This needs immediate clarification. The hydrographs in Appendix 4A don't add much clarity to how the MTs are established.

3. There is another issue in the determination of the MT. The hydrographs in Appendix 4A for the Primary Aquifer wells give at the base of the graph the MT calculation method used to set the value along with the MO and MT values. Tables 3-1 and 4-1 in the main GSP list the Primary Aquifer MT values (pdf pages 181, and 215-216, respectively). For several of the Primary Aquifer monitoring wells, 16 of 41, the MT values in the Appendix 4A hydrographs differ from the values in Tables 3-1 and 4-1. Specifically, the MT calculation method listed in the Appendix 4A hydrographs as -20 feet deep than historical low was changed for these 16 monitoring wells to 100% historical range (below the historical low value). Overall, 20 of the MTs for the Primary Aquifer monitoring wells are set at 100% historical range below the lowest historical level. The MT values in Tables 3-1 and 4-1 in the main GSP text are all equal to or greater than those given in the Appendix 4A hydrographs. When you plot the values in Tables 3-1 or 4-1 on the Appendix 4A hydrographs, they are at a deeper depth than the -20-foot value. An example of one hydrograph 18N01E15D002M is attached as page 2 of AquAlliance Exhibit A. I have no understanding as to why these changes were made and the Draft GSP doesn't appear to explain it either. I've attached a table that lists the Butte GPS Primary Aquifer well characteristics and the different MTs (columns G and H) along with the MT calculation method (columns P and Q) for the main text and Appendix 4A. See page 1 of AquAlliance Exhibit A.

4. The MT calculation method for the Very Deep Aquifer monitoring wells given in the Appendix 4A hydrographs are at the 100% historical range ***below*** the lowest historical groundwater level

(Appendix pdf pages 1096 to 1105). The MTs for the Very Deep Aquifer wells are described in the Draft GSP main text (pdf page 216) as:

> *Setting minimum thresholds using this methodology is protective of the Beneficial Uses of the very deep groundwater aquifer, including agricultural, municipal, and domestic uses, because the minimum threshold is calculated to be at a level that allows for adequate flexibility to compensate for drought periods (e.g. 2015) while protecting up to 93% of supply wells greater than 700 feet deep (the minimum depth of the very deep aquifer representative monitoring network), thereby avoiding undesirable results.*

5. The MT calculation method for the Interconnected Surface Water monitoring wells given in the Appendix 4A hydrographs as *-10 feet deeper than the historical low* (Appendix pdf pages 1108 to 1119). The MTs for the Interconnected Surface Water wells are described in the Draft GSP main text (pdf page 225) as:

> *Minimum thresholds for depletion of interconnected surface waters were set at 10 feet below the measured historical low for each of the representative monitoring wells. The minimum threshold was established to prevent undesirable results while taking into consideration key water bodies (including the Sacramento River, Feather River, Butte Creek, Little Dry Creek, Dry Creek, and Angel Slough) and groundwater dependent ecosystems (GDEs).*
>
> *The minimum threshold was selected such that levels would be protective of the beneficial use of interconnected surface water and of shallower groundwater near streams and rivers, including those of shallower domestic users and potential groundwater dependent ecosystems. The additional 10 feet in depth below the measured historical low (during which no undesirable results were observed) is intended to provide an appropriate margin of operational flexibility during GSP implementation. While information and understanding of interconnected surface waters is limited, groundwater levels that exceed the minimum threshold in the future for an extended period of time could impact beneficial uses of interconnected surface waters by reducing the volume and changing the timing of surface water availability, and potentially impacting the beneficial uses of groundwater by dewatering domestic wells and limiting groundwater supplies to groundwater dependent ecosystems. As additional data are collected during GSP implementation, minimum thresholds may change and the threshold calculations revised to reflect a better understanding of this complex interaction and the Subbasin's unique conditions.*

Setting the MTs groundwater levels for Interconnected Surface Water at a value greater than the lowest historical depth may result in undesirable results to stream flows and Groundwater Dependent Ecosystems (GDEs) because a decline of 10 feet could result in stream flows being lower than the minimum instream flows necessary to protect aquatic habitats and groundwater levels dropping beyond the acceptable rooting deep of GDEs vegetation. Rooting depths of GDEs can be found at The Nature Conservancy's Groundwater Resources Hub[2]. Note that 170

[2] https://groundwaterresourcehub.org/sgma-tools/gde-rooting-depths-database-for-gdes/

of the 230 entries, 74%, for California phreatophytes in The Nature Conservancy's database have maximum rooting depth at or less than 10 feet. The loss in stream flows predicted by the simulations for the Draft GSP show that surface water flows will be reduced (see discussions on the Water Budgets). The GSP Interconnected Surface Water monitoring network and the MOs and MTs should be set based on the requirements that sustain the existing GDEs by maintaining shallow groundwater at depths less than the maximum rooting depth for the overlying vegetation, and also to maintains surface water flow necessary to protect overlying aquatic habitats.

As noted in the excerpts above, this Plan offers experimentation cloaked as science through the abuse of the already stressed hydrologic system and all flora and fauna species, including humans, living in the region. The Butte GSP must not offer, let alone approve, Minimum Thresholds that are below ***any*** historic low. Proposing declines of up to 100% or 20 feet, whichever is greater, demonstrates an intention to hammer the basin and figure out the problems later. Well failure must not be an accepted result, so some water players may have "flexibility" during droughts or to conduct conjunctive use exercises. The public and the environment are not willing participants in this special interest Plan.

6. For Water Quality MTs the values are set at this time only for salinity using electrical conductivity (EC). The minimum threshold for EC in Water Quality monitoring wells was set as the higher of 900 µs/cm or the measured historical high, whichever is greater (pdf pages 221 to 223). For other water quality constituents, the Draft GSP says that it will wait 5-years and then:

> *The GSAs will also consider setting minimum thresholds for other constituents as part of the 5-year update. The established minimum thresholds will take into consideration:*
>
> - *Maximum Contamination Levels (MCL)*
> - *Local conditions (historical measurements).*
> - *Agricultural requirements (Irrigated Lands Regulatory Program [ILRP], Central Valley Salinity Alternatives for Long-Term Sustainability [CV-SALTS])*

Water quality standard already exist for the Butte Subbasin in the Central Valley Regional Water Quality Control Board's (CVRWQCB) Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin.[3] The Water Quality MOs and MTs for the Butte Subbasin should follow the requirements of the CVVRWQCB's Sacramento River Basin Plan. In addition, the GSP should maintain the subbasin's water quality so that it meets all required health protective drinking water standards at levels below the Maximum Contaminant Levels (MCLs) for public water systems, and below the public health goals (PHGs).[4,5]

7. The hydrographs in Appendix 4A for the Primary Aquifer and Very Deep Aquifer monitoring wells all list a *Model Adjustment Value*. This value is sometimes positive, zero, or negative. See column R on page 1 of AquAlliance Exhibit A. What this adjustment does to the calculation of

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[3] https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

[4] https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.html

[5] https://www.waterboards.ca.gov/laws_regulations/docs/drinking_water_code_2021.pdf

MO or MT is unclear. The description of the Model Adjustment is given on page 2 of the Appendix 4A report (pdf page 1045) as:

> *Projected future water levels from the model run are a line plot of the monthly values averaged from the daily model results. The projected future water levels have been adjusted on the graphs at wells where the historical measurements were offset from the model results. This is an accepted modeling practice and it is noted on the hydrographs when such an adjustment has been made.*

The hydrographs don't provide much clarity on how the adjustment changes these values. Clarification is need on what this adjustment does to the MO and MT values.

8. The MO values listed in the Appendix 4A hydrographs are the same as in Tables 3-1 and 4-1. The hydrographs also show the simulated groundwater levels for future conditions using the 2070 climate change simulation results. The MO values essentially align with the simulation groundwater curve. The description of the hydrographs is given on page 2 of the report in Appendix 4A (pdf page 1045) as:

> *Hydrographs for the future conditions with 2070 climate change and the historical measured groundwater levels were plotted on one chart for each of the monitoring well locations (i.e., the chart includes the 2000 through 2018 historical run and 2019 through 2068 projected future run). The charts show simulated groundwater elevations on the left vertical axis and groundwater depths below ground surface (bgs) on the right vertical axis. Ground surface elevation is also plotted along with the elevation and depth bgs of the draft MT and MO. The charts are organized by monitoring network beginning with the primary aquifer, followed by the very deep aquifer and the interconnected surface water networks, and included as attachments to this TM.*

9. There are several issues related to how the MTs are set. For the Primary Aquifer, why are the MTs being set below the historical lowest groundwater level when the Draft GSP says that the subbasin will be managed to maintain the current MOs? The future 2070 simulation assumed that the past 50-years of water use would be repeated during the next 50 years. The simulation groundwater levels shown in the Appendix 4A hydrographs don't suggest that there will be deep declines in groundwater in the next 50 years. Does the Draft GSP assume that there will be more conjunctive use in the future than in the past, such that the groundwater will decline below the depths calculated in the 2070 future simulation? Why didn't the 2070 simulation include these projected increases in conjunctive use? Why almost double the historical lowest depth of groundwater decline for the MT? As discussed below, the results on the water balance suggests that the MTs in the Draft GSP are set based on a planned significant increase in average annual groundwater production during the next 50 years. The Draft GSP does mention increased groundwater production during drought years, but also states that groundwater storage will recover during non-drought years (pdf page 231 and 232). The Draft GSP seems to state that although there will be an average decrease in the future in groundwater storage of 2,000 AFY, the management actions will address this imbalance and provide *an average annual benefit to groundwater storage of at least this volume*. **Again, why is an MT that's almost twice the historical low needed to maintain groundwater sustainability?**

10. In the discussion of the Interim Milestones, the main GSP text states on page 4-15 (pdf page 212) for the Primary Aquifer and on page 4-21 (pdf page 218) for the Very Deep Aquifer that:

> *For the Butte Subbasin, since groundwater levels are already at or near MOs, it is reasonable to set the interim milestones equal to the MOs to provide numerical metrics for GSAs to track maintenance of the Subbasin's sustainability goal relative to the overall sustainability goal, ensuring that the basin remains sustainable.*

The Draft GSP reasoning for setting of the Interim Milestones at the MO values seems to say that the subbasin is already sustainable. If that were the case, then why does a GSP need to be prepared? DWR seems to believe that groundwater levels are declining such that the Butte Subbasin was given a Medium SGMA priority. The results of the 50-year Current and 2070 climate change simulations suggest that there has been a decline in groundwater storage since 1971 with an overall decline since WY 1998 (pdf page 173; also see modified Figure 2-42 on page 3 of AquAlliance Exhibit A). The setting of the Interim Milestone at the MOs suggests that there is no need to raise groundwater levels or add to the volume of groundwater in storage.

