



OROVILLE CITY COUNCIL

Council Chambers
1735 Montgomery Street
Oroville, CA. 95965

NOVEMBER 21, 2017 REGULAR MEETING CLOSED SESSION 5:30 P.M. OPEN SESSION 6:30 P.M. AGENDA

CLOSED SESSION (5:30 P.M.)

ROLL CALL

Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier

CONVENE TO CLOSED SESSION (ITEMS LISTED ON PAGE NO. 3)

RECONVENE TO OPEN SESSION

OPEN SESSION (6:30 P.M.)

PLEDGE OF ALLEGIANCE

PROCLAMATION / PRESENTATION

Proclamation recognizing **December 9th, 2017** as *The Oroville Salvation Army's Red Kettle Day*

Proclamation recognizing **November 28th, 2017** as *Giving Tuesday*

Presentation by Bob Marciniak, relocation of salmon sculptures update

CONSENT CALENDAR

1. **APPROVAL OF THE NOVEMBER 7, 2017 REGULAR MEETING MINUTES OF THE OROVILLE CITY COUNCIL** – minutes attached

Administration Department

2. RATIFICATION OF CONFLICT OF INTEREST CODE – staff report

The Council may consider a Resolution to ratify the City of Oroville Conflict of Interest Code. **(Dawn Nevers, Assistant Planner)**

Council Action Requested: **Adopt Resolution No. 8669 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA, RATIFYING THE CONFLICT OF INTEREST CODE FOR THE CITY OF OROVILLE.**

3. AMENDMENT TO EMPLOYMENT AGREEMENT FOR ASSISTANT CHIEF OF POLICE – staff report

The Council may consider an Amendment to the Employment Agreement between the City of Oroville and Allen W. Byers for the position of Assistant Chief of Police. (Bill LaGrone, Acting Personnel Officer)

Council Action Requested: **Adopt Resolution No. 8670 - A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE AN AMENDMENT TO THE EMPLOYMENT AGREEMENT BETWEEN THE CITY OF OROVILLE AND ALLEN W. BYERS FOR THE POSITION OF ASSISTANT CHIEF OF POLICE – (Agreement No. 3073-2).**

Public Works

4. PROJECT UPDATE ON MONTGOMERY STREET ROUNDABOUT PEDISTRIAN SAFETY (continued from September 5, 2017) – staff report

The Council may consider approving a budget of \$40,000 proceed with the with the design of the flashing beacon system at the Montgomery Street Roundabout. **(Mike Massaro, Contract City Engineer)**

Council Action Requested: **Approve the design and the installation of the flashing beacons and rumble strips by the City’s Public Works personnel.**

PUBLIC HEARINGS - None

REGULAR BUSINESS

Community Development Department

5. OROVILLE FACILITIES PROJECT (OROVILLE DAM) – FERC NO. 2100 REQUEST FOR SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT – staff report

The Council may consider sending the Federal Energy Regulatory Commission (FERC) a letter in support of the preparation of a Supplemental Environmental Impact Statement (Supplemental EIS) prior to issuing a long-term operating license for the California Department of Water Resources (California DWR) Oroville Facilities Project (FERC No. 2100). **(Donald Rust, Director of Community Development)**

Council Action Requested: **Approve the attached letter of support.**

Public Works Department

6. CANYON HIGHLANDS & ORO-QUINCY HWY INTERSECTION SAFETY OPTIONS – staff report

The Council may provide direction, based on the Technical Memorandum provided, on whether or not to

proceed to a project estimate phase. If approved, Bennett Engineering will provide a scope and fee for re-design of this intersection to improve safety. **(Mike Massaro, Contract City Engineer)**

Council Action Requested: **Provide direction, as necessary.**

COUNCIL ANNOUNCEMENTS/COMMITTEE REPORTS (A verbal report may be given regarding any committee meetings attended)

CITY ADMINISTRATOR/ ADMINISTRATION REPORTS

CORRESPONDENCE

HEARING OF INDIVIDUALS ON NON-AGENDA ITEMS

This is the time the Mayor will invite anyone in the audience wishing to address the Council on a matter not listed on the agenda to step to the podium, state your name for the record and make your presentation. **Presentations are limited to 3 minutes.** Under Government Code Section 54954.2, The Council is prohibited from taking action except for a brief response by the Council or staff to a statement or question relating to a non-agenda item.

CLOSED SESSION

The Council will hold a Closed Session on the following:

1. Pursuant to Government Code section 54957(b), the Council will meet with Acting City Administrator, Personnel Officer, and City Attorney to consider the evaluation of performance and employment related to the following positions: Deputy City Clerk/City Clerk.
2. Pursuant to Government Code section 54957(b), the Council will meet with Acting City Administrator, Personnel Officer, and City Attorney to consider the evaluation of performance and employment related to the following positions: Director of Finance, Assistant City Administrator and Director of Public Safety.
3. Pursuant to Government Code section 54956.9(d)(4), the Council will meet with the Acting City Administrator and City Attorney regarding potential initiation of litigation – one case (related to the Spillway Incident).
4. Pursuant to Government Code section 54956.9(d)(2), the Council will meet with the Acting City Administrator and City Attorney regarding potential exposure to litigation – two cases.
5. Pursuant to Government Code section 54957.6, the Council will meet with Labor Negotiators and City Attorney to discuss labor negotiations for the following represented groups: Oroville Firefighters' Association and Oroville Management and Confidential Association.

ADJOURNMENT

The meeting will be adjourned. A regular meeting of the Oroville City Council will be held on Tuesday, December 5, 2017, at 5:30 p.m.

Accommodating Those Individuals with Special Needs – In compliance with the Americans with Disabilities Act, the City of Oroville encourages those with disabilities to participate fully in the public meeting process. If you have a special need in order to allow you to attend or participate in our public meetings, please contact the City Clerk at (530) 538-2535, well in advance of the regular meeting you wish to attend, so that we may make every reasonable effort to accommodate you. Documents distributed for public session items, less than 72 hours prior to meeting, are available for public inspection at City Hall, 1735 Montgomery Street, Oroville, California.



**CITY COUNCIL MEETING MINUTES
NOVEMBER 7, 2017 – 5:30 P.M.**

The agenda for the November 7, 2017, regular meeting of the Oroville City Council was posted on the bulletin board at the front of City Hall and on the City of Oroville's website located at www.cityoforoville.org on Thursday, November 2, 2017, at 10:40 a.m.

The November 7, 2017 regular meeting of the Oroville City Council was called to order by Mayor Dahlmeier at 5:39 p.m.

ROLL CALL

Present: Council Members Berry, Del Rosario, Draper, Hatley, Vice Mayor Goodson, Mayor Dahlmeier
Absent: None

Staff Present:

Donald Rust, Assistant City Administrator
Bill LaGrone, Director of Public Safety
Karolyn Fairbanks, Treasurer
Dawn Nevers, Assistant Planner
Mike Massaro, Contract City Engineer

Ruth Wright, Director of Finance
David Ritchie, Assistant City Attorney
Amy Bergstrand, Management Analyst III
Liz Ehrenstrom, Human Resource Manager

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Amy Jernigan, Recology, and Council Member Linda Draper.

RECOGNITION OF INDIVIDUALS WHO WISH TO SPEAK ON AGENDA ITEMS

Bryan Brown – Item No. 10
Tim Gibbs – Item No. 16

Celia Hirschman – Item No. 16

PROCLAMATION / PRESENTATION

Council Member Draper presented Maia Illa, Homeless Emergency Action Response Team, with a Proclamation recognizing the month of November 2017 as National Homeless and Runaway Prevention Month.

CONSENT CALENDAR

A motion was made by Vice Mayor Goodson, seconded by Council Member Del Rosario, to approve the following Consent Calendar:

- 1. APPROVAL OF THE OCTOBER 17, 2017 REGULAR MEETING MINUTES OF THE OROVILLE CITY COUNCIL** – minutes attached

Public Works Department

2. **PAVEMENT REHABILITATION LIST FOR SUBMITTAL TO CALIFORNIA TRANSPORTATION COMMISSION FOR FUNDING** – staff report

The Council considered approving by Resolution the submittal of the City's list of roads and streets prioritized for rehabilitation to the California Transportation Commission (CTC) for compliance with CTC guidelines. *(This list was submitted to the CTC by the required submittal deadline of October 16, 2017, after approval by the City Council at the October 3, 2017 Council meeting, however; the CTC requires a resolution approving the project list even though the list is non-binding and can be amended by City staff and Council. This resolution is necessary for the City to be eligible for additional transportation funding under Senate Bill 1 (SB 1) and Assembly Bill 135 (AB 135)).* **(Mike Massaro, Contract City Engineer)**

Council Action Requested: **Adopt Resolution No. 8663 – A RESOLUTION OF THE OROVILLE CITY COUNCIL AMENDING THE 2017-2018 BUDGET TO INCORPORATE A LIST OF PROJECTS FUNDED BY SB 1: THE ROAD REPAIR AND ACCOUNTABILITY ACT.**

3. **THIS ITEM WAS REMOVED FROM THE CONSENT CALENDAR (SEE BELOW)**

Finance Department

4. **MONTHLY FINANCIAL REPORT AND REPORT OF INVESTMENTS FOR JULY, AUGUST & SEPTEMBER 2017** – report attached

The Council received copies of the July, August & September 2017 Monthly Financial Report and Report of Investments. **(Ruth Wright, Director of Finance)**

Council Action Requested: **Acknowledge receipt of the July, August & September 2017 Monthly Financial Reports and Reports of Investments.**

Community Development Department

5. **RECOLOGY SERVICE RATE INCREASE FOR THE COLLECTION AND DISPOSAL OF SOLID WASTE** – staff report

The Council received an update on the Recology service rate increase for the collection and disposal of solid waste that will become effective January 1, 2018. **(Donald Rust, Director of Community Development)**

Council Action Requested: **None.**

6. **REQUESTED PERMISSION BY STEEPLECHASE FILMS TO PUBLISH A PHOTO FROM CHINESE TEMPLE ARCHIVES** – staff report

The Council considered a request by Steeplechase Films to publish one (1) photo from the Chinese Temple archives in a PBS documentary broadcast of, "The Chinese Exclusion Act".

(Donald Rust, Director of Community Development and Dawn Nevers, Assistant Planner)

Council Action Requested: **Acknowledge the approved request by Steeplechase Films to publish one (1) photo from the Chinese Temple archives in a PBS documentary broadcast of, “The Chinese Exclusion Act”, with the required acknowledgements, as indicated in the November 7, 2017 staff report.**

7. OROVILLE ARTS COMMISSION ARTS AWARD RECOGNIZING “YOUR VOICE FOR THE ARTS” – staff report

The Council considered approving the Oroville Arts Commission Art Award recognizing, “Your Voice for the Arts”, an award that recognizes an artist who has positively impacted the community through the arts. **(Donald Rust, Director of Community Development and Dawn Nevers, Assistant Planner)**

Council Action Requested: **Approve the Oroville Arts Commission Arts Award recognizing, “Your Voice for the Arts,” an award that recognizes an artist who has positively impacted the community through the arts.**

8. FINAL DRAFT NOTICE OF FUNDS AVAILABLE FOR ART IN PUBLIC PLACES/OROVILLE BEAUTIFICATION – staff report

The Council considered approving the updated 2017 final draft of the Notice of Funds Available for the Art in Public Places/Beautification funding under City of Oroville Ordinance No. 1798, Section II, Chapter 26, §17.08.135. **(Donald Rust, Director of Community Development and Dawn Nevers, Assistant Planner)**

Council Action Requested: **Approve the updated 2017 final draft of the Notice of Funds Available for the Art in Public Places/Beautification funding under City of Oroville Ordinance No. 1798, Section II, Chapter 26, §17.08.135.**

Business Assistance & Housing Development Department

9. 2017 ANNUAL LONG-TERM MONITORING REPORTS FOR HOME MULTI-FAMILY RENTAL HOUSING PROJECTS – staff report

The Council considered a Professional Services Agreement with R.L. Hastings & Associates, LLC, in the amount of \$7,500, for the preparation of HOME Investment Partnerships Program annual monitoring documentation reports for three (3) multi-family rental housing projects. **(Amy Bergstrand, Management Analyst III)**

Council Action Requested: **Adopt Resolution No. 8665 - A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH R. L. HASTINGS & ASSOCIATES, LLC, IN THE AMOUNT OF \$7,500, TO PREPARE THE ANNUAL LONG-TERM MONITORING REPORT FOR HOME MULTI-FAMILY RENTAL HOUSING PROJECTS - (Agreement No. 3237).**

10. THIS ITEM WAS REMOVED FROM THE CONSENT CALENDAR (SEE BELOW)

Administration Department

11. **REAPPOINTMENT TO THE BUTTE COUNTY MOSQUITO & VECTOR CONTROL BOARD OF TRUSTEES** – staff report

The Council considered reappointing Gordon Andoe to continue serving on the Butte County Mosquito and Vector Control Board of Trustees for an additional term, ending December 31, 2021. **(Jamie Hayes, Assistant City Clerk and Donald Rust, Acting City Administrator)**

Council Action Requested: **Reappoint Gordon Andoe to serve on the Butte County Mosquito and Vector Control District for an additional term, ending December 31, 2021.**

12. **AMENDMENT TO THE CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM AGREEMENT REGARDING EMPLOYEES SHARING ADDITIONAL COST** – staff report

The Council considered an Ordinance to amend the California Public Employees Retirement System Agreement for employees sharing additional cost. **(Liz Ehrenstrom, Human Resource Manager)**

Council Action Requested: **Waive the second reading, and adopt by title only, Ordinance No. 1825 – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA, AUTHORIZING AN AMENDMENT TO THE AGREEMENT BETWEEN THE OROVILLE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA, AND THE BOARD OF ADMINISTRATION OF THE CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM.**

13. **AMENDMENT TO THE OROVILLE MID-MANAGER AND CONFIDENTIAL ASSOCIATION'S MEMORANDUM OF UNDERSTANDING** – staff report *(Continued from October 17, 2017)*

The Council considered an Amendment to the Oroville Mid-Manager and Confidential Association's Memorandum of Understanding. **(Donald Rust, Acting City Administrator)**

Council Action Requested: **Adopt Resolution No. 8660 - A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE AN AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF OROVILLE AND THE OROVILLE MID-MANAGER AND CONFIDENTIAL ASSOCIATION - (Agreement No. 3083-4).**

The motion to approve the Consent Calendar was passed by the following vote:

Ayes: Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes: None
Abstain: None
Absent: None

ITEMS REMOVED FROM THE CONSENT CALENDAR

Public Safety Department

3. **AMENDMENT OF ORIGINAL AGREEMENT TO EXTEND THE TERM OF THE AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF PARKS AND RECREATION – staff report**

The Council considered an Amendment to the Agreement with the California Department of Parks and Recreation, for extra patrols in the State Parks Recreation area in and around Oroville, extending the terms through December 31, 2018. *(Funding for these patrols is supplied through this agreement, in an amount not to exceed \$180,000).* **(Bill LaGrone, Director of Public Safety)**

This item was removed from the Consent Calendar at the request of Vice Mayor Goodson.

Chief Bill LaGrone answered questions for the Council.

Following discussion, a motion was made by Council Member Thomson, seconded by Council Member Del Rosario, to:

Adopt Resolution No. 8664 – A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE AN AMENDMENT TO THE AGREEMENT WITH THE STATE DEPARTMENT OF PARKS AND RECREATION, EXTENDING THE TERM THROUGH DECEMBER 31, 2018.