The future 2070 simulation groundwater levels shown in the Appendix 4A hydrographs also suggest that there will be no sustainability issues in the future. However, the information provided in the Draft GSP Water Balance calculations suggests that there may be problems with the sustainability of the subarea in the future. The cumulative loss in groundwater storage on January 1, 2015, the SGMA Benchmark date, calculated by the Current water budget simulation is approximately 150,000 AF. See modified Figure 2-42 on page 3 of AquAlliance Exhibit A. If the cumulative change in groundwater storage simulated for the next 50 years is subtracted from the January 2015 cumulative loss, the total loss in storage in 2070 will be approximately 450,000 AF. This is more than double the cumulative storage loss estimated at the start of SGMA. Perhaps, this is why the GSP has set the MTs at 100% below the historical range, which is almost twice the maximum historical depth. Twice the loss in cumulative storage will likely cause a decline in groundwater levels that is almost twice the historical maximum.

11. The Draft GSP provides several water budgets, or water balances, scenarios for both surface water and groundwater. There appear to be three baseline water balance calculations, and three 50-years-in-the-future water balance calculations. The Draft GSP selects the future 2070 Central Tendency (2070CT) climate change scenario for comparison to the Current conditions.

The three baseline water budgets include two called “Historical” (19 water years from 2000 to 2018), and one “Current” (50 years from 1971 to 2018 plus 2004 and 2005 to fill in to make 50 years). The three future water balance scenarios are described as (pdf pages 23 to 26):

> *Three projected water budget scenarios were developed across a range of future conditions that may occur: these scenarios include one in which no climate change occurs, one with adjustments to precipitation, evapotranspiration, and surface water supplies based on the 2030 Central Tendency climate change datasets provided by DWR to support GSP development, and one with adjustments to precipitation,*

evapotranspiration, and surface water supplies based on the 2070 Central Tendency climate change datasets provided by DWR to support GSP development.

One of the Historical water budgets is given in Appendix 4C as two tables, Table C-1 for surface water, and Table C-2 for groundwater. See pages 4 and 5 of AquAlliance Exhibit A. There doesn't seem to be a clear explanation of the development of these two Appendix tables, but there are several water balance reports in the Appendices, so maybe these tables can be derived from those reports. The second Historical water budget is given as part of the main GSP text in Section 2 (pdf pages 149 to 161). Table 2-7 for surface water and Table 2-8 for groundwater (pdf pages 156 and 157) have a column called Historical. See column B pages 6 and 7 of AquAlliance Exhibit A. I've attached a file that has several modifications to those two tables that calculate the annual differences between the three baseline scenarios and the 2070 future scenarios. See pages 8 with 9, 16 with 17, and 18 with19 of AquAlliance Exhibit A for the three baseline to 2070 scenario water balance differences.

The third baseline water budget is called "Current" in column C of Tables 2-7 and 2-8. This is a water budgets based on the past from 1971 to 2018 with two additional average years 2004 and 2005 added to make a 50-year average. The past 50-years of annual water budget is then used to estimate the annual water balances for 50 years into the future using three different assumptions. The Draft GSP apparently selects the 2070 future scenario for comparison to the Current water budget for evaluation future groundwater pumping impacts. The GSP selects the 50-year Current scenario because it has *[a]n advantage of evaluating the current conditions water budget over a representative 50-year period is that the results provide a baseline for evaluation of the projected water budgets* (p. 2-55, pdf page 147).

12. The Historical water budget for Appendix 4C Tables C-1 and C-2 had to be calculated because the tables only list the annual values for each component, but don't give any overall statistics. The attached two Appendix 4C water budgets and two tables that give the summary statistics for surface water and groundwater. See pages 4, 5, 10 and 11 of AquAlliance Exhibit A. In addition, modified Tables 2-7 and 2-8 are included that calculate the average annual differences between the two Historical water budgets for each water budget components. See pages 12 and 13 of AquAlliance Exhibit A.

13. The Draft GSP gives in Figure 2-42 (pdf page 173) graphs of the cumulative change in groundwater storage for the past "Current" 50-years and the three future 50-year scenarios. I've included this graph with some modifications in the attached water budget pdf document. See page 3 of AquAlliance Exhibit A. The Draft GSP in Table 5-1 (pdf page 232) provides a comparison of the Current to the future 2070 water balances for selected parameters for 2019 to 2068. It is unclear why the future years start in 2019 when the 50 years for the Current water budget added two years after 2018 to end in 2020. Regardless, the values in Table 5-1 appear to be derived from values in Tables 2-7 and 2-8. See page 14 of AquAlliance Exhibit A.

    Also attached is a modification of Table 5-1 that includes the original Current to 2070 year water balances along with two additional Historical baselines for comparison. See page 15 of AquAlliance Exhibit A. One modification compares Table 2-8 Historical to future 2070 water balances and the other Appendix 4C Table C-2 Historical to the future 2070. The comparisons

for the two Historical baseline water budgets show significant differences from the "Current" scenario. Both the Historical baselines comparisons show an increase in overall groundwater storage of approximately 7,800 AFY rather than the decrease as calculated with the Current baseline.

This increase in groundwater storage seems to come from a significant *net* reduction in surface water flows caused by an increase in total surface water seepage to groundwater, and a significant decrease in discharge of groundwater to surface water (accretion). Even with the Current baseline water budget, the *Net Stream Gains from Groundwater (Accretion)* parameter decreases in the future, just not as much as the difference from the two Historical baselines. There is also significant decrease in *Surface Water Outflows* with both Historical baselines. The *Surface Water Inflows* parameter for the Appendix 4C Historical water budget also differs significantly from the Current and Table 2-8 Historical baselines.

If the Historical water budgets that the subbasin is presently experiencing (since 2000) are used as the baseline for estimating the results of the 2070 future climate change conditions, then the difference calculations show that the flows in the subbasin's streams and rivers will be significantly reduced. At the same time the subbasin will have an increase in groundwater pumping along with a gain in groundwater storage. This contradiction for the Historical baselines needs to be explained because it might indicate a problem with the assumptions about the water budgets and the future scenarios.

The use of the past 50-year Current scenario as the input for the hypothetical future scenarios is reasonable. Repeat the past with the climate changes applied to see what happens. However, the starting point for going forward in an evaluation of the subbasin's groundwater sustainability should be at today's conditions, not the average of the past 50 years. From the graphs of groundwater storage in Figure 2-42 (pdf page 173; page 3 of AquAlliance Exhibit A) it's clear that during the past 20 years the subbasin has seen a downward trend in groundwater storage. The volume of storage at the SGMA benchmark date of January 1, 2015 was near -150,000 AF lower than in 1971, and lower than any time prior to the start of SGMA. The additional decline in groundwater storage from the 2070 climate change scenario should be started at the -150,000 AF value of the SGMA Benchmark date, not the zero of 1971. The authors of the Draft GSP may know this, and that's maybe why many of the groundwater monitoring well MTs are set at 100% of the historical range below the historical low. The GSP authors want to allow for an additional 200,000 to 300,000 acre feet of loss in groundwater storage predicted by the 2070 climate change scenario, for a total of 400,000 to 450,000 AF since the 1971, without triggering an *undesirable result*. The Draft GSP doesn't actually say that it's planning to have this amount of groundwater storage loss, but the water balance calculations suggest that it is likely.

14. The water budgets given in Tables 2-7 and 2-8 suggest that groundwater production in the Butte Subbasin will be significantly increase during the next 50 years. The groundwater pumping annual average given in Table 2-7 or Table 2-8 for the Draft GSP preferred scenarios, 50-year Current baseline and 2070 climate change future, show an increase in the annual production of 47,700 AFY, a 29.3% increase over the Current baseline (columns G and H on page 9 of AquAlliance Exhibit A), from 162,800 AFY to 210,500 AFY (columns C and F). If the Historical baselines are used the groundwater production increases to 48% above the baseline,

with an approximately 68,300 AFY increase. See pages 17 and 19 of AquAlliance Exhibit A. This increase in groundwater production is apparently recharged by losses in the stream and rivers. The water budgets have two components that deal with stream flow and groundwater interaction, the *Stream Gains from Groundwater* as an inflow, and the stream *Seepage* as an outflow. See pages 8, 16 and 18 of AquAlliance Exhibit A.

The Draft GSP Table 5-1 lists a parameter called *Net Steam Gains from Groundwater* for the Current baseline and the 2070 Climate Change water budgets. See page 14 of AquAlliance Exhibit A. Both parameter values show that for these two scenarios the net gain for the streams is negative and that the loss increases in the future under the 2070 climate change scenario. The streamflow loss under the Draft GSP preferred 50-year Current vs 2070 Climate change is 42,800 AFY, approximately 3% of the Current baseline loss. This is stream flow loss of 2.14 million acre-feet (AF) over the next 50 year.

If the Historical baselines are evaluated for net stream accretion, the stream losses significantly increase from gains ranging from 40,600 AFY to 212,116 AFY during the Historical period to losses during the next 50 years of 148,500 AFY. A decrease in stream flow ranging from 189,100 AFY with the Table 2-7 Historical water budget values, up to 360,616 AFY with the Appendix 4A Table C-1 Historical values. See page 15 of AquAlliance Exhibit A, columns B, C and D. This is an approximate 13% to 25% decrease in annual stream flow during the next 50 years (column E), or a 9.45 million AF to 18.03 million AF over the next 50 years.

If the ratio of the future changes in stream flow for the three baselines are compared to the increase in groundwater pumping with the 2070 scenario, the ratio ranges from approximately negative 89% to a negative 528%. See column D on page 15 of AquAlliance Exhibit A. In other words, the increase in future pumping results in a decrease in annual average stream flow volume that's slightly less than the increase in the volume of groundwater pumping, but it may be more than 5 times greater. I've attached another table that compares selected groundwater water balance components. See page 20 of AquAlliance Exhibit A. If the total annual average groundwater pumping for the Historical periods are compared to the net change in stream accretion, the ratio goes from a positive value for stream accretion that ranges from approximately 29% to 149% (the streams are gaining flow during the Historical periods). For the 50-year Current and future 2070 climate change scenarios, the net stream accretion is negative, ranging from approximately minus 65% to 71%. In other words, groundwater pumping under these two scenarios is apparently recharged by a reduction in stream flow, with stream flows decreasing in the future due to climate change.

15. All three baselines water budgets show a future loss in stream flow with the increase in groundwater production during the next 50 years under the 2070 climate change scenario. See page 15 of AquAlliance Exhibit A. This loss in stream flow isn't being directly measured. Instead, the Draft GSP proposes to use groundwater levels to monitor, and presumably measure, changes in Interconnected Surface Waters.

    - Under the Draft GSP preferred scenario comparison, the past 50-year Current vs the future 50-years of 2070 climate change, an increase in groundwater production of 47,700 AFY is almost balanced by a loss of 42,800 AFY from the streams (column D).

- If the most recent 19-years in Table 2-7 Historical water budget is used, then the groundwater production increases 68,300 AFY over baseline with net stream flow changing from a gain of 40,600 AFY to a loss of 148,500, a net change of negative 189,100 AFY (column D).

- For the Appendix 4C Table C-1 Historical water budget, an increase in groundwater production of 68,289 AFY is balanced by a change in net stream flow from a gain of 212,116 AFY to a loss of 148,500 a net change of negative 360,616 AFY (column D).

These changes in net stream flow show that the assumption in the Draft GSP that monitoring the changes in the levels of shallow will ensure that the flow in the interconnected streams and rivers are maintained and sustainable is flawed. The significant losses in *Net Stream Gains from Groundwater* from the baseline condition are expected to occur over the next 50 years with the 2070 Climate change water budget even though the groundwater levels measured in the Interconnected Surface Water monitoring well are predicted to remain consistent with the MO groundwater levels. The hydrograph for the Interconnected Surface Water monitoring wells in Appendix 4A (Appendices pdf pages 1107 to 1119) show the groundwater levels under the 2070 climate change scenario varying about the MO values. This predicted shallow groundwater level stability occurs even though 29% to 48% more groundwater is being produced, and flow in the interconnected stream flow declines from 42,800 AFY to as much as 360,000 AFY.

The reason that the shallow groundwater levels in the Interconnected Surface Water monitoring wells are remaining relatively consistent is because the streams are losing flow. The shallow groundwater levels won't decline until the interconnected streams are dry and can't supply any more recharge. Unless the actual flows in the interconnected streams are being measured, as they apparently can be, the decline in flow and the associated impacts to habitat won't be recognized until it is too late. See pages 6 and 7 of AquAlliance Exhibit A for list of stream inflows water budgets.

The Draft GSP lists four existing surface water gauge site in Table 3-4 (pdf page 193) and plots the locations on Figure 3-5 (pdf page 195). Unfortunately, these four stream flow gauges are insufficient in number to measure changes in stream flow across the Butte Subarea and aren't located to capture the upstream and downstream change in the six interconnected streams shown on Figure 2-28 (pdf page 142). See page 21 of AquAlliance Exhibit A. Additional stream gauges are needed to document that the subbasin is being sustainably managed to prevent undesirable results to surface waters.

The Draft GPS does propose to install additional shallow groundwater monitoring wells in the areas of the Groundwater Dependent Ecosystems (GDEs) shown on Figure 3-6 (pdf page 197) See page 22 of AquAlliance Exhibit A. Here the shallow groundwater level measurements can aid in monitoring the sustainability of the GDEs because the depth to groundwater directly affects the water available for vegetation. However, using groundwater levels to measure and monitoring the sustainability of the GDE habitat for stream aquatic species would be inappropriate for the reasons stated above for instream flow monitoring. That is, groundwater

levels can't measure surface water flows, which need to be maintained to maintain aquatic habitat sustainability.

It should be noted, that the Draft GSP proposed MTs for interconnected surface water at a depth that's 10 feet below the historical lowest level probably isn't appropriate for maintaining GDEs because a sustained decline in groundwater depth of 10 feet below the lowest historical level may result loss of the vegetation (see maximum rooting depths dataset available at The Nature Conservancy's Groundwater Resources Hub[1].

16. The Draft GSP water budget for groundwater lists an outflow component called Western Boundary Net Outflows (see Table 2-8; see page 7 of AquAlliance Exhibit A). The Draft GSP describes the Western Boundary as:

> *The western boundary is a combination of the Butte-Glenn County line along the Sacramento River, the Sacramento River through portions of Glenn and Colusa Counties and the jurisdictional boundary of Reclamation District No. 1004 (RD1004).* (pdf page 77)

The net outflow for the Western Boundary is described as:

> *Western Boundary Net Outflows – Sacramento River gains from groundwater and subsurface outflows to the Colusa and Corning Subbasins along the shared boundary along the river. The split between these outflows is uncertain at this time and will be addressed through future refinements to the BBGM and through coordination and collaboration with neighboring subbasins as part of GSP implementation.* (pdf page 155)

Groundwater flows across the Western Boundary are considered interbasin flows and are described as:

> *Interbasin flows are dependent on conditions in adjacent basins. It is recommended that GSAs refine estimates of subsurface groundwater flows from and to neighboring basins through coordination with GSAs in neighboring basins during or following GSP development and through review of modeling tools that cover the Sacramento Valley region, including the C2VSim and SVSim integrated hydrologic model applications developed by DWR.* (pdf page 176)

The water budgets for the three baselines when compared to the next 50 years with the 2070 climate changes shows that the outflows at the Western Boundary increase significantly over the Historical conditions. See page 20 of AquAlliance Exhibit A. The outflows for the Historical water budgets range from an average low of 10,911 AFY for the Appendix 4A Table C-2 to 182,400 AFY for Historical Table 2-8. Under the 2070 climate change future, the outflow increases to 292,800 AFY, an increase of 61% to as much as 2600%, depending on the Historical water budget. See pages 17 and 19 of AquAlliance Exhibit A. The Western Boundary outflows decline slightly in the future from the past 50-year Current outflows, which are 304,400 AFY. An approximate 4% decline. See page 9 of AquAlliance Exhibit A. The wide variation in the

value of the Western Boundary outflow with the different water budgets shows that there is a need to improve the estimate.

The Plan also believes that … *interaction with the Sacramento River is subject substantially [sic] greater uncertainty than other streams, due to the river representing the western boundary of the BBGM model domain. It is recommended that this uncertainty be addressed through future refinements to the BBGM (Section 6.1.2.3)* (pdf page 145). With this level of uncertainty about the outflow on the Western Boundary, caution must guide present and future activity.

The Plan attempts to start from today when the last twenty years have shown serious declines, but when combined with the prior 30 years, it makes the starting point look less dire. In a deep hole NOW. See page 3 of AquAlliance Exhibit A.

17. The Draft GSP discusses several projects that may help Disadvantaged Communities in the Plan Area (pdf pages 252, and 284 through 289). The City of Biggs and City of Gridley were specifically identified as having disadvantaged communities. Unfortunately, the GSP doesn't appear to have any analysis of these disadvantaged communities. In the Appendix Section 5.A.2., under the section titled *Analysis of Disadvantaged Communities in the Plan Area*, the Draft GSP (Appendix pdf p. 1125) just says:

    > *Currently in development – to be included with final GSP.*

    The descriptions of GPS projects often refer to Disadvantaged Communities using the language that is similar to:

    > *This project can be designed to benefit disadvantaged communities, …. Required permitting activities will be determined as the project is developed further.*

    The lack of analysis for disadvantaged communities prevents any meaningful review of a critical public need. The Draft GPS in effect provides no protection or benefits for disadvantaged communities.

18. The projects and management actions to achieve sustainability goals are given in Chapter 5. The 25 projects and actions are divided into three categories, *ongoing, planned, and as needed*, see Table 5-2 for brief descriptions of projects (pdf pages 234 through 237). Details of these projects and the cost and benefits are only given for those that are *ongoing* and *planned,* 7 out of the 25 projects. The remaining *as needed* projects are described in less detail with no cost and benefit analysis provided. Table 5-4 lists the benefits and costs for the three *ongoing* project that will be completed prior to year 2042 and lists a combined total gross average annual benefit at full implementation of 8,939 AFY. Table 5-5 lists four *planned* projects that will be *available if continued monitoring indicates that they are needed to meet the sustainability goal by 2042, or to maintain other water management objectives.* Costs for all four *planned* projects are listed in Table 5-5, but benefits are only listed for two of the *planned* projects. The combined total gross average annual benefit for the two *planned* at full implementation is 9,947 AFY. The combined total benefit of the *ongoing* and *planned* projects is therefore 18,889 AFY. No specific costs or

benefits are given for the *as needed* projects. Table 5-3 does identify the general category of expected benefit for six general types of projects/management action.

19. The GSP implementation schedule for tasks and studies, along with general timelines are given in Tables 6-1 for GSP Implementation in years 2022 through 2042, and Table 6-2 for GSP Studies Implementation for years 2022 to 2027 (pdf page 317). Many of the projects and studies in Tables 6-1 and 6-2 have a footnote that states that: *Implementation and scale of these projects is dependent on funding availability*. The two footnoted funding dependent projects listed in Table 6-1 are the two *planned* projects in Table 5-2 that have cost benefits listed in Table 5-3. The apparent lack of current funding at this time for these two *planned* projects suggests that the be 9,947 AFY of benefit shouldn't be assumed at this time.

20. The water budget calculations in the Draft GSP for Butte Subbasin suggest that the assumptions being made regarding loss of surface water flows during a groundwater substitution transfer are flawed. The change from any of the baseline water budgets in the *Net Steam Gains from Groundwater (Accretion)* (see Table 5-1 for the Current baseline change, pdf page 232; see p. 14 of AquAlliance Exhibit A) that occurs with the increase in groundwater production during the next 50-year with the 2070 climate change scenario is much greater than the DWR/BOR assumed *stream depletion factor* of 13 percent[6] The ratio of the change in net stream accretion to the change in groundwater ranges from approximately negative 90% to as much as negative 528%. See page 15 of AquAlliance Exhibit A.

    The groundwater budget in Draft GSP Table 2-8 shows that with the future increase in groundwater pumping under the 2070 climate change scenario, there is an increase in seepage from surface waters to the groundwater ranging from 7,800 AFY to 86,000 AFY with the Current or Historical baseline, respectively. See pages 9 and 17 of AquAlliance Exhibit A. In other words, more surface water will infiltrate into the groundwater basin to the detriment of the streams.

    The groundwater budget in Draft GSP Table 2-8 also shows that with the future increase in groundwater pumping the discharge of groundwater to streams, the S*tream Gains from Groundwater (Accretion)* during the next 50 years will decrease from 218,500 AFY and 154,800 AFY, the Historical and Current baselines, down to 123,500 AFY under the 2070 climate change scenario. See pages 9 and 17 of AquAlliance Exhibit A.