The motion was passed by the following vote:

Ayes:	Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes:	None
Abstain:	None
Absent:	None

Business Assistance & Housing Development Department

10. **ACCEPTANCE OF 2016 HOUSING RELATED PARKS PROGRAM GRANT AND ESTABLISHMENT OF BUDGET – staff report**

The Council may consider accepting the 2016 Housing Related Parks Program Grant No. 16-HRPP-11489 and establishing the budget, in the Amount of \$117,458, for improvements to the Oroville Municipal Auditorium. **(Amy Bergstrand, Management Analyst III)**

This item was removed from the consent calendar at the request of a public speaker from for comments.

Bryan Brown made comments supporting the parks and the community.

Amy Bergstrand, Management Analyst III, answered question regarding the program for the City council.

Following discussion, a motion was made by Council Member Del Rosario, seconded by Council Member Draper, to:

Accept the 2016 Housing Related Parks Program Grant No. 16-HRPP-11489 and establishing the budget, in the amount of \$117,458, for improvements to the Oroville Municipal Auditorium.

The motion was passed by the following vote:

Ayes: Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes: None
Abstain: None
Absent: None

PUBLIC HEARINGS

Business Assistance & Housing Development Department

14. 2017 COMMUNITY DEVELOPMENT BLOCK GRANT APPLICATION – staff report

The Council conducted a public hearing and may consider the submittal of an application to the State Department of Housing and Community Development for the 2017 Community Development Block Grant Program funding. **(Amy Bergstrand, Management Analyst III)**

Mayor Dahlmeier opened the hearing for public comment, seeing none, the Public Hearing was closed.

Following discussion, a motion was made by Vice Mayor Goodson, seconded by Council Member Thomson, to:

Adopt Resolution No. 8666 - A RESOLUTION OF THE OROVILLE CITY COUNCIL APPROVING AN APPLICATION FOR FUNDING AND THE EXECUTION OF A GRANT AGREEMENT AND ANY AMENDMENTS THERETO FROM THE 2017 FUNDING YEAR OF THE STATE COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM.

The motion was passed by the following vote:

Ayes: Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes: None
Abstain: None
Absent: None

REGULAR BUSINESS

Public Works Department

15. CONTRACT WITH FRANKLIN CONSRUCTION RELATING TO THE REGIONAL SURFACE TRANSPORTATION PROGRAM STREET REPLACEMENT PROJECT BID AWARD – staff report

The Council considered awarding a Contract with the lowest responsive bidder, Franklin Construction, in the amount of \$644,813, and an additional 10% contingency, relating to the Regional Surface Transportation Program (RSTP) Street Replacement Project. **(Mike Massaro, Contract City Engineer)**

Contract City Engineer, Mike Massaro, answered questions for the Council.

Following discussion, a motion was made by Vice Mayor Goodson, seconded by Council Member Draper, to:

Adopt Resolution No. 8667 – A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE A CONTRACT WITH FRANKLIN CONSTRUCTION, THE LOWEST RESPONSIVE BIDDER, IN THE AMOUNT OF \$644,813, AND AN ADDITIONAL 10% CONTINGENCY, RELATING TO THE REGIONAL SURFACE TRANSPORTATION PROGRAM STREET REPLACEMENT PROJECT – (Agreement No. 3238).

The motion was passed by the following vote:

Ayes:	Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes:	None
Abstain:	None
Absent:	None

Community Development Department

16. **REQUEST TO AMEND ORDINANCE NO. 1794 TO RESTRICT THE SALE OF MENTHOL CIGARETTES AND OTHER FLAVORED TOBACCO PRODUCTS WITHIN CITY LIMITS – staff report**

The Council considered a request from the California Health Collaborative for an amendment to Ordinance No. 1794 restricting the sale of menthol cigarettes and other flavored tobacco products within City limits. **(Dawn Nevers, Assistant Planner and Donald Rust, Director of Community Development)**

Deanne Blankenship, California Health Collaborative, gave a presentation regarding their educational campaign on the dangers of flavored tobacco products.

Celia Hirschman spoke in support of the requested ordinance amendment.

Tim Gibbs, The American Cancer Society, spoke in support of the requested ordinance amendment.

Following discussion, the Council directed staff to return with more details regarding appropriate licensing fees to cover the cost to adequately enforce the proposed amendment.

17. **REQUEST FOR PROPOSALS FOR CONTRACT PLANNING SERVICES TO PROCESS THE RIO D' ORO SPECIFIC PLAN ANNEXATION PETITION – staff report**

The Council considered providing staff with direction to send a Request for Proposals for

contract planning services to process the Rio d' Oro Specific Plan Annexation Petition. **(Donald Rust, Director of Community Development)**

Council Member Hatley stated, for the record, that he is opposed to the project.

Following discussion, council directed staff to move forward with the Request for Proposal for a contract planer.

18. GROUND LEASE AGREEMENT WITH MODERN BUILDING, INC. FOR THE EXPANSION OF GRAPHIC PACKAGING INTERNATIONAL – staff report

The Council considered approving a Ground Lease Agreement with Modern Building, Inc. for the phased construction of 350,000 square feet of new building space for the expansion of Graphic Packaging International which will require 13.6 acres of airport property to be leased for a non-aeronautical use. **(Donald Rust, Director of Community Development)**

Following discussion, a motion was made by Council Member Draper, seconded by Vice Mayor Goodson, to:

Adopt Resolution No. 8668 – A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE A GROUND LEASE AGREEMENT WITH MODERN BUILDING, INC. FOR USE OF AIRPORT PROPERTY FOR A NON-AERONAUTICAL USE RELATED TO THE EXPANSION OF GRAPHIC PACKAGING INTERNATIONAL – (Agreement No. 3239).

The motion was passed by the following vote:

Ayes:	Council Members Del Rosario, Draper, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes:	Council Members Berry
Abstain:	Council Members Hatley
Absent:	None

Public Safety Department

19. AUTHORIZATION FOR REPAIR OF PATROL VEHICLE AND ADMINISTRATION VEHICLE – staff report

The Council considered authorizing the repair of two (2) Police vehicles. **(Bill LaGrone, Director of Public Safety)**

Following discussion, a motion was made by Vice Mayor Goodson, seconded by Council Member Del Rosario, to:

Authorize the repair of both vehicles by Pioneer Collision Center, in an amount not to exceed \$19,172.23.

The motion was passed by the following vote:

Ayes: Council Members Berry, Del Rosario, Draper, Hatley, Thomson, Vice Mayor Goodson, Mayor Dahlmeier
Noes: None
Abstain: None
Absent: None

COUNCIL ANNOUNCEMENTS/COMMITTEE REPORTS

Council Member Draper reported on the following:

- Attendance to the Butte Local Agency Formation Commission meeting regarding the Regional Water Study.
- Tour of the Oroville Dam, also attended by Vice Mayor Goodson and Council Member Del Rosario.

Council Member Thomson reported on the following:

- Attendance to the Butte County Association of Governments meeting with discussions relating to the Oroville Hospital expansion.
- Shared thoughts on the current progress and upcoming years scheduled work with a potential economic surge in growth for the community.

Council Member Del Rosario reported on the following:

- Attendance to the Carl's Jr. Grand Opening, also attended by Mayor Dahlmeier.
- Acknowledged the loss of John Lowe.
- Attendance to the Air Quality Control Board meeting.
- Department of Water Resources has received the Golden Fleece Award.

Vice Mayor Goodson reported on the following:

- Appointed to the Juvenile Justice and Detention Board.
- The Sewer Commission-Oroville Region meeting

Mayor Dahlmeier reported on the following:

- Followed up on Vice Mayor Goodson's report regarding the Sewer Commission-Oroville Region meeting.
- Attendance to the California Public Utilities Commission meeting in Sacramento regarding potential progress relating to broadband issues.
- Attendance of the memorial service for Dean Hill Sr., also attended by Council Member Hatley.
- Spoke at the Caring for Women event.
- Spoke at Mug Shots event.

CITY ADMINISTRATOR/ ADMINISTRATION REPORTS

- American Planning Association California Conference: Capitalizing on Diversity - memo

Chief LaGrone reported on the following:

- Attendance to the retirement party for Poncho Zarate.
- Wrote (2) letters in support of the HYW 70 widening.
- November 18th, 2017 is the Axiom event at the Gray Nurse.

Don Rust reported on the following:

- Presented a request for the displaced fire victims to rent the vacant City homes.
- 1355 Washington Avenue purchased and a drive-thru restaurant has been proposed.
- The Jamboree Housing project will not move forward this funding round due to new restriction in the application process. Staff is working with the Housing Authority to complete steps to be prepared for the next funding round.

Finance Director Wright reported on the following:

- Attendance to the CalPERS Educational Forum; followed by a recommendation from Council Member Hatley for the Council to direct reimbursement of Ms. Rights personal out-of-pocket costs for the attendance to the Forum, with additional recommendation for attendance to the upcoming scheduled meetings to take place at the CalPERS headquarters in Sacramento.

CORRESPONDENCE

- Butte County Public Health Administration

HEARING OF INDIVIDUALS ON NON-AGENDA ITEMS

Annie Terry discussed the AB109 Funds for the eradication of blight and discussed programs at the Rescue Mission.

Tasha Levinson discussed two potential cost savings options.

Bill Speer delivered a prayer for the City of Oroville and the community.

CLOSED SESSION

The Council held a Closed Session on the following:

1. Pursuant to Government Code section 54957(b), the Council met with Acting City Administrator, Personnel Officer, and City Attorney to consider the evaluation of performance and employment related to the following positions: Director of Finance, Assistant City Administrator and Director of Public Safety.
2. Pursuant to Government Code section 54956.9(d)(4), the Council met with the Acting City Administrator and City Attorney regarding potential initiation of litigation – one case (related to the Spillway Incident).
3. Pursuant to Government Code section 54956.9(d)(2), the Council met with the Acting City Administrator and City Attorney regarding potential exposure to litigation – two cases.
4. Pursuant to Government Code section 54957.6, the Council met with Labor Negotiators and City Attorney to discuss labor negotiations for the following represented groups: Oroville Firefighters' Association and Oroville Management and Confidential Association.

Following Closed Session, Mayor Dahlmeier reported that direction had been given and no action had been taken.

ADJOURNMENT

The meeting was adjourned at 9:11 p.m. A regular meeting of the Oroville City Council will be held on Tuesday, November 21, 2017, at 5:30 p.m.

Donald Rust, Acting City Clerk

Linda L. Dahlmeier, Mayor

**CITY OF OROVILLE
STAFF REPORT**

TO: MAYOR DAHLMEIER AND COUNCIL MEMBERS

**FROM: DAWN NEVERS, ASSISTANT PLANNER
ADMINISTRATION DEPARTMENT**

RE: RATIFICATION OF CONFLICT OF INTEREST CODE

DATE: NOVEMBER 21, 2017

SUMMARY

The Council may consider a Resolution to ratify the City of Oroville Conflict of Interest Code.

DISCUSSION

The State of California Fair Political Practices Commission (FPPC) requires that the local jurisdictions adopt a conflict of interest code requiring individuals holding designated positions to file Statement of Economic Interest forms, and designating the Filing Officer for the local jurisdiction. The FPPC requires a review of this conflict of interest code every even year in order to incorporate any new regulations, requirements, or designated positions.

For the City, the FPPC Statement of Economic Interests are public records maintained by the City and (in the case of 87200 filers) by the State. These documents provide the public with information about where the filers derive their income or other benefits, have economic interests and potentially have conflicts based on those interests. The purpose of the FPPC laws and regulations is to provide transparency in interest of those who are making decisions with the public's funds.

The City has maintained and amended position titles that staff is recommending be included as designated positions to file conflict of interest statements.

FISCAL IMPACT

None.

RECOMMENDATION

Adopt Resolution No. 8669 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA, RATIFYING THE CONFLICT OF INTEREST CODE FOR THE CITY OF OROVILLE.

ATTACHMENTS

A - Resolution No. 8669

B - Resolution No. 8539

ATTACHMENT A

**CITY OF OROVILLE
RESOLUTION NO. 8669**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA,
RATIFYING THE CONFLICT OF INTEREST CODE FOR THE CITY OF OROVILLE**

WHEREAS, pursuant to the California Government Code, commencing with section 87300, the City Council is required to adopt and promulgate a Conflict of Interest Code; and

WHEREAS, pursuant to the California Government Code 87302, the Conflict of Interest Code shall provide for specific enumeration of the positions within the City, other than those specified in the California Government Code 87200. Which involve in the making or participation in the making of decisions which may foreseeably have a material effect on any financial interest and for each such enumerated position, the specific types of investments, business position interests in real property and sources of income which must be reported by designated positions; and

WHEREAS, the City Council at this time wishes rescind the Conflict of Interest Code adopted by Resolution No. 8539 and to adopt a revised Conflict of Interest Code which will designate employees required to comply with the Conflict of Interest Code; and to establish a clearly defined conflict policy; and

WHEREAS, the Fair Political Practices Commission has adopted a regulation, Title 2, California Code of Regulations, section 18730, which contains the terms of a standard model Conflict of Interest Code, which can be incorporated by reference, and which may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act; and

WHEREAS, incorporation by reference of the terms of the aforementioned regulation and amendments thereto in the City's Conflict of Interest Code will save the City time and money by minimizing the actions required of that body to keep its Code in conformity with the Political Reform Act.

**NOW THEREFORE, BE IT RESOLVED BY THE OROVILLE CITY COUNCIL
THAT:**

Section 1. Resolution No. 8539, adopted August 16, 2016, is hereby rescinded.

Section 2. The terms of Title 2, California Code of Regulations, section 18730 and any and all amendments to it adopted by the Fair Political Practices Commission are hereby incorporated by reference, as well as the attached Appendices A and B in which officials and employees are designated and disclosure categories are set forth, and constitute the Conflict of Interest Code of the City of Oroville.

Section 3. Designated employees shall file Statements of Economic Interests with the City Clerk, or their designated appointee, to whom the City Council hereby designates the authority to carry out the duties of the Filing Officer.

Section 4. The effective date of the Code shall be the date this Code is originally approved and adopted by the Oroville City Council.

Section 5. Statements of Economic Interests shall be made on forms prescribed by the Fair Political Practices Commission and supplied by the City of Oroville.

PASSED AND ADOPTED by the Oroville City Council at a regular meeting on November 21, 2017, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Linda L. Dahlmeier, Mayor

APPROVED AS TO FORM:

ATTEST:

Scott E. Huber, City Attorney

Donald Rust, Acting City Clerk

APPENDIX A
DESIGNATED CITY OFFICERS AND EMPLOYEES – FULL DISCLOSURE

ADMINISTRATION

Assistant City Administrator
City Clerk
Successor Agency Staff

ENGINEERING/PUBLIC WORKS

City Engineer
Public Works Director
Airport Manager

COMMUNITY DEVELOPMENT

Community Development Director
Chief Building Official

FINANCE

Director of Finance

PUBLIC SAFETY

Director of Public Safety
Assistant Police Chief
Assistant Fire Chief
Police Captain
Code Enforcement Officer

BUSINESS ASSISTANCE & HOUSING DEVELOPMENT

Director of Business Assistance & Housing Development
Management Analyst III

CITY COMMISSIONS & COMMITTEES

Housing Loan Advisory Committee
Economic Development Loan Advisory Committee

CONSULTANTS*

*City Administrator may determine in writing, that a particular consultant, although a “designated position”, is hired to perform a range of duties that are limited in scope and therefore not required to fully comply with the disclosure requirements described in this section. Written determination shall include a description of the consultant’s duties and based upon that description a statement of the extent of disclosure requirements.