    The combined loss of stream flow, or net change, over the next 50 years with climate change from the increased seepage and reduced accretion ranges from -42,800 AFY up to -189,100 AFY, from the Table 2-8 Current or Historical baselines, respectively. See p. 15 of AquAlliance Exhibit A. This loss of stream flow occurs while groundwater pumping is increasing from 47,700 AFY to 68,300 AFY, Current or Historical baselines, respectively. This suggests that the amount of stream flow lost when groundwater pumping is increased ranges from 90 percent to 277 percent (-42,800 / 47,700 = -0.897; -189,100 / 68,300 = -2.768). This shows that the overall percentage of groundwater being pumped that will be recharged from the streams in the Butte

[6] https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Water-Transfers/Files/Draft_WTWhitePaper_20191203.pdf

Subbasin, i.e., stream depletion, with any future pumping increase is significantly greater than the DWR/BOR assumed 13% stream flow loss from a groundwater substitution transfer. **In fact, with the Historical baseline, the loss exceeds the volume of groundwater being pumped, suggesting that the subbasin maybe at a *tipping point* where the impacts from future pumping increases are amplified, causing significantly more harm than just taking 100 percent of the groundwater recharge from surface waters.**

21. The trigger for an undesirable result from lowering of groundwater levels occurs whenever the groundwater levels in 25% of the monitoring wells exceed the MT value continuously for 24 months (Section 4.2.1.2, pdf pages 202 and 203). There are 41 Primary Aquifer and 10 Very Deep Aquifer monitoring wells across the 265,500 acres of the Butte Subbasin (Bulletin 118). The Draft GSP doesn't appear to provide the areas monitored by each of these wells. If it is assumed that they are uniformly distributed, then each of the Primary Aquifer wells monitors an area of approximately 6,476 acres and the Very Deep Aquifer wells an area of 26,550 acres. The requirement that 25% of the monitoring wells continuously exceed their MTs for 24 months before an undesirable result is declared means that the Primary Aquifer MT for the area of exceedance is at least 71,232 acres, or 111 square miles (11 of 41 wells) and at least 79,650 acres in the Very Deep Aquifer, or 124 square miles (3 of 10 wells). Both minimum exceedance areas are greater than 25% of the total subbasin area (66,375 acres). In addition, the undesirable result *all or none* requirement with MT exceedance for a continuous 24 months in 25% of the monitoring wells appears to have no limitations on the maximum decline in groundwater that might occur in an area monitored by less than 25% of the wells. ***In other words, the Draft GSP has no limit to the maximum depth of groundwater drawn down when it occurs in less than 25% of the wells, or when the groundwater depths in the wells exceed their respective MT for a duration that's less than 24 continuous months.*** An uncontrolled maximum depth to groundwater in exceedance of the MTs can apparently continue indefinitely if depression remains smaller than an area covered by 25% of the wells or the groundwater level rises above the MT in at least one of 11 monitoring wells during a 24-month period. The GSP minimum threshold standard needs to be amended to provide a maximum allowable depth to groundwater at any time in a well to protect domestic wells, interconnected surface waters, and GDEs from periodic dewatering that might occur from a deep groundwater depression.

B. Conflict Resolution

State and federal agencies have long viewed the Northern Sacramento Valley as a source of "surplus" water that will one day serve the accelerating water market through conjunctive-use and water banking (more in Section C). Sadly, the Butte GSP reflects the willingness of the Groundwater Sustainability Agencies[7] to participate in a destruction model, emulating the demise of the Owens and San Joaquin valleys. As discussed in Section A, the Plan as proposed will degrade the groundwater basin and harm groundwater users who are not involved in conjunctive use or water banking but are reliant on the same groundwater basin.

[7] Biggs-West Gridley Water District, Butte Water District, City of Biggs, City of Gridley, Colusa Groundwater Authority, County of Butte, County of Glenn, Reclamation District No. 1004, Reclamation District No. 2106, Richvale Irrigation District, Western Canal Water District.

It is easy to see that newly formed GSAs have layers of potential conflict. Questions regarding authority, streamlined legal and regulatory timelines, a lack of existing precedents, and the need to represent agency and constituent interests have the potential to exacerbate regional conflicts under SGMA. In some cases, where authoritative interpretations of legal authority and truly sustainable limits have not been established yet, litigation may be necessary and warranted.

The public and SGMA governing bodies and committees have been excluded from inter-basin discussions. Moreover, when participants in the Vina Stakeholder Advisory Committee asked staff if discrepancies in inter-basin flow volumes/direction that are estimated in the various GSA Basin Settings had been deliberated within the Inter-Basin Coordinating Committee, they answered that they are too busy, but would examine the issue after the GSPs are submitted in 2022.

The drama surrounding the nascent Tuscan Water District and highly questionable Minimum Objectives and Minimum Thresholds in this and other plans are examples of "issues" that have already emerged. Achieving sustainability requires local agencies, stakeholders, and water users to make many difficult and potentially contentious decisions. These decisions are prone to conflict, particularly when pumping restrictions are viewed as infringing on property rights or when fees are charged to support local management.

The Butte GSP is not complete without a detailed process and funding to resolve conflicts that arise both within and external to the GSA boundaries.

C. Water Transfers and Conjunctive Use

Page 2-9 (pdf p. 64). Key Butte County General Plan Water Resources Element policies include: "W-P3.2 Groundwater transfers and substitution programs shall be regulated to protect the sustainability of the County's economy, communities and ecosystem, pursuant to Chapter 33 of the Butte County Code." For the Butte GSP to assume that Butte County's General Plan, Chapter 33, or other ordinances will in any way protect the population and environment of Butte County from any transfers belies historic facts and current proposals by DWR funded think tanks:

- Water transfers are not protective of the public or the environment. Transfers implement the dreams of the California's Department of Water Resources, the U.S. Bureau of Reclamation, and State Water Project and Central Valley Project water sellers who have demonstrated over decades that their interests are not the same as the public's interest. Once the state recognized that they were considerably short on water after former Governor and President Ronald Reagan protected North Coast rivers with Wild and Scenic status, it began trolling for other water sources.
    - Some of the Butte GSA entities in Butte County sold surface water from Oroville Reservoir to the 1994 Drought Water Bank.[8] This led to an increase in

[8] Thomas, Gregory, 2001. Designing Successful Groundwater Banking Programs in the Central Valley: Lessons From Experience. "The Butte County/Basin districts that increased groundwater pumping during the 1991 State Drought Water Bank included: Western Canal Water District, the Joint Water Districts Board (Richvale Irrigation District, Biggs-West Gridley Water District, Butte Water District, and Sutter Extension Water District) Ramirez Water District, Cordua Irrigation District, Hallwood Irrigation Company, and Browns Valley Irrigation District." p. 30.

groundwater withdrawals used for irrigating rice, called groundwater substitution transfers. Until the time of the water transfers, groundwater levels had sustained the normal demands of domestic and agricultural users in the region. The 1994 extractions, however, caused the water levels to suddenly fall in shallow domestic wells, water quality to deteriorate in the wells serving the town of Durham, irrigation wells to fail on several orchards, and one farm to enter bankruptcy because it didn't recover from the loss of its crop. Harmed farmers and residents were told to "Go hire an attorney."

- State and federal water agencies kept exploring how to manipulate groundwater systems during the 1990s to set up conjunctive use programs. CalFed was one such effort. **"**Potential projects at Stony Creek, Butte Basin, and the Cache-Putah Basin (Conaway Ranch) were eliminated because these aquifers are generally full. *Using these aquifers conjunctively would require initial extraction followed by active or passive recharge*. These may prove to be attractive projects in the future if potential third-party impacts are addressed adequately."[9] **(emphasis added)**
- Additional CalFed material recognized that conjunctive use will require an extra 100 feet of aquifer drawdown and "may be an issue." [10]
- Glenn Colusa ID received close to $3,000,000 of public money to study the Stony Creek Fan Conjunctive Water Management Program and Regional Integration of the Lower Tuscan Groundwater formation project.
- Glenn Colusa ID, Western Canal WD, and Richvale ID actively planned to implement conjunctive use schemes: "Ultimately the project evaluated the effects of exercising both the northern Sacramento Valley's deep aquifer system, which is presently relatively undeveloped, and the shallower, regional aquifer, which is more heavily pumped for both domestic and agricultural needs."[11]

- Think tanks are already encouraging the California Legislature to override local ordinances. "Once GSAs establish sustainability plans that address undesirable impacts of pumping, it should be possible to ease the coarser restrictions on this practice found in most county ordinances—which effectively preclude trades if they entail water leaving the county. If counties with restrictive groundwater export ordinances fail to amend their laws to conform to SGMA*, the legislature should consider preempting local laws that discriminate against out-of-county uses or place undue burdens on groundwater and groundwater-substitution transfers* that would not jeopardize sustainable groundwater management of the source aquifer."[12] (emphasis added)

Sustainability is not found in the Butte GSP, let alone equitable sustainability for all residents, farms, businesses, and the environment. The Butte GSA and Colusa GSA are dominated by

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"Participants in the 1994 State Drought Water Bank were Richvale Irrigation District, Western Canal Water District, Browns Valley Irrigation District, Cordua Irrigation District, and Ramirez Water District." p. 30.

[9] CalFed Bay Delta Program, 1999. *Conjunctive Use Assessment*. p. 6.

[10] CalFed Bay Delta Program. Groundwater Storage Attribute Matrices, Appendix B. p. B-5.

[11] Glenn Colusa ID, et al, 2012. *Feasibility Investigation of Re-Operation of Shasta and Oroville Reservoirs in Conjunction with Sacramento Valley Groundwater Systems to Augment Water Supply and Environmental Flows in the Sacramento and Feather Rivers*. p. ii.

[12] Ayres, Andrew, et al., 2021. *Improving California's Water Market: How Water Trading and Banking Can Support Groundwater Management*. p. 34.

large, non-residential landowners, many of whom have sought to play in the lucrative water market already to the detriment of their neighbors, streams, rivers, and species. Sadly, SGMA opened this door further: "Non-residential landowners and future banking partners may find it in their common interest to interpret the legislative intent (74)[13] and lax definitions of safe yield and overdraft provided in the Act (75)[14] based on the opinion in *Los Angeles v. San Fernando*, which encourages drawing down basins to create additional storage space and prevent water "wasting."(76)[15] Thus, in addition to exports, it is foreseeable that a future GSA will encourage drawdown of the aquifer to satisfy massive crop thirst as the drought continues, which will then create extra storage space for imported waters to "recharge" the Basin. As a result of future water exchanges and banking, local residents will bear the additional cost of digging deeper wells just to maintain their straws in the aquifer, and will increasingly compete with each other over a diminishing percolated supply while banked supplies increase."

D. Conclusion

By its own admission, the Butte GSP is bent on pursuing long-held plans to expand conjunctive use through groundwater manipulation, artificial recharge, and potential dam reoperation that will harm the people and environment of the GSA and surrounding region. The draft Plan will not lead to sustainability as required by SGMA, but will allow major groundwater fluctuations, significant well losses, and cost burdens on harmed groundwater dependent farms, homes, and businesses. This was predicted in 2016: "This potential conflict will become acute in the likely scenario where artificial recharge inhibits natural recharge so that it is difficult, if not impossible, to determine the relative quantity of each. Given explicit provisions in the Act and statewide policy favoring storing surface water underground it is not difficult to envision a privately-controlled GSA systematically drawing down percolated groundwater to create storage space in the basin, and then replenishing the basin with imported water, with little consideration of the ability for overlying users to access the basin or the long-term health of the surrounding ecosystem." [16]

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[13] Keats, Adam et al., 2016. *Not All Water Stored Underground is Groundwater: Aquifer Privatization and California's 2014 Groundwater Sustainable Management Act*. Footnote: *2014 Act, § 10720.1(g) (It is the intent of the Legislature "[t]o increase groundwater storage and remove impediments to recharge.").* p. 106.

[14] *Id. Footnote: 2014 ACT, § 10721(v) ("Sustainable yield" is defined as "the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result."); 2014 ACT, § 10735(a) ("Condition of long-term overdraft" means the condition of a groundwater basin where the average annual amount of water extracted for a long-term period, generally 10 years or more, exceeds the long term average annual supply of water to the basin, plus any temporary surplus. Overdraft during a period of drought is not sufficient to establish a condition of long-term overdraft if extractions and recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.").*

[15] *Id. Los Angeles v. San Fernando 14 Cal. 3d 199, 280 (1975) ("We agree with plaintiff that if a ground basin's lack of storage space will cause a limitation of extractions to safe yield to result in a probable waste of water, the amount of water which if withdrawn would create the storage space necessary to avoid the waste and not adversely affect the basin's safe yield is a temporary surplus available for appropriation to beneficial use. Accordingly, overdraft occurs only if extractions from the basin exceed its safe yield plus any such temporary surplus.").*

[16] *Id.* pp. 98-99.

Due to the inequity of the Plan for all dependent residents, farms, and the environment, the deficient presentation of the consequences in the text (see Section A above), and the unacceptable impacts to both ground and surface waters, it should be rejected by the Butte Subbasin Board.

Lastly, we submit additional comments and questions below in Attachment One.

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ATTACHMENT ONE

AquAlliance submits these additional facts and questions to seek clarification from the GSA regarding how future subbasin management actions will affect subbasin sustainability.

1. Table 2-7 gives the Historical, Current, and future Surface Water budgets, and Table 2-8 gives the same time periods for the groundwater budgets.
2. The surface water budgets shows that a decrease of approximately 4,300 to 4,600 AFY in surface water inflows is expected during the next 50 years with the 2070 climate change scenario, about quarter percent decrease, depending on the baseline, 2000-2018 Historical, or the 50-year 1971 to present Current.
3. The surface water budget shows that even though inflows decrease, precipitation will increase 35,400 to 60,300 AFY, an approximate 7 percent to 12 percent.

    - Question: Why is there a small decrease in surface water inflows with a much larger increase in precipitation?
    - Question: How does the increase in precipitation affect the availability of water for agricultural irrigation?

4. The surface water budget shows that total annual evapotranspiration (ET) is expected to increase from 40,100 to 46,700 AFY during the next 50 years, an approximate 5 percent to 6 percent increase.
5. Most of the increase comes from increased agricultural ET, 38,800 to 59,600 AFY.
6. The surface water and groundwater budgets show that the pumping of groundwater is expected to increase during the next 50 years by 47,700 AFY to 68,300 AFY, an increase of approximately 29 percent to 48 percent.

    - Question: Is the plan for managing the future groundwater sustainability of the Butte Subbasin to increase the average annual pumping of groundwater from 29 percent to possibly up to 48 percent to provide the water needed for an additional average annual ET of 5 percent to 6 percent?
    - Question: Is the increase in ET during the next 50 years due to a change in climate conditions, an increase the agricultural area under irrigation, a change in the type of crops, a change in irrigation efficiency, or a combination of all of these?
    - Question: How much does each of these potential changes contribute to the increase in ET and the increase in need for groundwater pumping?
    - Question: Will the monitoring proposed in the GSP track and quantify how much ET changes, tabulate these changes by the cause or source; when and where can public review the ET change monitoring data?

7. The groundwater budget in Table 2-8 shows that with the future increase in groundwater pumping under the 2070 climate change scenario, there is a decrease in stream accretion, or the stream gains from groundwater, ranging from 31,300 AFY to 95,000 AFY from the Current or Historical baseline, respectively. In other words, the subbasin will retain more groundwater to the detriment of the streams.

8. The groundwater budget in Table 2-8 shows that with the future increase in groundwater pumping under the 2070 climate change scenario, there is an increase in seepage from surface waters to the groundwater ranging from 7,800 AFY to 86,000 AFY from the Current or Historical baseline, respectively. In other words, more surface water will infiltrate into the groundwater basin to the detriment of the streams.
9. The groundwater budget in Table 2-8 shows that with the future increase in groundwater pumping under the 2070 climate change scenario, the change in stream accretion and seepage during the next 50 years will cause a net decrease in stream flow ranging from 42,000 AFY up to 189,100 AFY, from the Current or Historical baseline, respectively. This loss of stream flow is apparently caused, in part, by an increase in groundwater pumping of 47,700 AFY to 68,300 AFY, Current or Historical baseline, respectively.
10. Figure 2-28 in the Draft GSP (pdf page 142) shows the gaining and losing reaches of the streams in the Butte Subbasin based on the groundwater model for the Historical years 2000-2018.

    - Question: What percentage of the increase in net stream flow loss is due to increased groundwater pumping?
    - Question: What other factors are causing the future reduction in stream flow and what percentage do they contribute to the total loss?
    - Question: In particular, why is the ratio of the loss in stream flow to the increased groundwater pumping using the 2000-2018 Historical baseline at 277 percent (-189,100 AFY / 68,300 AFY = -2.77), while the ratio with the 50-year Current baseline, is only 88 percent (-42,000 AFY / 47,700 AFY = -0.88)?
    - Questions: What does the fact that the stream flow losses in the future relative to the most recent years, the Historical baseline, are much greater than the volume of additional groundwater being pumped say about the sustainability of the subbasin? How sensitive is the sustainability of the Butte subbasin to increases in groundwater pumping? Is the subbasin at a *tipping point* in its sustainability where every acre-foot increase in groundwater pumping causes a much larger loss in surface waters?
    - Questions: Where will the stream flow losses calculated for the 2070 climate change scenario occur? These changes should be shown on a figure such as Figures 2-27 and 2-28 (pdf pages 141 and 142).
    - Questions: What does the fact that the stream flow losses in the future relative to the most recent years, the Historical baseline, are much greater than the volume of additional groundwater being pumped say about the validity of DWR/BOR's recommended standard of a *13 percent stream depletion factor* for groundwater substitution transfers? Should the *stream depletion factor* for groundwater substitution transfers in the Butte Subbasin be equal to or greater than 100 percent of the volume of groundwater pumped for the transfer? Can the Butte Groundwater Subbasin achieve sustainability if groundwater substitution transfers are allowed using the 13 percent *stream depletion factor*; if yes, why? How will the losses to stream flow caused by a groundwater substitution transfer be accounted for and mitigated under the GSP management actions?

11. The groundwater budget in Table 2-8 shows that with the future increase in groundwater pumping under the 2070 climate change scenario, the net of the outflows at the Western

Boundary will decrease an average of 11,600 AFY relative to the 50-year Current water budget, but increase to 110,400 AFY relative to the most recent 2000-2018 Historical water budget, reaching an annual average outflow of 292,800 AFY throughout the next 50 years. This increase in groundwater outflow from the Historical conditions is significantly greater than the predicted annual increase in groundwater storage loss of 800 AFY given in Draft GSP Table 5-1 (pdf page 232) with the 2070 climate change scenario.

- Question: What does the increase in future Western Boundary outflows relative to the most recent time, the Historical water budget, say about the real effects that future groundwater pumping in the subbasins west of the boundary, e.g., the Colusa Subbasin, will have on the future sustainability of the Butte Subbasin?
- Question: Does the increase in future Western Boundary outflows contribute to the amplified surface water loss in the Butte Subbasin that occurs with the future increase in groundwater pumping?
- Question: What is/are the cause(s) of this approximate 60% increase over the Historical baseline in outflow at the Western Boundary (110,400 AFY / 182,200 AFY = 0.605), and what management actions can the Butte Subbasin GSAs take to prevent this increase?
- Question: If the cause(s) of the increase in outflow at the Western Boundary is/are due part to management of the groundwater basins to the west, what management actions should those western subbasin GSAs take to prevent the increase outflow?
- Question: Does the fact that the groundwater outflow at the Western Boundary is much greater than the loss in groundwater storage caused by future 2070 climate change indicate that the GSPs in all of the groundwater subbasins along the Butte Subbasin Western Boundary should have specific management actions to reduce the outflow from the Butte Subbasin?

12. The management objectives (MOs) for the Butte Subbasin are set at the groundwater levels during the most recent 5 years. Simulation results shown in hydrographs for each monitoring well in Appendix 4A for the groundwater levels in the future under the 2070 central tendency climate change scenario at the wells in the Primary Aquifer, Very Deep Aquifer and Interconnected Surface Water monitoring networks show that levels remain near the MOs for the next 50 years. The graphs in Figure 2-42 of the cumulative change in groundwater storage for Current and future conditions for the next 50 years show a decrease in groundwater storage relative to the Current baseline, with the greatest occurring during dry water years after the 30th simulation year (WY 2000). Even with these decreases in groundwater storage, the model predicted groundwater levels are expected to remain stable. Apparently, the GSP isn't proposing any specific management actions to maintain the MOs groundwater levels.