The positions designated above shall disclose full Categories of Disclosure:

- Investments, Stocks, Bonds, etc. (less than 10%)
- Investments, Income and Assets – Business Trusts (greater than 10%)
- Interests in Real Property
- Income & Business Position
- Income – Loans
- Income – Gifts
- Income – Gifts & Travel Payments

OROVILLE REDEVELOPMENT SUCCESSOR AGENCY OVERSIGHT BOARD

Redevelopment Successor Agency Oversight Board

DESIGNATED CITY OFFICERS & EMPLOYEES – LIMITED DISCLOSURE

ADMINISTRATION

Information Technology Manager
Human Resource Manager

COMMUNITY DEVELOPMENT

Planning Manager
Senior Planner
Associate Planner
Assistant Planner
Planning Technician

PUBLIC WORKS

Public Works Manager

CITY COMMISSIONS & COMMITTEES

Arts Commission

PUBLIC SAFETY

Police Captain
Police Lieutenant
Fire Engineer

Limited categories of disclosure related to the conduct of your position:

- Investments, Stocks, Bonds, etc. (less than 10%)
- Investments, Income and Assets – Business Trusts (greater than 10%)
- Interests in Real Property
- Income & Business Position
- Income – Loans
- Income – Gifts
- Income – Gifts & Travel Payments

Filing requirement – Filed with City Clerk, original kept in Clerk's office.

APPENDIX B

OFFICIALS WHO MANAGE PUBLIC INVESTMENTS

Per Government Code section 87200 and the regulations of the Fair Political Practices Commission, Title 2, Division 6, Regulation 18720 of the California Code of Regulations the positions listed below manage public investments and will file Form 700 Statement of Economic Interests:

- City Council/ Successor Agency
- City Administrator/Successor Agency Executive Director
- City Treasurer
- City Attorney/Successor Agency Counsel
- Planning Commission

Filing requirements – Filed with the City Clerk, original sent to Fair Political Practices Commission, copy retained in the Clerk's office.

ATTACHMENT "B"

CITY OF OROVILLE RESOLUTION NO. 8539

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OROVILLE, CALIFORNIA, RATIFYING THE CONFLICT OF INTEREST CODE FOR THE CITY OF OROVILLE

WHEREAS, pursuant to the California Government Code, commencing with section 87300, the City Council is required to adopt and promulgate a Conflict of Interest Code; and

WHEREAS, pursuant to the California Government Code 87302, the Conflict of Interest Code shall provide for specific enumeration of the positions within the City, other than those specified in the California Government Code 87200. Which involve in the making or participation in the making of decisions which may foreseeably have a material effect on any financial interest and for each such enumerated position, the specific types of investments, business position interests in real property and sources of income which must be reported by designated positions; and

WHEREAS, the City Council at this time wishes rescind the Conflict of Interest Code adopted by Resolution No. 7540 and to adopt a revised Conflict of Interest Code which will designate employees required to comply with the Conflict of Interest Code; and to establish a clearly defined conflict policy; and

WHEREAS, the Fair Political Practices Commission has adopted a regulation, Title 2, California Code of Regulations, section 18730, which contains the terms of a standard model Conflict of Interest Code, which can be incorporated by reference, and which may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act; and

WHEREAS, incorporation by reference of the terms of the aforementioned regulation and amendments thereto in the City's Conflict of Interest Code will save the City time and money by minimizing the actions required of that body to keep its Code in conformity with the Political Reform Act.

NOW THEREFORE, BE IT RESOLVED BY THE OROVILLE CITY COUNCIL THAT:

Section 1. Resolution No. 7540, adopted June 15, 2010, is hereby rescinded.

Section 2. The terms of Title 2, California Code of Regulations, section 18730 and any and all amendments to it adopted by the Fair Political Practices Commission are hereby incorporated by reference, as well as the attached Appendices A and B in which officials and employees are designated and disclosure categories are set forth, and constitute the Conflict of Interest Code of the City of Oroville.

**APPENDIX A
DESIGNATED POSITIONS – FULL DISCLOSURE**

ADMINISTRATION

Assistant City Administrator
City Clerk
Successor Agency Staff

ENGINEERING/PUBLIC WORKS

City Engineer
Public Works Director

COMMUNITY DEVELOPMENT

Community Development Director
Chief Building Official
Code Compliance Officer

POLICE DEPARTMENT

Chief of Police
Police Captain

CONSULTANTS*

The positions designated above shall disclose full Categories of Disclosure:

- Investments, Stocks, Bonds, etc. (less than 10%)
- Investments, Income and Assets – Business Trusts (greater than 10%)
- Interests in Real Property
- Income & Business Position
- Income – Loans
- Income – Gifts
- Income – Gifts & Travel Payments

OROVILLE REDEVELOPMENT SUCCESSOR AGENCY OVERSIGHT BOARD

Redevelopment Successor Agency Oversight Board

DESIGNATED POSITIONS – LIMITED DISCLOSURE

COMMUNITY DEVELOPMENT

Planning Manager
Senior Planner
Associate Planner
Assistant Planner
Planning Technician
Code Compliance Officer

Limited categories of disclosure related to the conduct of your position:

- Investments, Stocks, Bonds, etc. (less than 10%)
- Investments, Income and Assets – Business Trusts (greater than 10%)

APPENDIX B

OFFICIALS WHO MANAGE PUBLIC INVESTMENTS

Per Government Code section 87200 and the regulations of the Fair Political Practices Commission, Title 2, Division 6, Regulation 18720 of the California Code of Regulations the positions listed below manage public investments and will file Form 700 Statement of Economic Interests:

- City Council/ Successor Agency
- City Administrator/Successor Agency Executive Director
- City Treasurer/ Successor Agency Fiscal Officer
- City Attorney/Successor Agency Counsel
- Planning Commission

Filing requirements – Filed with the City Clerk, original sent to Fair Political Practices Commission, copy retained in the Clerk's office.

**OROVILLE CITY COUNCIL
STAFF REPORT**

TO: MAYOR AND CITY COUNCIL MEMBERS

FROM: BILL LAGRONE, ACTING PERSONNEL OFFICER

**RE: AMENDMENT TO EMPLOYMENT AGREEMENT FOR ASSISTANT
CHIEF OF POLICE**

DATE: NOVEMBER 21, 2017

SUMMARY

The Council may consider an Amendment to the Employment Agreement between the City of Oroville and Allen W. Byers for the position of Assistant Chief of Police.

DISCUSSION

Assistant Chief Byers has served in the Police Department of the City of Oroville since 2010, with the last three years serving as Assistant Chief. The original employment agreement provided that the Assistant Chief would receive an increase in pay following a positive annual evaluation. Specifically, Section 6 of the employment agreement provides, "...with the satisfactory review, Byers may receive an incentive adjustment of up to 10% of his base salary, but not less than CPI..." CPI stands for Consumer Price Index.

Byers has received a positive evaluation. Pursuant to the Employment Agreement, Byers is entitled to receive an adjustment of compensation. The July 2017 Consumer Price Index indicates a CPI increase of 1.7%. Assistant Chief Byers' current salary is \$116,576 and, following approval of this Amendment, Assistant Chief Byers' salary would adjust to \$118,558.

FISCAL IMPACT

Council approval will increase Lieutenant Byers' salary from \$116,576 per year to \$118,558 per year.

RECOMMENDATIONS

1. Adopt Resolution No. 8670 - A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE AN AMENDMENT TO THE EMPLOYMENT AGREEMENT BETWEEN THE CITY

CC 3

OF OROVILLE AND ALLEN W. BYERS FOR THE POSITION OF ASSISTANT
CHIEF OF POLICE – (Agreement No. 3073-2).

ATTACHMENTS

U.S. Department of Labor Consumer Price Index, July 2017
Resolution No. 8670
Agreement No. 3073-2

NEWS RELEASE

BUREAU OF LABOR STATISTICS

U. S. D E P A R T M E N T O F L A B O R



Transmission of material in this release is embargoed until
8:30 a.m. (EDT) August 11, 2017

USDL-17-1100

Technical information: (202) 691-7000 • cpi_info@bls.gov • www.bls.gov/cpi
Media Contact: (202) 691-5902 • PressOffice@bls.gov

CONSUMER PRICE INDEX – JULY 2017

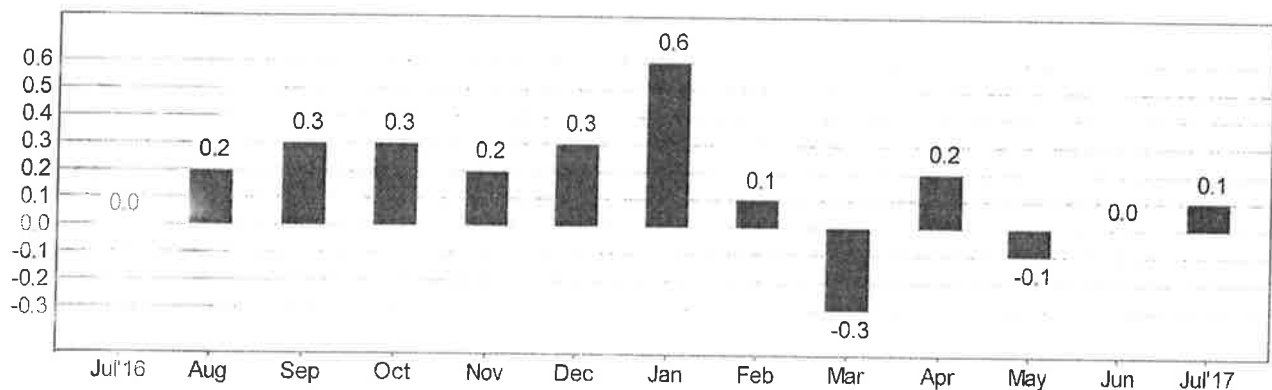
The Consumer Price Index for All Urban Consumers (CPI-U) rose 0.1 percent in July on a seasonally adjusted basis, the U.S. Bureau of Labor Statistics reported today. Over the last 12 months, the all items index rose 1.7 percent.

The indexes for shelter, medical care, and food all rose in July, leading to the seasonally adjusted increase in the all items index. The energy index declined slightly in July, with its major component indexes mixed. The index for natural gas declined, while the electricity index rose and the gasoline index was unchanged. The food index increased 0.2 percent, with the indexes for food at home and food away from home both rising.

The index for all items less food and energy rose 0.1 percent, the fourth month in a row it increased by that amount. The indexes for shelter, medical care, recreation, apparel, motor vehicle insurance, and airline fares all rose in July. These increases more than offset declines in the indexes for new vehicles, communication, used cars and trucks, and household furnishings and operations.

The all items index rose 1.7 percent for the 12 months ending July, a slightly larger increase than for the 12 months ending June. The index for all items less food and energy also rose 1.7 percent for the 12 month period, the same increase as for the 12 months ending May and June. The energy index rose 3.4 percent over the last year, while the food index increased 1.1 percent.

Chart 1. One-month percent change in CPI for All Urban Consumers (CPI-U), seasonally adjusted, July 2016 - July 2017
Percent change



**CITY OF OROVILLE
RESOLUTION NO. 8670**

**A RESOLUTION OF THE OROVILLE CITY COUNCIL AUTHORIZING AND
DIRECTING THE MAYOR TO EXECUTE AN AMENDMENT TO THE EMPLOYMENT
AGREEMENT BETWEEN THE CITY OF OROVILLE AND ALLEN W. BYERS FOR
THE POSITION OF ASSISTANT CHIEF OF POLICE**

(Agreement No. 3073-2)

NOW THEREFORE, be it hereby resolved by the Oroville City Council as follows:

1. The Mayor is hereby authorized and directed to execute an Amendment to the Employment Agreement between the City of Oroville and Allen W. Byers for the position of Assistant Chief of Police. A copy of the Agreement is attached to this Resolution.
2. The City Clerk shall attest to the adoption of this Resolution.

PASSED AND ADOPTED by the Oroville City Council at a regular meeting on November 21, 2017, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Linda L. Dahlmeier, Mayor

APPROVED AS TO FORM:

ATTEST:

Scott E. Huber, City Attorney

Donald Rust, Acting City Clerk

**AMENDMENT TO THE EMPLOYMENT AGREEMENT
BETWEEN THE CITY OF OROVILLE AND
ALLEN W. BYERS**

(Agreement No. 3073-2)

This Amendment dated November 21, 2017, is to the Employment Agreement between the City of Oroville ("City") and Allen W. Byers ("Byers"). A copy of the Agreement, including all prior amendments, is attached as Exhibit "A".

In consideration of the terms and conditions herein, the City and Byers agree that the amendment to the agreement is effective July 1, 2017, and shall be amended as follows:

1. **SECTION 5 IS REPLACED WITH THE FOLLOWING:**

Byers shall receive an initial salary of **\$118,558** per year.

Salary pay schedule:

1.7% INCREASE EFFECTIVE JULY 1, 2017

A	B	C	D	E	F	G	H
\$84,257	\$88,470	\$92,893	\$97,538	\$102,415	\$107,535	\$112,912	\$118,558

2. Conflicts between this Amended Agreement and Agreement No. 3073, including all prior amendments, shall be controlled by this Amendment. All other provisions within Agreement No. 3073 shall remain in full force and effect.

This Amendment is approved by the City Council of the City of Oroville at a regular meeting held November 21, 2017.

CITY OF OROVILLE

ALLEN W. BYERS

By: _____
Linda Dahlmeier, Mayor

By: _____
Allen W. Byers, Assistant Police Chief

APPROVED AS TO FORM:

By: _____
Scott E. Huber, City Attorney

Agreement No. 3073-2

**OROVILLE CITY COUNCIL
STAFF REPORT**

TO: MAYOR AND CITY COUNCIL MEMBERS

**FROM: MIKE MASSARO, PE, CONTRACT CITY ENGINEER
PUBLIC WORKS DEPARTMENT**

**RE: PROJECT UPDATE ON MONTGOMERY STREET ROUNDABOUT
PEDESTRIAN SAFETY (Continued from September 5, 2017)**

DATE: NOVEMBER 21, 2017

SUMMARY

This item is a project update from the September 5, 2017 City Council Meeting agenda item No. 6. TRAFFIC CALMING AND SPEED REDUCTION OPTIONS FOR MONTGOMERY STREET ROUNDABOUT PEDESTRIAN SAFETY.

On September 5th, staff took direction to proceed with re-striping the intersection, further investigate flashing beacons for the crosswalks, and evaluate rumble strips to reduce speeds approaching the roundabout.

Public Works has had the crosswalks re-striped and the Contract City Engineer has returned with an estimate for design of the flashing beacon system (attached.)

Staff seeks approval to proceed with a budget of \$40,000 using local transportation fund.

DISCUSSION

At the August 15, 2017 City Council Meeting, the city's risk manager, Liz Ellenstrom, brought forward concerns about the speed of traffic entering the Montgomery Street Roundabout and the potential hazard to pedestrians crossing at the crosswalks.

The City Council heard discussion by the City Engineer, Mike Massaro and the Police Chief, Bill LaGroan; about speed reduction via speed bumps and flashing beacons. Public comment on the discussion item also generated the idea of rumble strips or dots for slowing traffic on approach to the Roundabout.

The City Council directed the City Engineer to come back and present concepts and costs of various options including, crosswalk illumination, flashing beacons, and rumble strips.

The City Engineer will provide this information in a presentation with examples and he will present conceptual level cost estimates for the options to slow traffic and improve

pedestrian safety.

At the September 5, 2017 City Council Meeting, the Contract City Engineer returned with a presentation of options for flashing beacons, illuminated crosswalks, and rumble strips. Council directed staff to proceed with updated striping, flashing beacons, and potentially rumble strips.

Public works staff have completed re-striping of the crosswalks at the intersection for improved visibility and the City Engineer has returned with an estimate for the design of the flashing beacon system with rumble strips.

Upon approval by City Council, Bennett Engineering Services will prepare final plans, specifications, and estimate to the City and construction of the system will be accomplished with Public Works Staff.

FISCAL IMPACT

Fiscal impact is anticipated to be approximately \$9,340 in design and \$30,000 in materials for a total cost of \$40,000. Funding for the project is available in the RSTP 115 Fund (Regional Surface Transportation) with a current available balance of \$843,674. RSTP - Maintenance Streets, 5061-6230.

RECOMMENDATIONS

Approve the design and the installation of the flashing beacons and rumble strips by the City's Public Works personnel.

ATTACHMENTS

A – Design Estimate

Scope of Services and Fee –



TRUSTED ENGINEERING ADVISORS

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661

T 916.783.4100

F 916.783.4110

www.ben-en.com

Client: City of Oroville

Consultant: Bennett Engineering Services Inc

Project: Roundabout Safety Upgrades

Date: October 19, 2017

Consultant's services shall be limited to those expressly set forth below, and Consultant shall have no other obligations or responsibilities for the Project or to the Client except as agreed to in writing or as provided in this Agreement. All of Consultant's services in any way related to the Project or Client shall be subject to the terms of this Agreement.

Assumptions:

- *City forces to perform construction work.*

TASK 1. Plans and Estimate	\$7,925
BEN EN will prepare and submit final plans, specifications, and estimate to the City. Plans will be drawn over a scaled aerial photo and show of Rectangular Rapid Flashing Beacon (RRFB) and rumble strip locations.	
TASK 2. Construction Support	\$1,415
BEN EN will provide staff to answer questions and assist with the setup of the RRFBs.	
	Total \$9,340

Deliverables:

- *Plans (hard copy, 2 sets, 11"x17")*
- *Estimate of Probable Construction Costs (hard copy, 2 sets)*

INITIALS:

**CITY OF OROVILLE
STAFF REPORT**

TO: MAYOR DAHLMEIER AND COUNCIL MEMBERS

**FROM: DONALD RUST, DIRECTOR
COMMUNITY DEVELOPMENT DEPARTMENT**

**RE: OROVILLE FACILITIES PROJECT (OROVILLE DAM) – FERC NO. 2100
REQUEST FOR SUPPLEMENTAL ENVIRONMENTAL IMPACT
STATEMENT**

DATE: NOVEMBER 21, 2017

SUMMARY

The Council may consider sending the Federal Energy Regulatory Commission (FERC) a letter in support of the preparation of a Supplemental Environmental Impact Statement (Supplemental EIS) prior to issuing a long-term operating license for the California Department of Water Resources (California DWR) Oroville Facilities Project (FERC No. 2100).

DISCUSSION

Pierce Atwood LLP, attorneys for Butte County, California, (Butte County) submitted a letter to the FERC requesting, on behalf of Butte County, that the FERC prepare a Supplemental EIS prior to issuing a long-term operating license for the California DWR Oroville Facilities Project (FERC No. 2100). The Council may consider sending a letter in support of this request by Butte County for FERC to prepare a Supplemental EIS prior to issuing a long-term operating license for the California DWR Oroville Facilities Project (FERC No. 2100).

FISCAL IMPACT

No impact to the General Fund.

RECOMMENDATION

Approve the attached letter of support.

ATTACHMENTS

- A – Letter of Support
- B – Pierce Atwood LLP’s letter to FERC dated October 19, 2017
- C – Evaluation of the Adequacy of the 2007 EIS



City of Oroville

CITY COUNCIL

1735 Montgomery Street
Oroville, CA 95965-4897
(530) 538-2401 – FAX (530) 538-2426
www.cityoforoville.org

Linda L. Dahlmeier
MAYOR

November 22, 2017

Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: OROVILLE FACILITIES PROJECT (OROVILLE DAM) – FERC NO. 2100 REQUEST FOR SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

Dear Secretary Bose,

Pierce Atwood LLP, attorneys for Butte County, California, (Butte County) submitted a letter to your office dated October 19, 2017, requesting, on behalf of Butte County, that the Federal Energy Regulatory Commission (FERC) prepare a Supplemental Environmental Impact Statement (Supplemental EIS) prior to issuing a long-term operating license for the California Department of Water Resources (California DWR) Oroville Facilities Project (FERC No. 2100).

The Oroville City Council is sending this letter in complete support of this aforementioned request by Butte County for FERC to prepare a Supplemental EIS prior to issuing a long-term operating license for the California DWR Oroville Facilities Project (FERC No. 2100). Of particular interest to the City of Oroville is ensuring that the social, recreational, economic and environmental impacts are adequately analyzed, which we believe the existing 2007 EIS has failed to adequately consider. The Council hereby sends its absolute support and concurrence with Pierce Atwood LLP's request for a Supplemental EIS to be prepared prior to issuing a long-term operating license for the California DWR Oroville Facilities Project (FERC No. 2100).

Respectfully,

Linda L. Dahlmeier, Mayor

Janet Goodson, Vice Mayor

Scott Thomson, Council Member

Art Hatley, Council Member

Marlene Del Rosario, Council Member

Linda Draper, Council Member

Jack Berry, Council Member

Exhibit A
Letter from Pier Atwood LLP, October 19, 2017

**MATTHEW D. MANAHAN**

Merrill's Wharf
254 Commercial Street
Portland, ME 04101

P 207.791.1189
F 207.791.1350
C 207.807.4653
mmanahan@pierceatwood.com
pierceatwood.com

Admitted in: MA, ME, NH

October 19, 2017

Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

**RE: OROVILLE FACILITIES PROJECT (OROVILLE DAM) – FERC No. 2100
REQUEST FOR SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT**

Dear Secretary Bose:

On behalf of Butte County, California, I request that the Federal Energy Regulatory Commission (FERC) prepare a Supplemental Environmental Impact Statement (Supplemental EIS) prior to issuing a long-term operating license for the California Department of Water Resources (California DWR) Oroville Facilities Project (FERC No. 2100).

The Final EIS (FERC/FEIS-0202F) was issued on May 18, 2007, over ten years ago, and since that time the Project has been operating on annual licenses. The 2007 EIS, however, did not relieve FERC of its continuing duties under the National Environmental Policy Act (NEPA). To the contrary, "NEPA requires agencies to take a hard look at the environmental consequences of their proposed projects even after an EIS has been prepared." *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 443 (4th Cir. 1996) (finding that the Army Corps of Engineers violated NEPA by failing to take a hard look at the problem of zebra mussel infestation resulting from a dam project). Relying on the outdated EIS to support a long-term licensing decision without considering in a Supplemental EIS new information bearing upon the Project and its impacts would be inconsistent with Council on Environmental Quality (CEQ) guidance on NEPA as well as FERC's own hydropower relicensing guidelines.

FERC has a continuing duty to gather and evaluate new information relevant to the environmental impact of its actions. See *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1023 (9th Cir. 1980) (finding that new information presented to the Army Corps of Engineers raised sufficient environmental concerns to require the Corps to take another

hard look at the issues affecting a dam project, and that the Corps' decision not to file a supplemental EIS on the basis of information available prior to trial was not reasonable).¹

It is incumbent on FERC here to evaluate new information and the existing EIS to determine whether it requires supplementation. On behalf of Butte County, I am submitting the enclosed report, *Evaluation of the Adequacy of the 2007 EIS to Support FERC's NEPA Obligations Regarding Issuing a Long-Term Operating License for the Oroville Facilities Project (FERC No. 2100)*, in support of our request for a Supplemental EIS.

Supplementation plainly is required here as there are significant new circumstances and information relevant to environmental concerns and bearing on the Project and its impacts. 40 C.F.R. § 1502.9(c)(1)(ii). *See also Friends of the Clearwater v. Dombek*, 222 F.3d 552, 557-59 (9th Cir. 2000) (finding that the Forest Service violated NEPA when it failed timely to prepare, or sufficiently evaluate the need for, a supplemental EIS in light of, *inter alia*, seven new sensitive species designations). The significant new circumstances and information bearing on the Project are described in the enclosed report and described briefly below.

Since the 2007 EIS was prepared, for example, several threatened and endangered species have been listed and/or found within the Project area, including the yellow-billed cuckoo, Sierra Nevada yellow-legged frog, and the California tiger salamander. In addition to running afoul of NEPA, issuing a long-term license without preparing a Supplemental EIS would also potentially be in violation of, among others, rules and regulations related to the Endangered Species Act (ESA) of 1973, as amended.

By way of further example, on December 5, 2016, the National Oceanic and Atmospheric Administration (NOAA) issued an *ESA Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response and Fish and Wildlife Coordination Act Recommendations for Relicensing the Oroville Facilities Hydroelectric Project*. This correspondence was issued in response to a July 31, 2007, letter from FERC requesting initiation of consultation with NOAA's National Marine Fisheries Service (NMFS). Coming almost 10 years after the request for consultation, NMFS concludes that the Project will adversely affect the EFH of Pacific Coast Salmon and recommends several conservation measures. Such consultation should have started prior to finalizing the EIS and is further evidence that FERC's agency and stakeholder consultation process in this case was inconsistent with CEQ NEPA guidelines and FERC's own hydropower relicensing guidelines. Accordingly, in addition to NEPA violations, issuing a long-term license without preparing a Supplemental EIS may also be in violation of the Essential Fish

¹ Where FERC is presented with new information bearing on a Project, it must take such a "hard look," regardless of its eventual assessment of the significance of that information. *See Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 385 (1989) (finding that the Army Corps had a duty to take a hard look at proffered evidence in determining whether to prepare a supplemental EIS). "Absent exceptional circumstances, an agency decision not to prepare a supplemental EIS will be upheld only where the agency carefully evaluated the impact of the new information, and its decision is supported by a rational explanation or additional data." *Sierra Club v. Marsh*, 714 F. Supp. 539, 571 (D. Me. 1989) (citing *Marsh v. Oregon Natural Resources Council*).

Ms. Kimberly Bose
October 19, 2017
Page 3

Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended.

Butte County also believes that the 2007 EIS is materially deficient in terms of its consideration of the socio-economic impacts of Project operation on its residents.² The 2007 EIS failed to adequately consider the social and economic impacts of Project operation on the community, and what analysis was done is materially out-of-date pursuant to CEQ guidance governing when studies supporting NEPA documents should be updated (*i.e.*, generally if they are more than five years old).

The 2007 EIS also failed to address the foreseeable failure of the dam's main and emergency spillways, which occurred in February 2017 and has resulted in significant social, economic, and environmental impacts to the community. As this type of failure was predicted by knowledgeable experts, it should have been more thoroughly addressed in the 2007 EIS. Among other things, therefore, the Supplemental EIS should consider the impacts associated with the 2017 failure as well as the socio-economic and environmental impacts of future failures during the term of the next long-term operating license.

For these reasons, Butte County respectfully requests that the Commission initiate a hearing on this request for a Supplemental EIS, as authorized by 18 C.F.R. § 385, Subpart E. See *also* 40 C.F.R. § 1502.9(c)(1)(ii). FERC should also provide an opportunity for discovery as authorized by 18 C.F.R. § 385, Subpart D.

Please advise me at your earliest convenience of FERC's intentions regarding how it intends to meet its NEPA, ESA, and EFH obligations, among others, associated with the pending long-term license application for the Oroville Facilities Project.

Sincerely,



Matthew D. Manahan

Enclosure

cc: Bruce S. Alpert, County Counsel, Butte County
Service List

² 2017 Updates to *Report on the Operational Impacts of the Oroville Facilities Project on Butte County and Socio-Economic Impacts of the Oroville Facilities on Butte County, California*. Update provided by Paul Hahn, Chief Administrative Officer, Butte County, California.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Portland, Maine this day: October 19, 2017.



Matthew D. Manahan
Pierce Atwood LLP
254 Commercial Street
Portland, ME 04101
207-791-1189
Attorneys for Butte County, California



**EVALUATION OF THE ADEQUACY OF THE 2007
EIS TO SUPPORT FERC'S NEPA OBLIGATIONS
REGARDING ISSUING A LONG-TERM OPERATING
LICENSE FOR THE OROVILLE FACILITIES
PROJECT (FERC NO. 2100)**

FOR

**BUTTE COUNTY, CALIFORNIA
25 COUNTY CENTER ROAD
OROVILLE, CA 96965-3380**

**OCTOBER 2017
JN: 10296.003**



Corporate Office

465 South Main Street
PO Box 639
Brewer, Maine 04412
207.989.4824

www.ces-maine.com

Report Prepared By:

CES, Inc.
PO Box 639
465 South Main Street
Brewer, Maine 04412
207.989.4824

EXECUTIVE SUMMARY

The California Department of Water Resources (DWR) applied to the Federal Energy Regulatory Commission (FERC) to relicense the Oroville Facilities Project (FERC No. 2100) on the Feather River in January 2005. FERC's Alternative Licensing Process (ALP) was used in this hydropower relicensing effort, producing a Settlement Agreement in March 2006 with multiple, but not all, stakeholder groups. The ALP also produced an applicant-prepared Draft Environmental Impact Statement (EIS). FERC released its own Final EIS for relicensing the project in May 2007 in accordance with the requirements of the National Environmental Policy Act (NEPA; 40 CFR §1500-1508). DWR requested a 50-year license, but FERC has yet to issue a long-term license and the Project has instead been operating for over 10 years on what are called annual licenses.

It is not clear when – and under what circumstances – FERC intends to issue a long-term license for the Project. Given that it has been over 10 years since FERC's EIS was issued, Butte County asked CES, Inc., to consider whether the 2007 EIS can be relied on to support a long-term licensing decision, and to evaluate the adequacy of the 2007 EIS with regard to FERC's NEPA obligations. CES also considered FERC's obligations under the Endangered Species Act [ESA (16 U.S.C. §§1531 *et seq.*)] and the Magnuson-Stevens Fishery Conservation and Management Act [Magnuson-Stevens Act (16 U.S.C. §§1801 *et seq.*)].

CES reviewed studies completed for the Oroville Facilities Project as part of the relicensing effort and evaluated which are likely outdated given the time that has passed since the Final EIS was issued. We also considered the implications of the 2017 failure of the primary (flow control) and emergency spillways as well as updated economic impact data related to the actual financial costs to the County associated with the presence of the Oroville Facilities Project. In addition, CES reviewed regulatory requirements and Council on Environmental Quality (CEQ) guidelines for when an EIS should be considered outdated for purposes of supporting a long-term FERC license.

CES concludes that FERC's Final EIS must be supplemented because study documents and the Final EIS significantly exceed CEQ's thresholds for when NEPA documents should be updated. There are also significant new circumstances and information relevant to social, economic, and environmental concerns and bearing on the proposed federal action (i.e., issuing a long-term license) and its impacts [40 CFR §1502.9(c)(1)(ii)]. Preparing a Supplemental EIS would also further the purposes of NEPA [40 CFR §1502.9(c)(2)] by providing an opportunity for agencies, the public, and other interested stakeholders to comment on the proposed action, given the significant new circumstances and information. CES also concludes that a Supplemental EIS would be consistent with FERC's obligations under the ESA and the Magnuson-Stevens Act.