    - Questions: Is the assumption that the MOs will remain at the level of the most recent 5 years consistent with the large decrease in groundwater storage under the 2070 climate change scenario reasonable? Are the losses in groundwater storage after the 30th simulation year being cancelled out by the conditions in the earlier simulation years? Is it reasonable to carry the storage conditions in these early years forward for 20 years, when determining the

subbasin's sustainability? Doesn't the continued decline in groundwater storage occurring in the last 20 years of the 2070 climate change speak to the subbasin not being sustainable?

13. Minimum thresholds for primary aquifer are said to be ….*designed to be protective of domestic wells while also allowing for conjunctive use and groundwater extraction by agriculture.* The Draft GSP states that the minimum thresholds (MTs) for the Butte Subbasin for the Primary and Very Deep aquifers are set using two-step process (Section 4.2.1, pdf page 211) that requires:
    1. *Determine the shallower of:*
        a. *The shallowest 7th percentile of nearby domestic wells.*
        b. *The range of measured groundwater levels or 20 feet (whichever is greater) below the observed historic low.*
    2. *If the resulting value is shallower than the observed historic low, set the MT as 10 feet deeper than the observed historic low.*

    The MT values calculated using this two-step process are shown graphically in the hydrographs in Appendix 4A along with the MOs discussed above in Comment No. 12. Several of the Primary Aquifer and all of the Very Deep Aquifer hydrographs list another method for calculating the MT that sets the threshold at *[t]he lowest historical groundwater elevation minus 100 percent of the historical range in the groundwater elevation, or 20 feet, whichever is greater* (page 4 in Appendix 4A, pdf page 1047). Figure 4-1 in the Draft GSP (pdf page 213) shows the Primary Aquifer monitoring wells locations along with the MT value and the methodology for calculating the MT. Table 4-1 in the Draft GPS (pdf pages 215 and 216) lists the Primary Aquifer monitoring wells with the MTs and MO values. Figure 4-1 shows that MTs at up to 20 of the 41 Primary Aquifer monitoring wells, 49 percent, are set at 100 percent the historical range below the lowest historical elevation. The GSP selection of an MT at 100 percent below the historical lowest groundwater elevation in effect sets the threshold for subbasin groundwater sustainability at a depth that's close to twice the lowest historical value, depending on the shallowest historical measured depth to groundwater.

    - Questions: How will allowing the depth of groundwater of nearly double the historical lowest value when combined with the decline in groundwater storage (see above Comment No. 12) maintain the MO groundwater levels and achieve long-term subbasin sustainability? Are the conjunctive use conditions being planned for the future quantified in the Draft GSP water budget or elsewhere; if yes, where?
    - Questions: Are the anticipated conjunctive uses planned in the future greater than in the past; if yes, by how much? Is the additional groundwater pumping predicted for the future caused by the planned increases in conjunctive use? If yes, how much of an increase in pumping is due to the planned increase in conjunctive use?
    - Question: What percentage of the benefits from increasing conjunctive use are cancelled out by the decrease in stream flows that occur with the future increases in groundwater pumping (see above Comment Nos. 7 through 10)?

14. The MTs for two of the Primary Aquifer monitoring wells are said to be based on the *Shallowest 7th Percentile of Domestic Well Depth* with depth listed at 73 feet and 56 feet, Figure 4-1 (pdf page 213). The Draft GSP doesn't appear to provide any specific information on the number of domestic wells in the Butte Subbasin, the depths or the frequency percentiles associated with

their depths. Figure 4-1 shows several the Primary Aquifer monitoring well MTs exceed 56 feet and 76 feet. The Draft GSP also states that the MTs for the Very Deep Aquifer monitoring wells will *protect[ing] up to 93% of supply wells greater than 700 feet deep* (Section 4.3.2.6, pdf page 216). Figure 4-3 (pdf page 2127) shows that all of the MTs for the Very Deep Aquifer monitoring wells are calculated using the 100 percent of the historical range below the historical lowest groundwater elevation.

- Questions: What are the statistics for the domestic wells in the Butte Subbasin, the numbers, and the range of depths for each percentile? What are the numbers of domestic wells that will be dewatered around each Primary Aquifer monitoring wells when groundwater declines to the MT depths? What are the statistics for the Very Deep Aquifer supply wells in the Butte Subbasin, the numbers, and the range of depths for each percentile? What are the GSP management actions for remedying the dewatering of up to 7 percent of the domestic and very deep aquifer supply wells? Will any management actions to remedy dewatering of wells be implemented if the duration of the dewatering is less than 24 continuous months? What is the source of funding for remedial management actions for any dewatered well?

15. The trigger for an undesirable result for lowering of groundwater levels occurs whenever the groundwater levels in 25% of the monitoring wells exceed the MT value continuously for 24 months (Section 4.2.1.2, pdf pages 202 and 203). There are 41 Primary Aquifer and 10 Very Deep Aquifer monitoring wells across the 265,500 acres of the Butte Subbasin (Bulletin 118). The Draft GSP doesn't appear to provide the areas monitored by each of these wells. If it is assumed that they are uniformly distributed, then each of the Primary Aquifer wells monitors an area of approximately 6,476 acres and the Very Deep Aquifer wells an area of 26,550 acres. The requirement that 25% of the monitoring wells continuously exceed their MTs for 24 months before an undesirable result is declared means that for the Primary Aquifer MT the area of exceedance of least 71,236 acres, or 111 square miles, (11 of 41 wells) and at least 79,650 acres in the Very Deep Aquifer, or 124 square miles (3 of 10 wells). Both of these minimum exceedance areas are greater than 25% of the total subbasin area, 66,375 acres. In addition, the undesirable result *all or none* requirement with MT exceedance for a continuous 24 months in 25% of the monitoring wells, appears to have no limitations on the maximum decline in groundwater that might occur in an area monitored by less than 25% of the wells. In other words, the Draft GSP has no limit to the maximum depth that groundwater can be drawn down too, when it occurs in less than 25% of the wells, or when the groundwater depth in the wells exceed their respective MT for a duration that's less than 24 continuous months. An uncontrolled maximum depth to groundwater in exceedance of the MTs can apparently continue indefinitely if depression remains smaller than an area covered by 25% of the wells or the groundwater level rises above the MT in at least one of 11 monitoring wells during a 24-month period.

- Questions: How does the requirement that 25% of the monitoring wells exceed their respective MTs for 24 continuous months with the lack of a maximum for the decline in groundwater depth ensure that the GSP and its management actions will achieve long-term subbasin sustainability? Could the occurrence of groundwater level declines greater than the MOs and MT in areas smaller than 25% of the wells cause undesirable results, such as drying up domestic wells? Could this concentrated groundwater level decline dewater more than the number of wells in the 7th percentile? How many domestic wells could be dewatered in areas

covered by less than 25% of the wells in Primary Aquifer? What management actions does the GSP require if a deep groundwater depression occurs in the Primary Aquifer that has an area less than 25% of the monitoring wells?

16. The MTs for Interconnected Surface Water monitoring wells are set *at 10 feet below the measured historical low for each of the representative monitoring wells. The additional 10 feet in depth below the measured historical low (during which no undesirable results were observed) is intended to provide an appropriate margin of operational flexibility during GSP implementation* (Section 4.3.6.1, pdf page 225). *Selected RMS wells had either a total depth of less than 150 feet bgs, or a top screen above 100 feet bgs and a bottom screen above 200 feet bgs* (pdf page 226). The decision to allow shallow groundwater levels near surface water bodies to decline 10 feet below the lowest measured historical depth doesn't appear to be based on the required rooting depth for the overlying vegetation or the potential losses in stream flow or stream habitat (see above Comments Nos. 7 through 10). The Draft GSP appears to be saying that *no undesirable results were observed* when the groundwater depth declined 10 feet below the historical low, but how can a groundwater decline be observed below the lowest measured historical depth? Table 4-3 lists the characteristics of the Interconnected Surface Water monitoring wells (pdf page 230). This table gives the total depth for 8 of the 12 monitoring wells, one being 465 feet deep, but leaves the other depths blank. The table provides no information on the top or bottom screen depths, so requirement that wells deeper than 150 feet total depth have screens above 100 feet can't be verified. A comparison of the MT depths for Interconnected Surface Water monitoring wells shown in Figure 4-5 (pdf page 227) with the MTs depths for adjacent Primary Aquifers monitoring wells shown in Figure 4-1 (pdf page 213) finds that 7 of the 12 MTs (58 percent) in the adjacent Primary Aquifer monitoring wells are deeper.

- Question: Why are the MTs for Interconnected Surface Water not set based on the maximum rooting depths of the overlying Groundwater Dependent Ecosystems, and/or the minimum instream flows for habitat protection?
- Question: Why is *operational flexibility* the main reason for setting the Interconnected Surface Water monitoring well MTs?
- Question: Was the fact that losses are predicted in *net stream gains from groundwater* during the next 50 years (see above Comments Nos. 7 through 10) considered when setting the Interconnected Surface Water monitoring well MTs at greater than the measured historical low?
- Question: What facts and issues were considered in determining that the predicted decrease in future stream flows was less important than the margin of operational flexibility?
- Question: How do the GSP management actions that occur when undesirable results happen at the Interconnected Surface Waters monitoring wells differ from actions taken when undesirable results occur at the adjacent, and sometime the same well, Primary Aquifer monitoring wells?
- Question: If 7 out of 12 Interconnected Surface Water monitoring wells with MTs that are shallower than an adjacent well and sometime within the same well, what effect will MTs for the Primary Aquifer monitoring wells have on determining that an undesirable result has occurred and the subsequent management actions to be taken?

City of Chico Planning Commission

November 18, 2021, 6 p.m.