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INTRODUCTION

The California Department of Water Resources (DWR) applied to the Federal Energy Regulatory Commission (FERC) to relicense the Oroville Facilities Project (FERC No. 2100) on the Feather River in January 2005. FERC's Alternative Licensing Process (ALP) was used in this hydropower relicensing effort, producing a Settlement Agreement in March 2006 with multiple, but not all, stakeholder groups. The ALP also produced an applicant-prepared Draft Environmental Impact Statement (EIS). FERC released its own Final EIS for relicensing the project in May 2007 in accordance with the requirements of the National Environmental Policy Act (NEPA; 40 CFR §1500-1508). DWR requested a 50-year license, but FERC has yet to issue a long-term license and the Project has instead been operating for over 10 years on what are called annual licenses.

The Oroville Facilities Project is in Butte County, which has an estimated population of approximately 225,400 people as of 2015 and a county seat in the City of Oroville with a population of approximately 19,000 as of 2017. Butte County is a participant in the relicensing process for the hydroelectric project, but was not a party to the Settlement Agreement. The County remains a vested stakeholder in the ongoing relicensing process for the Oroville Facilities Project.

It is not clear when – and under what circumstances – FERC intends to issue a long-term license for the Project. Given that it has been over 10 years since FERC's EIS was issued, Butte County asked CES, Inc., to consider whether the 2007 EIS can be relied on to support a long-term licensing decision, and to evaluate the adequacy of the 2007 EIS with regard to FERC's NEPA obligations. CES also considered FERC's obligations under the Endangered Species Act [ESA (16 U.S.C. §§1531 *et seq.*)] and the Magnuson-Stevens Fishery Conservation and Management Act [Magnuson-Stevens Act (16 U.S.C. §§1801 *et seq.*)].

CES reviewed studies completed for the Oroville Facilities Project as part of the relicensing effort (Appendix A) and evaluated which are likely outdated given the time that has passed since the Final EIS was issued. We also considered the implications of the 2017 failure of the primary (flow control) and emergency spillways as well as updated economic impact data related to the actual financial costs to the County associated with the presence of the Oroville Facilities Project (Appendix B). In addition, CES reviewed regulatory requirements and Council on Environmental Quality (CEQ) guidelines for when an EIS should be considered outdated for purposes of supporting a long-term FERC license.

This report presents our findings and explains how CES concluded that a Supplemental EIS is required before FERC issues a long-term license for the Oroville Facilities Project.

BACKGROUND

The Oroville Facilities Project was developed as part of the California State Water Project, a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants. The dam is located on the Feather River and impounds Lake Oroville, the second largest man-made lake in California. The Project includes the Oroville Dam and Reservoir with storage of 3.5 million-acre-feet and surface area of 15,180 acres, Hyatt Pumping-Generating Plant with a capacity of 645 megawatts (MW) at a maximum flow of 16,950 cubic feet per second (cfs), Thermalito Diversion Pool and the Thermalito Diversion Pool Power Plant with a capacity of 3 MW at 615 cfs, Thermalito Forebay and Thermalito Pumping and Generating Plant with a capacity of 114 MW at a maximum flow of 17,400 cfs, and the Thermalito Afterbay.

The Project was completed in 1968 and, along with other water development projects and historic mining activity, has contributed to altered hydrology and geomorphology of the Feather River and impacted

water quality and anadromous fisheries. Oroville Dam, for example, blocks access to 66.9 miles of high quality habitat for anadromous fish. Anadromous fish are now restricted to the Lower Feather River and can seasonally experience high water temperatures and unnatural flows. The Lower Feather River is designated as critical habitat for Central Valley spring-run chinook and steelhead under the federal ESA (Appendix D). The Feather River Fish Hatchery was opened in 1967 to mitigate for the loss of habitat from the construction of Oroville Dam (State of California, State Water Resources Control Board, Water Quality Certification, Order WQ 2010-00160).

The initial FERC license for the Oroville Facilities Project was issued on February 11, 1957, and expired on January 31, 2007. The DWR, using the ALP, applied for a new federal license to continue generating hydroelectric power in January 2005. As part of the re-licensing process, a Final EIS was issued by FERC on May 18, 2007, over 10 years ago. DWR requested a 50-year license, but FERC has yet to issue a long-term license and the project has instead been operating for over 10 years on what are called annual licenses. Over 150 studies were completed in support of the relicensing effort, the applicant-prepared EIS, and FERC's 2007 Final EIS (Appendix A). Most of these studies were completed in 2002-2004, 13-15 years ago.

FERC issued its Final EIS in 2007, even though agency consultation regarding Essential Fish Habitat (EFH) and the ESA was ongoing. NOAA's National Marine Fisheries Service (NMFS), for example, was asked by FERC in a letter dated July 31, 2007, after the Final EIS had been issued, to consult regarding Section 7 of the ESA and EFH designated under the Magnuson-Stevens Act. NMFS did not respond to this request until December 5, 2016, when it concluded that the proposed action (i.e., relicensing the Oroville Facilities Project) "will adversely affect the EFH of Pacific Coast Salmon." NMFS also concluded that issuing a long-term license would adversely affect ESA-listed species or critical habitat, including California Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring-run chinook (*O. tshawytscha*), green sturgeon (*Acipenser medirostris*), and Sacramento River winter-run chinook (*O. tshawytscha*).

Since the Final EIS was issued, there have been changes in the ESA, whereby new species and critical habitats have been listed or designated. The yellow-billed cuckoo (*Coccyzus americanus*), for example, was listed as threatened under the ESA in 2014. Critical habitat for this species was designated west of the Oroville Facilities Project on the Sacramento River. While the critical habitat is west of the project area, this species uses wooded habitat with dense cover and water nearby and it is likely that such habitat occurs within the FERC boundary for the Oroville Facilities Project¹. In addition, the Sierra Nevada yellow-legged frog (*Rana sierrae*) was designated as endangered in 2014 and critical habitat, including within the Oroville Facilities Project FERC boundary, was designated in 2016. Critical habitat for the California red-legged frog (*Rana draytonii*) was also designated within the project area in 2010.

On February 11, 2017, the emergency spillway for Oroville Dam began receiving water for the first time since construction was completed in 1968. Due to the possibility of failure, an evacuation order was given for areas downstream of the dam, which resulted in significant social and economic costs for Butte County. When the spillway did fail, it resulted in damage to the Feather River Fish Hatchery and other foreseeable environmental impacts that were not considered in FERC's Final EIS.

¹ Oroville Facilities Relicensing (Project No. 2100), SP-T2 Progress Summary, SP-T2 Project Effects on Special Status Species. Review draft for Oroville Facilities Relicensing Environmental Work Group by California Department of Water Resources, November 2002.

Guidance on the NEPA process is provided by CEQ, a division of the Executive Office of the President². Individual federal agencies, like FERC, can provide their own guidance to the NEPA process. With regard to FERC, guidance is also provided regarding such things as the hydropower relicensing process and compliance with the ESA³.

CEQ guidance is clear that NEPA documents such as an EIS can become outdated, resulting in the need for a new EIS or, at a minimum, a Supplemental EIS. In general, CEQ recommends re-evaluating any NEPA document or information material to a NEPA document, such as a study, that is more than five years old. CEQ further recommends updating any material documents greater than 10 years old⁴. In the case of the Oroville Facilities Project, the EIS and all related study documents that the EIS relied on exceed these thresholds.

All federal agencies involved in the NEPA process must have a reevaluation process to incorporate recent and updated information into an EIS to ensure that it is based on accurate and timely data. The Federal Highway Administration (FHWA), for example, requires reevaluation of project-related studies, including NEPA documents, when there has been little activity on a project or prior to taking final action on a project. The FHWA refers to the reevaluation as an analysis of the changes in a project or existing environment at specified times in the Project Development Process (PDP). The PDP includes multiple decision points such as final design, right-of-way acquisition, and bid letting. Each of these decision points requires the state DOTs and FHWA to reevaluate the NEPA document, NEPA decision, and potentially any related environmental studies⁵. FERC's obligations regarding updating its EIS before issuing a long-term license for the Oroville Facilities Project are the same as FHWA's.

CEQ regulations for implementing the procedural provisions of NEPA are set forth in 40 CFR §§1500-1508, and requirements for preparing Supplemental EISs are found in §1502.9, specifically:

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

² <https://ceq.doe.gov/guidance/guidance.html>

³ <https://www.ferc.gov/industries/hydropower/gen-info/licensing.asp>

⁴ Council on Environmental Quality, Final Guidance for Effective Use of Programmatic NEPA Reviews, 79 FR 249, December 23, 2014.

⁵ American Association of State Highway and Transportation Officials Standing Committee on Environment. Reevaluations of NEPA Documents (Prepared by ICF Consulting). March 2008.

(2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

The remainder of this report focuses on new circumstances and information that demonstrates that FERC is obligated to prepare a Supplemental EIS. Consideration is also given to how a Supplemental EIS would further the purposes of NEPA with regard to FERC issuing a long-term license for the Oroville Facilities Project.

NEW CIRCUMSTANCES AND INFORMATION [40 CFR §1502.9(c)(1)(ii)]

New circumstances and new information demonstrate that FERC is obligated to prepare a Supplemental EIS prior to issuing a long-term operating license for the Oroville Facilities Project. These circumstances and information include, among others, failure of the primary and emergency spillways, the economic downturn associated with the Great Recession, ongoing financial impacts on Butte County, new listings under the ESA, recent information from NMFS related to EFH and ESA-listed species, the addition of environmental justice criteria to the NEPA process, and lagging implementation of the Settlement Agreement.

Failure of the Emergency Spillway

On February 7, 2017, the primary (flow control) spillway for Oroville Dam failed, followed by failure of the emergency spillway on February 12, 2017, which resulted in the temporary evacuation of over 180,000 people, significant erosion and habitat damage downstream, and evacuation of the Feather River Fish Hatchery. A root cause analysis⁶ determined the failure to be associated with three factors: design; construction; and operations and maintenance.

FERC's Final EIS did not consider in any detail the potential socio-economic or environmental consequences associated with the foreseeable failure of the emergency spillway. Several environmental stakeholders, however, filed a motion with FERC during the relicensing process in 2005 regarding the likely failure of the emergency spillway⁷. These concerns were, in part, based on a 2002 technical report by the Yuba County Water Agency that described the significant erosion and damage that would be associated with use of the spillway under emergency conditions⁸. The socio-economic and environmental consequences of a spillway failure, while predictable, were not adequately considered in the Final EIS.

The 2017 primary and emergency spillway failures, and the associated environmental and socio-economic impacts, constitutes new material circumstances and information that demonstrate that FERC is obligated to prepare a Supplemental EIS. Indeed, the foreseeable scope and magnitude of these impacts suggest that the original EIS was significantly deficient and that a new full EIS, rather than a Supplemental EIS, is warranted.

⁶ Robert G. Bea and Tony Johnson, *Root Causes Analyses of the Oroville Dam Gated Spillway Failures and Other Developments* (University of California, Berkeley, 2017).

⁷ Motion to Intervene of Friends of the River, Sierra Club, and South Yuba River Citizens League in the matter of State of California Dept. of Water Resources, for a new major license, Oroville Division, State Water Facilities, "Oroville Facilities". Document submitted to FERC on October 17, 2005. 31 pp.

⁸ Technical Memorandum on Controlled Surcharge of Lake Oroville for Additional Flood Control. Yuba-Feather Supplemental Flood Control Project (Costa-Machado Water Act of 2000). Yuba County Water Agency, August 2002.

Socio-Economic Conditions

In June of 2017, Butte County prepared updates to the 2006 “Report on the Operational Impacts of the Oroville Facilities Project on Butte County” and the report entitled “Socio-Economic Impacts of the Oroville Facilities Project on Butte County, California”, included here as Appendix B.⁹ These analyses are for normal operating conditions and do not include the significant socio-economic costs to the County associated with the 2017 spillway failure.

The original reports were submitted to FERC by the County in February of 2006. The updated reports provide current annual costs over a 50-year period for services that the County provides related to the Oroville Facilities Project, including:

- Law Enforcement/Criminal Justice Services;
- Fire and Rescue Services;
- Communications Services;
- Public Works – Road Services;
- EOC Services; and
- Health and Human Services

The 2017 update identified an increase in overall annual costs (over a 50-year period) for each of the services described.

The updated socio-economic impact assessment also provides an update of the calculated “lost taxes” for the 41,000 acres purchased for the Project. The update used three different methodologies for calculating lost taxes, as was used in the original report. The results of the analyses show increases in the “lost taxes” under each of the methods used.

While the original 2007 EIS included an analysis of socio-economic impacts related to the proposed action, the socio-economic environment has changed since the EIS was issued. Shortly after the release of the 2007 EIS, for example, the United States experienced what has been described as the “Great Recession”. The effects of this recession had a significant impact on national and regional economies, impacts that continue to impact Butte County and its residents. In addition, the populations of the City of Oroville and Butte County have substantially increased since the 2007 EIS was prepared.

The overall financial burdens associated with the operational and socio-economic impacts used in the 2007 EIS do not reflect the current or actual burdens experienced by the County. In addition, the calculated annual 50-year costs are based on 2006 numbers and do not reflect actual current costs. In this regard, the updated socio-economic information constitutes new material circumstances and information that demonstrate that FERC is obligated to prepare a Supplemental EIS.

Threatened and Endangered Species [Endangered Species Act (16 U.S.C. §§1531 et seq.)]

There have been several changes to state and federally threatened and endangered species listings for the Project area since the issuance of FERC’s 2007 EIS (Appendix C and D). In 2010, for example, the

⁹ Paul Hahn, *Updates to “Report on the Operational Impacts of the Oroville Facilities Project on Butte County” and “Socio-Economic Impacts of the Oroville Facilities Project on Butte County, California”* (Office of the Chief Administrative Officer of Butte County, 2017).

California tiger salamander (*Ambystoma californiense*) became listed as threatened in California. In 2014 the yellow-billed cuckoo (*Coccyzus americanus*) was listed as federally threatened and the Sierra Nevada yellow-legged frog (*Rana sierrae*) was listed as federally endangered. These species are not mentioned in the EIS for the Oroville Facilities Project, but the following wildlife habitat is located near the Project: 1) the current range of the yellow-billed cuckoo is located where the Oroville Dam spillway empties into the Feather River; 2) the current range of the Sierra Nevada yellow-legged frog is within the project boundary; and 3) the current range of the California tiger salamander is approximately 13 miles west and 14 miles south of Oroville Dam along the Feather River. In addition, critical habitat was designated within the Oroville Facilities Project boundary, near the Upper North Fork, for the federally-threatened California red-legged frog (*Rana draytonii*) in 2010.

A great deal of new information concerning the yellow-billed cuckoo has been developed since the 2007 FERC EIS was completed¹⁰. In addition, tools for modeling potential habitats are vastly improved over what was available when endangered species surveys were conducted for the Oroville Facilities Project FERC application in 2002-2004. Dettling *et al.* (2015), for example, have developed habitat models that should be applied to habitats within the Oroville Facilities Project FERC boundary to determine the extent of potential habitat. The U.S. Fish and Wildlife Service has also recently concluded that dam operation has a substantial cumulative impact on the habitat of yellow-billed cuckoo, when considered with other threats¹¹. While specific additional studies for the yellow-billed cuckoo are warranted, this species is just one example of new information and circumstances that mandate updating all threatened and endangered species reports and issuing a Supplemental EIS.

While the 2007 EIS mentions the California red-legged frog, changes in designated critical habitat and assessments of the status of the species were published in 2010 by the U.S. Fish and Wildlife Service¹². This new information mandates updating threatened and endangered species reports and issuing a Supplemental EIS.

The NMFS, as noted above, concluded that issuing a long-term license would adversely affect ESA-listed fish species or critical habitat, including California Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring-run chinook (*O. tshawytscha*), green sturgeon (*Acipenser medirostris*), and Sacramento River winter-run chinook (*O. tshawytscha*).

The changes in species listed as threatened or endangered at the state and federal levels, as well as updated critical habitat designations, described above constitute new circumstances and new information that obligate FERC to prepare a Supplemental EIS, if not a completely new EIS. These changes also demonstrate that FERC must undertake additional consultation with, among others, the NMFS and the U.S. Fish and Wildlife Service regarding ESA-listed species.

¹⁰ Dettling, Seavy, Howell, and Gardali, 2015. Current status of Western Yellow-Billed Cuckoo along the Sacramento and Feather Rivers, California. PLoS One 10(4): e0125198: doi:10.1371/journal.pone.0125198.

¹¹ Decision to List the Western Distinct Population Segment of the Yellow-Billed Cuckoo as a Threatened Species, Questions and Answers. U.S. Fish and Wildlife Service, Sacramento Office, October 2014.

¹² Federal Register Vol. 75, No. 51, pp. 12816-12959.

NOAA NMFS Biological Opinion of 2016 [Magnuson-Stevens Act (16 U.S.C. §§1801 et seq.)]

In December 2016, NOAA issued an Endangered Species Act Section 7(a)(2) Biological Opinion, nine years after the initiation of consultation, that included a review of the proposed action for potential effects on EFH designated under the Magnuson-Stevens Act. Based on the best available scientific and commercial information, NMFS concluded that the proposed action (i.e., relicensing the Oroville Facilities Project) "will adversely affect the EFH of Pacific Coast Salmon." FERC has a statutory obligation under section 305(b)(4)(B) of the Magnuson-Stevens Act to provide a written response to the submitted report within 30 days of its receipt and prior to start of the action. At this time it does not appear that FERC has prepared and submitted such a response.¹³

NMFS's 2016 Biological Opinion constitutes new circumstances and information that demonstrate that FERC is obligated to prepare a Supplemental EIS. These changes also indicate that FERC, as required by the Magnuson-Stevens Act, must undergo additional consultation with the NMFS regarding EFH.

Environmental Justice

Consideration of "environmental justice" within the NEPA process has substantially increased since FERC's Final EIS was issued in 2007¹⁴. Environmental justice has been defined by EPA's Office of Environmental Justice as:

"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies."

Executive Order 12898 and its accompanying memorandum have the primary purpose of ensuring that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations ..." The Executive Order also explicitly called for the application of equal consideration for Native American programs. To meet these goals, the Order specified that each agency develop an agency-wide environmental justice strategy¹⁵.

¹³ *Oroville Facilities Biological Opinion* (NOAA, 2016).

¹⁴ <https://www.epa.gov/environmentaljustice/environmental-justice-and-national-environmental-policy-act>

¹⁵ <https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>

The Presidential Memorandum that accompanied the Executive Order calls for a variety of actions, four of which were directed at NEPA-related activities, including:

1. Each federal agency must analyze environmental effects, including human health, economic, and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA;
2. Mitigation measures outlined or analyzed in EAs, EISs, or Records of Decision (RODs), whenever feasible, should address significant and adverse environmental effects of proposed federal actions on minority communities and low-income communities;
3. Each federal agency must provide opportunities for community input in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving accessibility of public meetings, official documents, and notices to affected communities; and
4. In reviewing other agencies' proposed actions under Section 309 of the Clean Air Act, EPA must ensure that the agencies have fully analyzed environmental effects on minority communities and low-income communities, including human health, social, and economic effects.¹⁶

In a memo dated April 19, 2011, to Regional and Assistant Administrators, former Assistant Administrator for Enforcement and Compliance Assurance, Cynthia Giles, wrote "Through the Administrator's heightened commitment to and focus on environmental justice, much has been and continues to be learned on how best to achieve this objective...to ensure that the spirit as well as the letter of the Executive Order and Presidential directive is met."¹⁷

Butte County has a substantial minority population and specific consideration of environmental justice regarding issuing a long-term operating license for the Oroville Facilities Project is mandated by NEPA guidance that was issued after FERC's 2007 Final EIS. According to current census records, approximately 25 percent of Butte County's population is minority based, including Hispanic or Latino, Asian, American Indian, Black or African American, or Native Hawaiian or Pacific Islander. Census records also indicate that minority populations in Butte County have grown significantly since FERC's 2007 Final EIS was issued.

In addition to basic socio-economic impacts of project operation on Butte County (see above), FERC must specifically consider how these conditions might be unfairly burdening minority populations. For example, money directly spent by the County due to the presence of the Oroville Facilities Project is money that is not available for other purposes, potentially impacting minority populations.

Consideration of environmental justice issues was not a priority in FERC's 2007 Final EIS and the need for such analyses to ensure compliance with modern NEPA guidelines mandates preparation of a Supplemental EIS before issuing a long-term license for the Oroville Facilities Project. In preparing a

¹⁶ Final Guidance for Incorporating Environmental Justice Concerns into EPA's NEPA Compliance Analyses, April 1998.

¹⁷ Giles, Cynthia (April 19, 2011), Addressing Environmental Justice through Reviews Conducted Pursuant to the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Memorandum prepared for USEPA Regional Administrators and Assistant Administrators.

Supplemental EIS, modern practices and methodologies used in NEPA reviews, including meaningful engagement with minority communities, must be employed¹⁸.

Settlement Agreement

The terms of the Settlement Agreement identify actions to be implemented by DWR that will benefit environmental, recreational, cultural, land use, and engineering and operations resources. These actions represent both new measures and enhancements to existing broad efforts by DWR and other agencies performing a stewardship role of these resources. The Settlement Agreement signatories requested that this comprehensive Settlement Agreement package, which includes proposed benefits outside of FERC's jurisdiction, be used when FERC issues a new license for the Oroville Facilities.¹⁹ Programs such as the development of a Recreational Management Plan (RMP), and environmental enhancements (e.g., a Gravel Supplementation and Improvement Plan) and establishing an Ecological Committee, were to be implemented in accordance with proposed timelines beginning at the time of the filing of the Settlement Agreement with the FERC. Under the annual licenses, however, it appears that the terms of the Settlement Agreement and draft license orders have not been fully implemented²⁰.

Operating for 10 years under annual licenses was not contemplated by the parties to the Settlement Agreement and constitutes new circumstances that demonstrate that FERC is obligated to prepare a Supplemental EIS prior to issuing a long-term license for the Oroville Facilities Project.

FURTHERING THE PURPOSES OF NEPA [40 CFR §1502.9(c)(2)]

In addition to the new circumstances and information discussed above that demonstrate that FERC is obligated to prepare a Supplemental EIS before issuing a long-term license for the Oroville Facilities Project, there are numerous reasons to update the EIS to further the purposes of NEPA, including:

- Complying with CEQ guidelines for implementing NEPA;
- Complying with FERC guidelines for hydropower relicensing and preparing NEPA environmental documents;
- Complying with the requirements of the Endangered Species Act;
- Complying with the requirements of the Magnuson-Stevens Act and Essential Fish Habitat; and
- Supplementing the 2007 EIS to be consistent with modern EIS guidelines regarding such topics as environmental justice.

CONCLUSIONS

CES concludes that FERC's Final EIS must be supplemented because study documents and the Final EIS significantly exceed CEQ's thresholds for when NEPA documents should be updated. There are also significant new circumstances and information relevant to social, economic, and environmental concerns and bearing on the proposed federal action (i.e., issuing a long-term license) and its impacts [40 CFR §1502.9(c)(1)(ii)]. Preparing a Supplemental EIS would also further the purposes of NEPA [40 CFR

¹⁸ Promising Practices for Environmental Justice Methodologies in NEPA Reviews. Report of the Federal Interagency Working Group on Environmental Justice and NEPA Committee. March 2016.

¹⁹ *Oroville Facilities Highlights of the Settlement Agreement for Licensing* (Department of Water Resources, 2006).

²⁰ "Oroville Dam: Relicensing saga holds up habitat restoration," *Mercury News*. August 21, 2017.

§1502.9(c)(2)] by providing an opportunity for agencies, the public, and other interested stakeholders to comment on the proposed action, given the significant new circumstances and information. CES also concludes that a Supplemental EIS would be consistent with FERC's obligations under the ESA and the Magnuson-Stevens Act.

We specifically conclude that FERC must prepare a Supplemental EIS before issuing a long-term license for the Oroville Facilities Project because, among other reasons:

- CEQ guidelines mandate updating studies that were conducted in support of an EIS that are more than five years old; most studies conducted in support of FERC's 2007 EIS are 13-15 years old;
- CEQ guidelines mandate supplementing an EIS that is more than 10 years old, which applies to FERC's 2007 Final EIS;
- New circumstances and information related to the Oroville Facilities Project demonstrate that FERC is obligated to prepare a Supplemental EIS, including:
 - Failure of the primary (flow control) spillway in 2017;
 - Failure of the emergency spillway in 2017;
 - New socio-economic impact information from Butte County;
 - Impacts associated with the Great Recession that were not considered in the 2007 EIS;
 - New listings of species and designation of critical habitats under the Endangered Species Act;
 - A Biological Opinion issued in 2016 by NOAA's NMFS that concludes that issuing a long-term license would have significant impacts on threatened and endangered species and Essential Fish Habitat designated under the Magnuson-Stevens Act;
 - Recent consideration of environmental justice issues within the NEPA process; and
 - Failure to implement all aspects of the Settlement Agreement for a period of over 10 years
- Preparing a Supplemental EIS would also materially support and further the purposes of NEPA.



APPENDIX A

**Oroville Facilities Relicensing Program
Federal Energy Regulatory Commission Project No. 2100
Study Plan Reports
(153 Reports Delivered by March 31, 2005)**

**Oroville Facilities Relicensing Program
Federal Energy Regulatory Commission Project No. 2100
Study Plan Reports Completed or Delivered to the Collaborative
(153 Reports have been delivered as of March 31, 2005)**

<u>Resource Area/Study Report Name</u>	<u>Completion or Delivery Date</u>
Cultural Resources	
C1 F.R. Cultural Resources Ethnographic Inventory - Public	02/04
F.R. Cultural Resources Archaeological and Historical Site Inventory - Public	07/04
F.R. Cultural Resources Ethnographic Inventory Report - Confidential	07/04
D.R. Cultural Resources Archaeological and Historical Site Inventory - Confidential	08/04
C2 F.R. Historic Properties Inventory and Evaluation: Oroville Facilities, Butte County - Confidential	07/04
C3/C4 P.D. Historic Properties Management Plan/Interpretive Evaluation	12/04
Engineering and Operations	
E1 Model Development	06/03
E1.1 Statewide Operations Model Development	06/03
E1.2 Local Operations Model Development (Final Enhancements Completed) - Confidential	08/03
E1.3/E1.4/E1.5 Oroville Reservoir/Thermalito Complex/Feather River Temperature Model Development I.R. Temperature Model Presented to Engineering & Operations Work Group	04/03
E1.6 Feather River Flow-Stage Model Development	04/03
E2 Perform Modeling Simulations Operations Modeling Seminar #1	06/03
Operations Modeling Workshop #2	08/03
Operations Modeling Workshop #3	10/03
Operations Modeling Workshop #4	02/04
Operations Modeling Workshop #5	04/04
Benchmark Study Results for CALSIM II, HYDROPS & WQRRS	09/04
PDEA Alternatives Analysis and Simulations	12/04
E3 D.R. Evaluate the Potential for Additional Hydropower Generation at Oroville (Executive Summary)	05/04
D.R. Evaluation of Potential Generation Improvements - CEII Document - Confidential	05/04
E4 F.R. Flood Management Study	12/04
E6 Downstream Extent of Reasonable Control of Feather River Temperature by Oroville - Thermalito	10/03
E7A D.R. Oroville Reservoir Cold Water Pool Availability Analysis	05/03
Environmental – Fisheries	
F1 Evaluation of Project Effects on Non-Fish Aquatic Resources I.R. Task 1 - Evaluation of Project Effects on Non-Fish Aquatic Resources	04/03
F.R. Tasks 1/Task 2 - Evaluation of Project Effects on Non-Fish Aquatic Resources	08/04
F2 Evaluation of Project Effects on Fish Diseases I.R. Phase 1 - Initial Progress Report on the Evaluation of Project Effects on Fish Diseases	11/02
D.R. Task 1/Task 2 - Evaluation of Project Effects on Fish Diseases	03/03
F.R.	06/04
F3.1 Evaluation of Project Effects on Resident Fish and their Hab within Lake Oroville, its Upstream Tributaries, the Thermalito Complex, and the Oroville Wildlife Area F.R. Task 1A - Assessment of Potential Fish Passage Impediments above Lake Oroville's High Water Mark	05/04
F.R. Task 1B - Fish Species Composition in Lake Oroville's Upstream Tributaries	12/04
F.R. Task 1C, F15 Task 2 - Inventory of Potentially Available Habitat, and Distribution of Juvenile and Adult Fish Upstream from Lake Oroville	06/04
I.R. Task 1C and F3.2 Task 4A - Fish Habitat GIS Coverage (GIS Maps)	06/03
F.R. Task 2A/Task 3A - Fish Species Composition: Lake Oroville, Thermalito Diversion Pool, & Thermalito Forebay	07/03
F.R. Task 2B - Evaluation of the Ability of Lake Oroville's Cold Water Pool to Support Salmonid Stocking Recommendations	03/03
I.R. Task 2C - Evaluation of Lake Oroville's Water Surface Elevation Reductions on Bass Spawn Success	12/02
F.R. Task 2D - Management Practices and Monitoring Studies of White Sturgeon	12/02

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Environmental – Fisheries (continued)