VESP DEIR Public Hearing

Public Comment Speaker Summaries:

1. Mallory Borrego – Senior at Chico State, student intern for the Community Legal Information Center, Environmental Advocates Department. Pleasantly surprised by the adequacy of the Draft EIR, didn't expect so many topic areas, the miles of creek to be preserved in open space, keeping more than 5,000 oak trees. Feel like this Draft EIR is adequate and we should focus our efforts toward conservation and sustainability within development because it is not avoidable at this point with the housing crisis Chico is facing. PC-1

2. Susan Tchudi – I co-host Ecotopia on KZFR and convene the Environment Coalition of Butte County, however I am speaking just for myself. The proposed Valley's Edge development in the southeastern foothills, superficially, looks beautiful. Parks, ponds, green spaces and walking trails amidst a huge neighborhood, including apartments and housing for seniors. However, I think this project is in the wrong time and in the wrong place. PC-2

   The Draft EIR notes two impacts that are un-mitigatable. The GHG emissions are un-mitigatable; construction emissions and automobile travel into town. This pristine riparian woodland area with its birds, reptiles, animals, and plants will be slashed through with 2,777 housing units with an anticipated population of 5,654. I think that the impact on natural resources in the EIR is inadequate. It's a huge wildlife area, a huge ecosystem, it has big value for our community. PC-3

   Valley's Edge stands in contradiction to a lot of Chico's guiding principles and documents. The current General Plan calls for infill and compact, mixed-use development. General Plan quote: "*The urban form is compact, with a clear distinction between the City and its surrounding lands.*" We call this a site, but it's a reach to happen where it is. PC-4

   This is a 1,448-acre project, which is the opposite of compact urban form, it is urban sprawl. The Climate Action Plan, approved by the City Council just a few weeks ago, calls for zero-net emissions by 2045. According to the Draft EIR, the project would result in GHG emissions of approximately 3.13 megatons of CO2 emissions per capita, exceeding the 2030 efficiency target of 2.76 megatons of CO2 emissions per capita per year. This project is taking us in exactly the wrong direction. We're trying to reduce emissions, and this will increase emissions City of Chico's CAP thresholds by 2045 and the project being held to the 2030. PC-5

   And, finally, not so much for the Draft EIR but a significant thing to look at, is that the City will soon approve the Housing Element Update, which emphasizes the need for affordable housing. This project is intended for those who can afford HOA dues and costly amenities. According to every measure I have seen, Chico needs housing for its low-income residents. The Valley's Edge development, with its beautiful vision, is not for those in need, but for those with deep pockets. PC-6

3. Jake Morley – Been in development and land use for almost 20 years. I'd like to submit to the record Appendix C of the General Plan, that talks about this growth area and how the project itself expands upon this small page of the General Plan. It's a fantastic project that meets the lion's share of the General Plan policy goals and action items. It's a fantastic property. It's a wonderful project in a post-COVID world where the outdoor space is even more important than before. The adequacy of the EIR is definitely on-point, with thousands of pages of expert opinions on everything from GHG to aesthetics. PC-7

4. Erica Spangler – I laid our digital product and UX teams for a home improvement company locally, that has a lot of remote associates that are always looking for housing. Stayed in Chico after college, enjoys Chico's outdoor spaces. Pleasantly excited about Valley's Edge because of the open space, and that the open space was instrumental in the design. It provides smart growth, and a bigger vision for our future. It really embodies this post-COVID world, where we develop our careers indoors and need to enjoy the outdoors more than ever. Roughly half of the total land space is designated for parks, open space, and public uses. That is very rare for a lot of the development areas, which are more for housing. Having that balance of housing meeting housing needs and outdoor and really embodying the Chico area is something that I support. PC-8

5. Brent Silberbauer – Used to live on 20th Street, just north of the project, familiar with site. Two thumbs up with regard to the Draft EIR. Liked where the EIR took note of all the on-site trees, those ribbons of trees. I've seen the flooding in past, so glad to see the hydrology is planning to deal with that. I am a real estate agent by trade and houses are now going for $50-60,000 dollars over the asking price. Have to give potential buyers lots of bad news. There's a severe housing shortage given the Camp Fire and we have built a small amount since then to replace those units. We need large projects to capture the units we lost in Paradise. We need housing at every single level from cottage homes to luxury homes. The CO2 emissions is necessary to provide the houses. There is no supply to fill the gap, so prices will continue to rise as demand stays constant. PC-9

6. Noah Zoppi – Young real estate entrepreneur. Valley's Edge team worked hard to reduce impacts. For example, 80% of the trees will be kept in their wild community. Why would we pass up an opportunity to have a developer that is environmentally focused? If this group doesn't do it, then someone else will in the future. Sometimes we have to make the best decision we have based on the options presented. PC-10

7. Jim Stevens – Formerly on the General Plan Task Force. VESP is implementing the General Plan, the site was identified as a growth area 11 years ago. It has a light footprint on the environment. Just over 2 units per acre due to the open space. Regarding GHG, the concern I have is that we have such a significant housing crisis here, if we don't provide the local housing, across the range… Chico is still going to become the employment center within 50 miles, I think, and if people cannot find or afford a house locally, then they will look in Orland, Gridley, Biggs, Oroville, Red Bluff, and Corning. Imagine the GHG impact if we have people commuting in from the outlying areas. PC-11

8. David Welch – From Chico. A member of the senior demographic and an lifelong cyclist. I see a conflict between my experience and what the EIR sees as the role of active transportation in reducing vehicle miles traveled and mitigating the traffic and climate impact of the project. The combination of the large physical size of the project, with very low-density housing in most of the project area, the concentration of commercial at one corner, and the steep terrain of most of the project tell me that the bike path network will be used recreationally by a few sport cyclists like as myself, but will likely play almost no role in the actual transportation mix of the project. Neither typical seniors, nor young parents with children in tow are going to climb those hills coming home from commercial services or employment sites within or beyond the project area.

   PC-12

   At the same time, the increases in auto traffic on surrounding major roads, such as 20th Street, as a result of the project will actually work to discourage the use of active transportation by residents of nearby areas that are better suited for it, like Meriam Park.

   PC-13

   On a broader scale, the comparison used in the EIR for assessing the significance of vehicle miles traveled is a very dubious one. It is not at all clear what area was used as a regional standard. It's a big area, but the population numbers tell us it's larger than all of Butte County. And it had to include a lot of rural areas where people drive long distances by necessity. A comparison to the City of Chico, or another similar urban area if the numbers aren't available for Chico, would be a much more valid standard for vehicles miles traveled.

   PC-14

   I would also say that the assumption that the senior portion of the project population dives substantially less than a younger working population is probably outdated and erroneous for this population. Not only is retirement age steadily rising, but there's good evidence that high-income seniors, the kind that will live in a high-cost project like this, generate high levels of vehicle miles traveled for leisure and other pursuits even during retirement.

   PC-15

   Finally, the EIR discusses the active recreational amenities provided within the project, which sound wonderful, but it is never made clear to what extent those amenities will be made available to the general public, or only to project residents. Project residents will add to the burden of existing parks and recreational facilities in Chico, it seems only right that the rest of us should be compensated for that by a commitment making sure that all the parks and trails in the project are open to everyone. And that's not clear in the EIR.

   PC-16

9. Jared Geiser – I got a degree in Geography and Planning from Chico State and work as a conservation planner.

   The Draft EIR describes this development as "mixed use" when it's not mixed use. I don't think it falls in line with the City's definition of mixed use that I read in the General Plan, and I don't think it falls in line with any reasonable person's definition of mixed use, which is clearly inferring the mix of uses whereas the Valley's Edge Draft Specific Plan EIR clearly shows that the uses will not be mixed, they will be separated. Commercial will be down low, residential will be

   PC-17

up high. Mixed use relates to smart growth principles, which is the idea that, in order to avert environmental issues, climate issues, issues of automobile dependency, we need to grow in a smart way, infill, compact urban form, so people can walk and bike to get where they need to go. And mixed uses have a component of that, so this entails having commercial on the bottom and residential on top as a common example. And the value of that is that you have people right next to, in immediate proximity to commercial uses. So it's going to be boosting economics as well as promoting walkability. As well as promoting safety, which is often overlooked thing in our community. When you have single-use developments like the Valley's Edge Specific Plan DEIR, you have low-density residential homes where people are mostly going to be inside their home throughout the day and nighttime. But when you really do smart growth, with mixed use development, there's going to be more activity on the streets, more eyes on the streets, more people looking at what's going on. So the mixed use is highly valuable and I think the EIR misuses that term.

PC-17 Cont.

In the overview of causes for climate change, the EIR mentions the two main causes: (1) fossil fuel use and (2) land use changes. Then the EIR only acknowledges the GHGs that will result from use of fossil fuels, they don't acknowledge the GHG that will be remitted into the atmosphere from the land use change they are proposing. They acknowledge that land use changes cause climate change, but the EIR fails to analyze how this project's land use change will exacerbate climate change. And it indubitably will because soil is a major carbon pool on this planet, and by converting soil, which is capturing carbon through photosynthesis of the grassland plants and trees, by converting that soil that holds carbon into asphalt, into roads, into houses, into parking lots, you reduce the photosynthetic capacity of the landscape. So the landscape cannot use photosynthesis to capture carbon how it used to, so you're reducing carbon capture from this development, but also causing carbon emissions directly from the grading of the landscape.

PC-18

The climate impacts to this area are severe. Page 4.7-5 reference; extreme heat that will kill people. Page 4.7-6 the regulatory settings cites Massachusetts court case – endangerment finding. Despite the fact that GHG emissions is significant an unavoidable, I still will argue that the threshold of significance is inadequate because it uses the 2030 targets from the Climate Action Plan Update, but the project will not become operational, according to the EIR, until 2045. If the project isn't operational until 2045, then the operational emissions of the project need to be weighed against the threshold of significance of the 2045 Climate Action Plan goals, which is zero metric tons of CO2-equivalent emitted per person per day in the whole City. CARB's Scoping Plan states: "local government as essential partners". This body and the Council and the other entities at the City have the responsibility to protect and plan for current populations.

PC-19

EO B-55-18, the statewide policy for achieving carbon neutrality no later than 2045. This project will obstruct the attainment of this policy, which is important because the EIR, on page 4.7-10, claims the project is consistent with and will not obstruct attainment. This project, as identified by its significant and unavoidable greenhouse gas emissions, will obstruct the attainment of this executive order. That is not acknowledged in the EIR, I think it needs to be.