F3.1	Evaluation of Project Effects on Resident Fish and their Hab within Lake Oroville, its Upstream Tributaries, the Thermalito Complex, and the Oroville Wildlife Area - continued	
	F.R. Task 3B/Task 3C - Project Operations Influencing Fish Habitat and Water Quality in the Thermalito Diversion Pool and Thermalito Forebay	05/04
	F.R. Task 4A - Fish Species Composition and Evaluation of Juvenile Bass Recruitment in the Thermalito Afterbay	12/04
	F.R. Task 4B - Characterization of Cold Water Pool Availability in the Thermalito Afterbay	02/04
	F.R. Task 4C - Evaluation of Water Surface Fluctuations on Bass Nest Dewatering and Characterization of Inundated Littoral Habitat in the Thermalito Afterbay	08/04
	I.R. Task 5A - One-Mile Pond Fish Species Composition	11/03
	I.R. Task 5B - Characterization of Fish Habitat in One-Mile Pond	02/04
F3.2	Evaluation of Project Effects on Resident Fish and their Habitat in the Feather River Downstream of the Fish Barrier Dam	
	F.R. Task 1/Task 4/Task 5 - Comparison of Fish Distribution to Habitat Distribution and Maps (by species)	08/04
	D.R. Task 1 and F21 Task 2 - Fish Distribution in the Feather River below the Thermalito Diversion Dam to the Confluence with the Sacramento River	01/03
	I.R. Task 2 and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	01/03
	F.R. Task 2, F15 Task 1, and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	04/04
	F.R. Task 3A - Final Assessment of Potential Sturgeon Passage Impediments	09/03
	F.R. Task 3A - Final Assessment of Sturgeon Distribution and Habitat Use	12/03
	F.R. Task 3B - Assessment of Potential Project Effects on Splittail Habitat	07/04
	I.R. Task 4A and F3.1 Task 1C - Fish Habitat GIS Coverage (GIS Maps)	06/03
F5/7	Evaluation of Potential Effects of Fisheries Management Activities on ESA-Listed Fish Species	
	F.R. Task 1 - Evaluation of Potential Effects of Fisheries Management Activities on ESA-Listed Fish Species	05/04
	F.R. Task 2 - Evaluate the Achievement of Current Stocking Goals	09/04
	F.R. Task 3 - Evaluate the Interaction between the Lake Oroville Fishery & Upstream Tributary Fisheries	12/04
F8	Transfer of Energy and Nutrients by Anadromous Fish Migrations	
	D.R. Transfer of Energy and Nutrients by Anadromous Fish Migrations	04/03
	D.R. Revised - Transfer of Energy and Nutrients by Anadromous Fish Migrations	09/03
	Summary of Revisions to SP-F8 Technical Report	09/03
F9	Evaluation of Project Effects on Natural Salmonid Populations	
	Phase 1 - Interim Literature Review	11/02
	Phase 1 Revised Interim Literature Review	03/03
	D.R. The Effects of the Feather River Hatchery on Naturally Spawning Salmonids	11/04
F10	Evaluation of Project Effects on Salmonids and Their Habitat in the Feather River below the Fish Barrier Dam	
	I.R. Task 1C - Evaluation of Flow-Related Physical Impediments in the Feather River below the Fish Barrier Dam	01/03
	I.R. Task 1E - Pre-Spawning Chinook Salmon Migration Patterns and Holding Characteristics	03/04
	I.R. Task 1E - Identification and Characterization of Early Up-Migrant Chinook Salmon Holding Habitat and Habitat Use Patterns	04/03
	F.R. Task 1D/Task 1E - Evaluation of Oroville Facilities Operations on Water Temperature Related Effects on Pre-Spawning Adult Chinook Salmon And Characterization of Holding Habitat	07/04
	F.R. Task 2A - Evaluation of Spawning and Incubation Substrate Suitability for Salmonids in the Lower Feather River	07/04
	I.R. Task 2B - Steelhead Spawning Methods	05/03
	F.R. Task 2B - Evaluation of Potential Effects of Oroville Facilities Operations on Spawning Chinook Salmon	07/04
	I.R. Task 2B - 2003 Lower Feather River Steelhead Redd Survey	07/03
	F.R. Task 2C - Evaluation of the Timing, Magnitude and Frequency of Water Temperatures and Their Effects on Chinook Salmon Egg and Alevin Survival	07/04
	F.R. Task 2D - Evaluation of Flow Fluctuation Effects on Chinook Salmon Redd Dewatering in the Lower Feather River	07/04
	F.R. Task 3A - Distribution and Habitat Use of Juvenile Steelhead and other Fishes of the Lower Feather River	04/04
	I.R. Task 3A - Distribution and Habitat Use of Steelhead and Other Fishes in the Lower Feather River	01/03
	F.R. Task 3B - Growth Investigations of Wild and Hatchery Steelhead in the Lower Feather River	02/04
	I.R. Task 3B - Growth Investigations of Wild Juvenile Steelhead in the Feather River using Mark and Recapture Techniques	06/03
	I.R. Task 3B - Steelhead Rearing Temperatures	07/03
	F.R. Task 3C - Juvenile Steelhead and Chinook Salmon Stranding in the Lower Feather River	08/04
	I.R. Task 3C - Redd Dewatering and Juvenile Steelhead and Chinook Salmon Stranding in Lower Feather River	06/03
	F.R. Task 4A - River Flow Effects on Emigrating Juvenile Salmonids in the Lower Feather River	12/03

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Environmental – Fisheries (continued)

F10	Evaluation of Project Effects on Salmonids and Their Habitat in the Feather River below the Fish Barrier Dam - continued I.R. Task 4A - Literature Review of Devices Used for Enumeration of Juvenile Steelhead Outmigrants F.R. Task 4B - Timing, Thermal Tolerance Ranges and Potential Water Temperature Effects on Emigrating Juvenile Salmonids in the Lower Feather River	01/03 10/03
F15	Evaluation of the Feasibility to Provide Passage for Anadromous Salmonids Past Oroville Facility Dams F.R. Task 1, F3.2 Task 2 and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species F.R. Task 2, F3.1 Task 1C - Inventory of Potentially Available Habitat, and Distribution of Juvenile and Adult Fish Upstream from Lake Oroville F.R. Task 3 - Evaluation of Methods and Devices Used in the Capture, Sorting, Holding, Transport and Release of Fish F.R. Task 4 - Fish Passage Model F.R. Task 4 - Fish Passage Model (amended Appendix A)	04/04 06/04 06/04 01/04 11/04
F16	Evaluation of Project Effects on Instream Flows and Fish Habitat D.R. Phase 1 F.R. Phase 2 Addendum to Phase 2 Report – Evaluation of Project Effects on Instream Flows and Fish Habitat	07/02 02/04 01/05
F21	Project Effects on Predation of Feather River Juvenile Anadromous Salmonids I.R. Task 1 and F3.2 Task 2 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species F.R. Task 1, F3.2 Task 2, and F15 Task 1 - Literature Review of Life History and Habitat Requirement for Feather River Fish Species D.R. Task 2 and F3.2 Task 1 - Fish Distribution in the Feather River below Thermalito Diversion Dam to the Confluence with the Sacramento River F.R. Task 3 - Incorporate Results of Tasks 1 and 2 I.R. Task 4 - Predation PM&E Literature Review	01/03 04/04 01/03 05/04 02/03
	Environmental Study Report Comments and Errata	01/05

Environmental – Geomorphic

	Paleontologic Resources in the Vicinity of FERC Project 2100 (Oroville Reservoir and Lower Feather River): Literature-Based Inventory and Significance Assessment - Public Literature-Based Inventory and Significance Assessment - Confidential	01/05 01/05
G1	Effects of Project Operations on Geomorphic Processes Upstream of Oroville Dam I.R. Task 2 - Map the Channel Resources in the Tributaries above Oroville Dam and Task 3 - Re-Survey Reservoir Cross-Sections and Determine Sediment in Storage F.R.	04/03 04/04
G2	Effects of Project Operations on Geomorphic Process Downstream of Oroville Dam I.R. F.R. Task 1.1 - Bibliography and Index F.R. Task 1.2 - Physiographic Setting and Mesohabitat F.R. Task 2 - Spawning Riffle Characteristics F.R. Task 3/Task 4 - Channel Cross-Sections and Photography F.R. Task 5 - Dam Effects on Channel Hydraulics and Geomorphology and Task 8 - Summary and Conclusions F.R. Task 6 - Channel Meanders and Bank Erosion Monitoring D.R. Task 7 - Hydraulic and Sediment Transport Modeling with Fluvial 12	04/03 06/04 04/04 08/04 09/04 07/04 07/04 03/04

Environmental - Terrestrial

T1	F.R. Effects of Project Operations and Features on Wildlife and Wildlife Habitat	04/04
T2	Project Effects on Special Status Species F.R. Project Effects on Special Status Wildlife Species F.R. Project Effects on Special Status Plant Species	02/04 03/04
T3/5	F.R. Project Effects on Riparian Resources, Wetlands, and Associated Floodplains	07/04
T4	F.R. Biodiversity, Vegetation Communities, and Wildlife Habitat Mapping	12/03

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Environmental – Terrestrial (continued)

T6	I.R. Interagency Wildlife Management Coordination and Wildlife Management Plan Development	02/04
T7	F.R. Project Effects on Noxious Terrestrial and Aquatic Plan Species	06/04
T8	F.R. Project Effects on Non-Native Wildlife	09/03
T9	F.R. Recreation and Wildlife	06/04
T10	F.R. Effects of Project Features, Operation and Maintenance on Upland Plant Communities	08/04
T11	F.R. Effects of Fuel Load Management and Fire Prevention on Wildlife and Plant Communities	10/03

Environmental – Water Quality

W1	Project Effects on Water Quality Designated Beneficial Uses for Surface Waters F.R. Revised	09/04
W2	Contaminant Accumulation in Fish, Sediments, and the Aquatic Food Chain D.R. Phase 1	02/04
W3	Recreational Facilities and Operations Effects on Water Quality I.R. Task 1 - Effects of Current Recreation Facilities and Operations and Task 1A - Identification of Potential Effects to Water Quality F.R. Task 1B - First Year of Monitoring	11/02 08/04
W5	Project Effects on Groundwater I.R. Task 1, Phase 1 - Inventory Existing Wells and Assessment of Existing Groundwater Data and Current Groundwater Monitoring Activities D.R. Task 1, Phase 1 - Inventory Existing Wells and Assessment of Existing Groundwater Data and Current Groundwater Monitoring Activities (Revised) D.R. Task 1 D.R. Task 2 - Hyporheic Monitoring	01/03 05/03 03/04 11/04
W6	Project Effects on Temperature Regime F.R.	07/04
W7	Land and Watershed Management Effects on Water Quality I.R. F.R. Task 1 - Effects to Water Quality from Ongoing Land Uses and Management, and Task 1B - Monitoring of Potential Effects to Water Quality	02/03 08/04
W9	Project Effects on Natural Protective Process F.R.	06/04

Land Use, Land Management, and Aesthetics

L1	F.R. Land Use Study	07/04
L2	F.R. Land Mgmt Study	08/04
L3	F.R. Comprehensive Plan Consistency Evaluation	05/04
L4	F.R. Aesthetic/Visual Resources	07/04
L5	F.R. Fuel Load Management Evaluation	05/04
Land Use, Management, and Aesthetics Study Reports Errata		01/05

Recreation and Socioeconomics

R1	F.R. Vehicular Access Study	09/03
R2	F.R. Recreation Safety Assessment	01/04

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Recreation and Socioeconomics (continued)	
R3 F.R. Assess Relationship of Project Operations and Recreation	05/04
R4 F.R. Assess Relationship of Fish/Wildlife Management of Recreation	05/04
R5 F.R. Assessment of Recreation Areas Management	06/04
R6 F.R. ADA Accessibility Assessment	09/03
R7/R9/R13 I.R. Reservoir Boating - Existing Recreation Use-Recreation Surveys, Critical Path Recreation Field Studies	02/03
R7 F.R. Reservoir Boating	03/04
R8 F.R. Recreation Carrying Capacity	06/04
R9 F.R. Existing Recreation Use Study	02/04
R10 F.R. Recreation Facility Inventory and Condition Report	09/03
R11 F.R. Recreation and Public Use Impact Assessment	01/04
R12 F.R. Projected Recreation Use	05/04
R13 F.R. Recreation Surveys	12/04
R14 F.R. Assess Regional Recreation Barriers to Recreation	02/04
R15 F.R. Recreation Suitability	02/04
R16 F.R. Whitewater and River Boating	01/04
R17 F.R. Recreation Needs Analysis	06/04
R18 F.R. Recreation Activity, Spending, and Associated Economic Impacts	05/04
R19 F.R. Fiscal Impacts	05/04
R18/R19 Recreation Activity, Spending, and Associated Economic Impacts	
F.R. Phase 1 Background Report - Economic and Fiscal Conditions	05/03
D.R. Phase 2 Background Report - Property Value Analysis using a Hedonic Property-Pricing Model	01/04
D.R. Phase 2 Background Report - Recreation and Tourism Economy in Oroville	01/04
Recreation and Socioeconomics Study Reports Addenda and Errata	01/05



APPENDIX B

2017 Updates to “Report on the Operational Impacts of the Oroville Facilities Project on Butte County” and “Socio-Economic Impacts of the Oroville Facilities Project on Butte County, California”



2017 Updates to

**“Report on the
Operational Impacts of the
Oroville Facilities Project on
Butte County”**

and

**“Socio-Economic Impacts of the
Oroville Facilities Project On
Butte County, California”**

**Originally submitted to FERC by the
Office of the Chief Administrative Officer
February 2006**

**Update provided by Paul Hahn, Chief Administrative Officer
June 2017**

Background

In February 2006, the Office of the Chief Administrative Officer of Butte County filed, on behalf of Butte County, a document entitled ***Report on the Operational Impacts of the Oroville Facilities on Butte County***. This 2017 Update provides updated cost estimates based on the fiscal year (FY) 2016-17 Adopted Budget or FY 2015-16 Actual Costs, to match the sources used in the 2006 study.

Updated information is provided for the following:

- Fiscal data for Law Enforcement/Criminal Justice Services, Fire and Rescue Services, Communication Services, and Roads.
- Butte County population.
- The 50-year average for the National Consumer Price Index (CPI).

Certain data, either not within the County's control or not readily available, was not updated and includes but is not limited to:

- Variables used in the calculation of "Non-Resident Visitor Factor" and the "Non-Resident Visitor Use Within the Area of Highest Use Factor", such as the visitor data provided by the California Department of Water Resources (DWR) in the *Final Existing Recreation Use Report (R-12)*, submitted to the Federal Energy Regulatory Commission (FERC).
- Call data for fire responses.
- Cost data for upgrading dirt and gravel roads to paved or chip sealed roads, due to naturally occurring asbestos.

In addition, the County submitted a report titled ***Socio-Economic Impacts of the Oroville Facilities Project on Butte County, California*** authored by FMY Associates, Inc.

The FMY report included information regarding the economy in Butte County and estimates on the financial impact to Butte County in two areas: 1) lost property taxes and 2) costs related to the failure of the Project to provide low cost power to local residents, businesses, and industry.

Updated information is provided for lost property taxes, only.

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Report on the Operational Impacts of the Oroville Facilities on Butte County - Update

Executive Summary

Section 1.0 (pages 3-4 of the original report)

- **Law Enforcement/Criminal Justice Services**

The original report identified \$2,035,416 in direct annual costs and \$1,032,000 in one-time costs. This update identifies **\$1,939,791*** in direct annual costs in FY 2016-17 values, plus **\$366,608 of one-time costs** for the Sheriff's Office. **The average annual cost over a 50-year period for direct costs is \$6,548,191, or \$545,683 per month.**

Exhibits 3a and 3b – Update June 2017 provide updated cost information based on FY 2015-16 Actual Costs or FY 2016-17 Budget.

Exhibit 3c – Update June 2017 provides annual costs for 50 years, with a cost escalator based on the 50-year average (1966-2016) of the Consumer Price Index (CPI). The Exhibit also includes the one-time costs for the Sheriff's Office.

** The 2006 Study included costs for "Crucial Asset and Community Threat" services, which have been removed and are included under separate discussions between the DWR and the Butte County Sheriff.*

- **Fire and Rescue Services**

The original report identified \$393,257 in direct annual costs and \$1,309,478 in one-time costs. This update identifies **\$644,361 in direct annual costs** in FY 2016-17 values, plus **\$1,016,597 of one-time costs** for equipment and fire station replacement over a 50-year period. **The average annual cost over a 50-year period for direct costs is \$2,032,961, or \$169,413 per month.**

Exhibits 4 and 4a – Update June 2017 provide updated cost information based on FY 2015-16 Actual Costs, as well as annual costs for 50 years, with a cost escalator based on the 50-year average (1966-2016) of the Consumer Price Index (CPI).

Exhibit 5 – Update June 2017 provides updated cost information for construction a standard Butte County fire station, based upon 2011 actual costs and the Construction Cost Index (CCI) for San Francisco from 2011-2017.

Exhibit 6 – Update June 2017 provides updated cost and replacement schedule information for fire engines only.

- **Communications Services**

The original report identified \$351,143 in one-time costs. This update identifies \$610,576 in one-time costs, plus \$12,657 in annual maintenance for the new communications/radio system the County is currently constructing.

Exhibit 7 – Update June 2017 provides updated costs for the County’s radio system replacement project and annual maintenance, currently under contract with Motorola.