PC-20

Wildfire is an issue that hits close to home for everyone. I don't believe that the mitigation measures contained in the EIR, specifically Mitigation Measure WFIRE-1, would reduce wildfire risks faced by future residents. It does a good job of trying, but it's severely inadequate nonetheless because future residents will still be exposed to wildfire hazards due to its location in the Cal-Fire Moderate fire hazard severity zone. PC-21

Hydrology – The DEIR states that the project will not alter the hydrology in a way that would negatively affect groundwater recharge, but it does not justify that conclusion. The EIR explains that the lahar flows are relatively impermeable and underlie the site, and that cracks in the lahar flows are not large enough to contribute significantly to recharge, but they don't show where the lahar flows are in relation to the impermeable surfaces proposed to be developed. Says lahar on majority of site, but is it 51%? Is it 99%? It doesn't specify that, or where the groundwater recharge is or isn't occurring. PC-22

Wetland impacts – the DEIR fails to acknowledge how the development will hydrologically interrupt the wetlands located at the northwest of the site. And it does not acknowledge how it will affect the wetlands located further west of the site, in Stonegate. The DEIR states that the VESP site is hydrologically separated from the Stonegate site, but I was just out there and there are culverts under the bike path that provide a hydrological connection between the sites. There are preserves for meadowfoam on the Stonegate site because it's an endangered species. The EIR fails to acknowledge how the development of residential housing up above the wetlands sites, and in one case on top of a spring, will impact the water flowing into the wetlands. The wetlands on in Primary Open Space, however, the wetland preserves are only going to be meaningful if they're hydrologically connected to the land above them, because the water that drains into them is essential for their functionality. PC-23

Threatened and Endangered species – appalled at the mitigation to remove the species. The EIR mitigation is inadequate by not reducing the take of the habitat and only reducing the take of the species. For example, avoid Swainson's hawk impacts to individuals, but then come in and destroy their foraging and nesting habitat. My understanding of the Endangered Species Act is that habitat destruction would constitute "take" of habitat, which is prohibited. PC-24

Inconsistency with local documents, principally the City of Chico General Plan, the City of Chico Climate Action Plan, and the Butte County 2016 Regional Transportation Plan/Sustainable Communities Strategy – EIR claims consistency with the General Plan Sustainability Element where it speaks to emphasizing public health in making land use decisions. Yet, the EIR does not acknowledge how its significant and unavoidable impact to climate change will negatively impact public health. PC-25

In the Land Use Element, reinforce the City's compact urban form, and the EIR says consistent because it's in an identified growth area and clusters development to maintain large areas of the site undeveloped. While partly true, this project does not relate to the compact urban form of the City of Chico. This development is still a large, sprawling development, up into the foothills, that will be automobile-dependent, no doubt. Especially when you're talking about senior citizens that are over 55 years old and have reduced ability to use active transportation. PC-26

Ensure sustainable land use patterns, Policy LU 2.3. Significant and unavoidable GHG impacts is not sustainable. To be sustainable, we must be able to do the same thing indefinitely. By using the finite resource of fossil fuels, which is causing climate change and exacerbating several public health issues, it's not sustainable. Sustainable would be something that would not contribute significantly to climate change. PC-27

LU 2.5, protect areas with known sensitive resources. EIR says the project is consistent, despite all of the known resources on the site. PC-28

Complete neighborhoods, policy LU 3.1. EIR claims consistent, and nobody who's thinking reasonably can argue that this project will "reduce auto trips and support walking, biking and transit use." The density is about 4 units per acre, or closer to 2 units per acre if you count all the land area. That's not dense enough to support bus service. Reducing auto trips will not occur if you develop such a large area, with such long streets, sprawling so high up into the foothills. Other General Plan policies I'd like to argue: Goal CD 1.1, CD-1.1.1, CD-2.1, CD-2.1.1, CD-2.4, CD-2.4.1, Goal CD-3. PC-29

Transportation Plan calls for enhancing regional transit and mass transit, getting people from place to place without cars, with things like busses and trains. This project is not going to do that with this layout or by its location. PC-30

Climate Action Plan calls for three measures that the EIR says is consistent and it is clear not. Improve active transportation infrastructure to achieve greater than 6% bicycle mode share by 2030 and 12% bicycle mode share by 2045. This project does not improve active bicycle infrastructure, it provides recreational biking opportunities for residents. Measure T-1 is inconsistent with this project, and the EIR needs to reflect that. PC-31

Measure T-5: Support implementation of the City's General Plan that promotes sustainable infill development and mixed-use development in new growth areas to reduce VMT of the VMT. The project is not mixed-use development and is clear not infill development since it's surrounded by open space and grazing land. PC-32

Measure S-1: Increase carbon sequestration by increasing urban canopy cover at least 10% by 2030 through new greenscaping programs. EIR claims consistency with this measure by noting the project's street tree program, but that's not what the measure is saying. The measure says to increase carbon sequestration. This project will not increase carbon sequestration, it will decrease carbon sequestration by destroying the grasslands present at the site and removing 1,100 trees. Yes, they will plant more trees, but that will not increase carbon sequestration. Carbon sequestration will be reduced, indubitably. Thus, the project will be inconsistent with these plans. PC-33

10. Caitlin Dalby – BEC, Butte Environmental Council, is not against development or planning. We want to be smart about development.

The DEIR lacks an assessment of the impact this development will have on the imbalance of our regional housing needs. Goes back to more density, more infill, closer to facilities and public transportation. PC-34

The Draft EIR needs to incorporate a thorough and meaningful consultation with the Mechoopda Tribe on the plan area's ecological resources, in addition to its archaeological resources. Tribe is active in ecosystem restoration and monitoring, including flooding. Not just the 100-year flooding, which we are past at this point. We're now looking at 200-year, 500, 10,000 and 30,000-year flood events coming in the next 50 years. They are also knowledgeable about the wildfire regime in this area. Final EIR should include that additional consultation. Neither the DEIR or VESP clarify what areas will be restricted to the public. PC-35

Transportation impacts need to be re-evaluated, with the Chico Urban Area as the standard, not comparing the project to the County or beyond Butte County. PC-36

GHG impact needs to be re-evaluated with an assessment of how the expected demographics will be traveling. Fifty-five or older may drive more than a younger demographic.
Would like to see a 5th alternative with a greater density, pull residential from northern and add to lower portions of the site. PC-37

11. Maggie Scarpa – studied geography at Chico State, now a County Land Use Planner.
GHG impacts; increase in extreme heat, increase in deadly and devastating wildfires; we cannot approve projects with significant and unavoidable impacts. PC-38

Transportation: need to be about 14-20 du/ac to support local transit. Threshold area analyzed is the County and the threshold needs to be the Chico Urban Area. Transit and commute patterns are different in Chico than Magalia, yet they are viewed as equal. PC-39
Thresholds of significance: the City uses the State's, or 15%. We should use the recently adopted a CAP, should use the 2045 targets, not the 2030 targets. PC-40

There is no analysis for land use and population impacts. Appendix G checklist requires analysis of potential project impacts that could induce growth. This project will induce population growth. PC-41

There are many endangered, threatened and sensitive species onsite (burrowing owl, western pond turtle, and bats). Passive relocation per mitigation can result in "take," and take of an endangered species is prohibited. PC-42

The project needs to be denser and remove Equestrian Ridge. Needs to be denser to support transit. More density would reduce VMT and would reduce GHGs. Would like to see a more detailed protections for endangered species in the Final EIR. PC-43

12. Addison Winslow – advocate for housing, board member of the Northern California Environmental Defense Center.

    Social and psychological effects of this plan on the surrounding community. The largest concentration of land identified for affordable housing is in southeast Chico, primarily along Highway 32 and Bruce Road. Six out of seven of the pending, subsidized affordable housing projects are also located within or immediately adjacent to Meriam Park. The plan for Valley's Edge includes just 9 acres zoned Medium-High Density Residential, or about 5% of the total number of units in the project. It's not helpful for the dramatic imbalance of housing units Chico is experiencing. If successful in attracting higher income buyers, the project would exacerbate the geographic reflection of Chico's socio-economic divide, and further concentrate the placement of workforce housing along the highway and a major arterial where those families will experience the worst air quality impacts, the traffic noise, and the roadway danger that will come from building low density housing on the edge of an urban area. PC-44

    The custom houses overlooking Upper Park, down through California Park, the private road into Stilson Canyon, the Valley's Edge Site, the homes blocking access to Butte and Comanche Creek along Honey Run Road, and the Butte Creek Country Club. The area on the Valley floor undergoing the largest expansion of working-class housing is being enclosed and hemmed in by restricted-access developments in the foothills. Didn't know about lakes in California Park, I guess you need to carry an ID, and I don't know if that is the same intention for this HOA. Similarly, Stilson Canyon isn't accessible for the normal child. We are, to that extent, impoverished of the natural endowment of our area. For generations, if this project were to go though, kids will share the same schools but some will have the freedom to explore in the foothills while others will not. PC-45

    The applicants tout this plan as the largest conservation effort since Bidwell Park, but if this plan is approved without any condition requiring public access to the parks and the paths, it will be more like the largest privatization effort since the Mexican Land Grants. PC-46

    Equestrian Ridge is totally separate and unrelated to the rest of the site, it probably deserves its own environmental impact report. PC-47

    There's an inconsistency where the VESP says Equestrian Ridge will be Phase 2 and DEIR says Phase 1, multi-generational. PC-48

    Just like Meriam Park was required to build the multi-family first, then the single-family later, the City should first require development of the Core in Valley's Edge, then up from there, and should hold the developer to a development agreement. PC-49

13. Joshua Pierce – Resident of south Chico, builder in Doe Mill with a 25-year history of urban development and climate solutions. I want to describe the limitations under CEQA. California is currently undergoing a massive de-carbonization process, investing over a billion dollars in improving utilities, and the federal government is going into decarbonizing the building stock and decarbonizing transportation. That is not taken into account in the EIR's calculations of GHG PC-50

emissions and VMT, and the impact of those vehicle miles traveled. That means that, in ten years when these new homes are built, they will be all-electric, they will use heat pump technologies rather than natural gas, and more and more people will be driving and using electric vehicles. Those calculations are not considered in the way that they'll apply in California in the future, if we come anywhere near our climate goals.

PC-51

Infill is important, but not the entire solution. Infill generally does not provide parks and open space. It generally does not support inter-generational housing and uses the existing resources and infrastructure. May not be in the EIR but will impact the development.

PC-52

The poor soils and carbon sequestration. The project will cause a net increase in the number of trees onsite over a 15-year time horizon, due to the development and addition of street trees and landscaping on individual lots. The development, by necessity, will tear up the lahar flows and cemented cobble on the site. That will increase the surface area for potential water infiltration. Additional riparian areas will be created because of the development, and additional seasonal wetland areas that will be created due to the low impact development aspects mentioned in the EIR. The trenching for infrastructure, for sewer lines and storm drainpipes, will also disrupt the lahar flows and create additional opportunities for infiltration of the surface hydrology.

PC-53

Lastly, master planning is hard to do and we're not very good at it in the City of Chico, and generally in the North State. Most of the developments around Chico are small-plot subdivisions, generally built on verdant soils. Valley's Edge represents a once-in-a-generation opportunity, by creating opportunities for development that do not build on prime farmland, that do not build on sensitive habitat, and preserve as much of it as possible. We have seen this too much in the past. I have not seen a more thoughtful, well-planned legacy building project in our community in the 40 years that I've lived here. Thank you for you time.

PC-54