- **Public Works – Road Services** - The original report identified \$791,351 in annuals costs and \$5,306,136 in one-time costs. This update identifies \$1,099,202 in annual costs in FY 2016-17 values. The County requests the Project upgrade dirt and gravel roads used exclusively by the Project and then dedicate the roads to the County, in lieu of paying the County one-time funds to do the work.

- **EOC Services** – The County requests that DWR build a new EOC facility for the County out of the Project-created flood zone and then either provide the County with long-term use of the facility or give the facility to the County. The County does not request that DWR provide the County with any funding.

- **Health and Human Services** - The original report identified \$1,837,983 in indirect annual costs. This update does not provide updated numbers for health and human services costs or General Fund contributions, which have grown over the years. It does apply the Project’s share to only the General Fund portion identified in 2004-05, resulting in an updated amount of \$129, 890 in indirect annual costs.

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Law Enforcement/Criminal Justice Services

Section 4.1.1.2 (pages 18-20 of the original report):

**Table 4.1.1.2-1 (Updated)
Calculation of the Annual Cost of Providing
Law Enforcement Services for Non-Resident Visitors**

<i>Calculation Detail</i>
2,635/1000 = 2.635
2.635 * \$355,423 = \$936,538

The annual operating cost to provide Law Enforcement Services to Non-Resident Visitors within the Project Area is estimated to be \$936,538 in FY 2016-17. The one-time costs to enable law enforcement support are estimated to be an additional \$366,608 in FY 2016-17 (see Exhibits 3a and 3c – Update June 2017).

The average annual cost to provide Law Enforcement Services over a 50-year period is \$3,161,492, or \$263,458 per month (see Exhibit 3c – Update June 2017).

Section 4.1.2.2 (page 21 of the original report):

**Table 4.1.2.1-1 (Update)
Calculation Detail for Other Criminal Justice Costs**

	FY 15-16 Actual Net County Cost	Project-Related %	Project-Related Cost
District Attorney - Criminal	\$ 10,951,402	2.45%	\$ 268,309
Probation Department	\$ 11,163,146	2.45%	\$ 273,497
Public Defender	\$ 3,078,156	2.45%	\$ 75,415
Sheriff - Jail	\$ 15,756,364	2.45%	\$ 386,031
	\$ 40,949,068		\$ 1,003,252

The total estimated annual operating cost for Criminal Justice Services attributable to the Project is \$1,003,252 in FY 2016-17 (see Exhibit 3b – Update June 2017).

The average annual cost to provide Other Criminal Justice Services over the 50-year period is \$3,386,698, or \$282,225 per month (see Exhibit 3c – Update June 2017).

Fire and Rescue Services

Section 4.2.2 (pages 35-37 of the original report)

Table 4.2.2-2 (Updated)
Total Operating Costs for Stations that Serve the Area of Highest Use (16/17 \$)

Station Type	Response Level	Cost Factor	Operating Costs	Number of Stations	Total Operating Costs	Costs Attributable to the Project
Butte County Station	Direct Response	8.52%	\$ 1,271,079	4	\$ 5,084,316	\$ 433,184
Butte County Station	Partial Response/ "Move up and Cover"	2.45%	\$ 1,271,079	4	\$ 5,084,316	\$ 124,566
Butte County Volunteer Station	Direct Response	8.52%	\$ 80,099	5	\$ 400,495	\$ 34,122
Butte County Volunteer Station	Partial Response/ "Move up and Cover"	2.45%	\$ 80,099	4	\$ 320,396	\$ 7,850
CAL FIRE/ Butte County Amador Station	Partial Response/ "Move up and Cover"	2.45%	\$ 193,515	4	\$ 774,060	\$ 18,964
TOTAL					\$ 11,663,583	\$ 618,686

Table 4.2.2-3
Project Related Cost of Replacing a Station That Responds Directly to the Project

<i>Calculation Detail</i>
$4 * \$1,500,000 = \$6,000,000$
$\$6,000,000 \times 8.52\% = \$511,200$
<i>Annualized Cost over a 10-year period</i>
$\$511,200 / 10 = \$51,120$

**Table 4.2.2-4
Project Related Cost of Replacing a Station
That Partially Serves the Area of Highest
Use or Provides Backup to Other Stations**

<i>Calculation Detail</i>
$4 * \$1,500,000 = \$6,000,000$ $\$6,000,000 \times 2.45\% = \$147,000$ <i>Annualized Cost over a 10-year period =</i> $\$147,000 / 10 = \$14,700$

**Table 4.2.2-5
Total One-Time Costs Attributed to Project
For Replacing Eight Fire Stations**

<i>Calculation Detail</i>
$\$511,200 + \$147,000 = \$658,200$ <i>Annualized Cost over a 10-year period =</i> $\$658,200 / 10 = \$65,820$

The estimated annual cost for Fire and Rescue Services operations demanded by the Project is \$644,361 in FY 2016-17 (see Exhibit 4a – Update June 2017).

The estimated one-time fixed costs for station replacement for Fire and Rescue Services demanded by the Project over a 50-year period are \$658,200 (see Exhibit 5 – Update June 2017).

The estimated one-time costs for engine replacement for Fire and Rescue Services demanded by the Project over a 50-year period are \$358,397 (see Exhibits 4a and 6 – Update June 2017).

The average annual cost to provide Fire and Rescue Services over the 50-year period is \$2,032,961, or \$169,413 per month (see Exhibit 4a – Update June 2017).

Communications System Services

Section 4.3.2 (page 40 of the original report)

Table 4.3.2-1
Summary of Required Communication System Upgrade Costs

<u>Motorola Project</u>	<u>Actual Cost</u>
Replacement System – One-time Costs	\$7,166,380

- 700 MHz to meet FCC requirements.
- Eight (8) fixed-radio sites located within County borders – provides additional talk groups, coverage, and capacity
- New microwave backhaul network to interconnect fixed-radio sites.
- Redundancy.
- New system equipment including fixed-site radio equipment, 9-1-1 Dispatch consoles, and approximately 1,000 handheld/mobile radios.

Calculation Detail

$$\$7,166,380 * 8.52\% = \$610,576$$

Total one-time costs related to the Project to replace the County's radio and microwave systems are \$610,576 (see Exhibit 7 – Update June 2017).

Annual maintenance costs related to the Project to maintain the system are \$12,657 (see Exhibit 7 – Update June 2017).

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Section 4.4 (pages 42 and 46 of the original report)

Table 4.4.1.2-1
Calculation Detail for Costs of County Road
Maintenance for Project Visitor in the Area of Highest Use

<i>Calculation Detail</i>
$\$5,831,743 * 8.52\% = \$496,865$

Table 4.4.2-1
Calculation of Costs to Maintain Unpaved Roads
Once Converted to Reduce Environmental Impacts

<i>Calculation Detail</i>
$30.32 * \$19,866 = \$602,337$

Total annual mitigation required by the Project for road maintenance costs on existing County-maintained arterial and collector roads used by the Project is \$496,865 (see exhibit 8 – Update June 2017).

One-time costs to the Project to upgrade gravel roads used exclusively by the Project to paved or chip-sealed roads have not been updated. The County requests the Project upgrade the roads and then dedicate the upgraded roads to the County for on-going maintenance. Annual costs to the Project for the road maintenance on the upgraded roads would be \$602,337 (see Exhibit 8 – Update June 2017).

Socio-Economic Impacts of the Oroville Facilities Project on Butte County, California - Update

Section IV (pages 16-18 of the original report)

Property Taxes – The original report provided three methodologies for calculating lost property taxes for the 41,000 acres purchased for the Project. The methodologies included:

1. **Lost Taxes Assuming Project Was Never Built** (if land developed over time in the same fashion as the County as a whole);
2. **Big Bend Hydro Plant and Alternate Use of Excess Property** (if the private hydro plant remained and other land developed in the same fashion as the County as a whole); and
3. **Investor Owned Utility** (if same facilities were owned by and investor-owned utility as a non-rate base asset or other privately owned unregulated power producer).

This update provides revised estimates for lost property tax revenue in 2017 values, based on the 40-year average annual inflation factor of 1.788% as provided by the Board of Equalization (see Attachment A).

Methodology 1 – Assuming Project Never Built

The original report estimated \$2,985,489 in lost property tax revenue in 2006, under this methodology. This update estimates **\$3,628,088** in lost property tax revenue in 2017.

The average annual lost property tax revenue over a 50-year period, utilizing this methodology, is \$5,844,799, or \$487,067 per month.

Methodology 2 – Big Bend Hydro and Alternate Use of Excess Property

The original report estimated \$3,265,488 in lost property tax revenue in 2006, under this methodology. This update estimates **\$3,968,355** in lost property tax revenue in 2017.

The average annual lost property tax revenue over a 50-year period, utilizing this methodology, is \$6,392,964, or \$532,747 per month.

Methodology 3 – Investor-Owned Utility

The original report estimated \$6,870,535 in lost property tax revenue in 2006, under this methodology. This update estimates **\$8,349,355** in lost property tax revenue in 2017.

The average annual lost property tax revenue over a 50-year period, utilizing this methodology, is \$13,450,694, or \$1,120,891 per month.

Estimated Cost for Sheriff - Police Services
 Based on call data, the Sheriff's Office responds to approximately 50% of the calls in the Project Area

Jurisdiction	Population	Total # of Employees	Employees Per 1,000 pop.	FY 2016-17 Budget	Cost Per 1,000 pop.
City of Red Bluff	14,131	41	2.90	5,403,856	382,411
City of Oroville	16,260	38	2.34	5,962,530	366,699
City of Marysville	12,216	36	2.91	2,739,706	224,272
City of Anderson	10,217	27	2.59	4,221,336	413,168
City of Gridley (w/ Biggs contract)	8,286	22	2.66	3,236,199	390,562
AVERAGE:	12,222	33	2.68	4,312,725	355,423
FERC Project Area - Estimated Population:	11,334	30	2.68	4,028,359	355,423
Out-of-County Visitors to the Project	5,270	14	2.68	1,873,077	355,423
(Less 50% Reduction Factor for Non-Primary Response Status)					
Adjusted Out-of-County Visitors to the Project	2,635	7	2.68	936,538	355,423

Source: FY 2016-17 Budgets - Red Bluff, Oroville, Marysville, Anderson, Gridley

Annual Operating Costs for Police Services in 2017 - Project Portion - Licensee Mitigation (7 positions - 5 sworn, 2 non-sworn)	\$ 936,538
Initial Costs to Support Seven (7) Positions - Project Portion - Licensee Mitigation	
Initial recruit, hire, train, equip	\$75,000
Vehicles (5 x \$50,000)	\$250,000
Initial equipment (non-sworn)	\$12,000
Misc equipment and supplies	\$15,000
One-Time Costs	\$352,000

Estimated Cost for Other Criminal Justice Services - Butte County

	FY 15-16 Actual Net County Cost	Project-Related %	Project-Related Cost
District Attorney - Criminal	\$ 10,951,402	2.45%	\$ 268,309
Probation Department	\$ 11,163,146	2.45%	\$ 273,497
Public Defender	\$ 3,078,156	2.45%	\$ 75,415
Sheriff - Jail	\$ 15,756,364	2.45%	\$ 386,031
	\$ 40,949,068		\$ 1,003,252

Source: Butte County Financial System - Actual FY 15-16 Expenditures and Revenue

Estimated Cost for Criminal Justice Services over 50-year Project Life

FACTORS

225,411 County Population - 2015
 11,334 FERC Project Population Not Updated
 2.45% Ratio of FERC Project Population Not Updated
 4.15% 50-year average - CPI - 1966-2016

Annual Operating Costs - Licensee Mitigation

Year	Sheriff - Police Svcs.	Other Criminal Justice Costs			Sheriff - Jail	Total
		District Attorney Criminal Div.	Probation Department	Public Defender		
FY2016-17	\$ 936,538	\$ 268,309	\$ 273,497	\$ 75,415	\$ 386,031	\$ 1,939,791
Year 1	\$ 975,405	\$ 279,444	\$ 284,847	\$ 78,545	\$ 402,051	\$ 2,020,292
Year 2	\$ 1,015,884	\$ 291,041	\$ 296,668	\$ 81,804	\$ 418,736	\$ 2,104,134
Year 3	\$ 1,058,043	\$ 303,119	\$ 308,980	\$ 85,199	\$ 436,114	\$ 2,191,456
Year 4	\$ 1,101,952	\$ 315,699	\$ 321,803	\$ 88,735	\$ 454,213	\$ 2,282,401
Year 5	\$ 1,147,683	\$ 328,800	\$ 335,158	\$ 92,417	\$ 473,062	\$ 2,377,121
Year 6	\$ 1,195,312	\$ 342,445	\$ 349,067	\$ 96,253	\$ 492,695	\$ 2,475,771
Year 7	\$ 1,244,917	\$ 356,657	\$ 363,553	\$ 100,247	\$ 513,141	\$ 2,578,516
Year 8	\$ 1,296,581	\$ 371,458	\$ 378,640	\$ 104,407	\$ 534,437	\$ 2,685,524
Year 9	\$ 1,350,390	\$ 386,874	\$ 394,354	\$ 108,740	\$ 556,616	\$ 2,796,973
Year 10	\$ 1,406,431	\$ 402,929	\$ 410,720	\$ 113,253	\$ 579,715	\$ 2,913,048
Year 11	\$ 1,464,798	\$ 419,651	\$ 427,764	\$ 117,953	\$ 603,774	\$ 3,033,939
Year 12	\$ 1,525,587	\$ 437,066	\$ 445,517	\$ 122,848	\$ 628,830	\$ 3,159,848
Year 13	\$ 1,588,899	\$ 455,204	\$ 464,006	\$ 127,946	\$ 654,927	\$ 3,290,981
Year 14	\$ 1,654,838	\$ 474,095	\$ 483,262	\$ 133,256	\$ 682,106	\$ 3,427,557
Year 15	\$ 1,723,514	\$ 493,770	\$ 503,317	\$ 138,786	\$ 710,413	\$ 3,569,801
Year 16	\$ 1,795,039	\$ 514,262	\$ 524,205	\$ 144,546	\$ 739,896	\$ 3,717,947
Year 17	\$ 1,869,534	\$ 535,604	\$ 545,959	\$ 150,544	\$ 770,601	\$ 3,872,242
Year 18	\$ 1,947,119	\$ 557,831	\$ 568,617	\$ 156,792	\$ 802,581	\$ 4,032,940
Year 19	\$ 2,027,925	\$ 580,981	\$ 592,214	\$ 163,299	\$ 835,888	\$ 4,200,307
Year 20	\$ 2,112,084	\$ 605,092	\$ 616,791	\$ 170,076	\$ 870,578	\$ 4,374,620
Year 21	\$ 2,199,735	\$ 630,203	\$ 642,388	\$ 177,134	\$ 906,707	\$ 4,556,167
Year 22	\$ 2,291,024	\$ 656,357	\$ 669,047	\$ 184,485	\$ 944,335	\$ 4,745,248
Year 23	\$ 2,386,101	\$ 683,595	\$ 696,813	\$ 192,141	\$ 983,525	\$ 4,942,175
Year 24	\$ 2,485,125	\$ 711,965	\$ 725,730	\$ 200,115	\$ 1,024,341	\$ 5,147,276
Year 25	\$ 2,588,257	\$ 741,511	\$ 755,848	\$ 208,420	\$ 1,066,851	\$ 5,360,888
Year 26	\$ 2,695,670	\$ 772,284	\$ 787,216	\$ 217,069	\$ 1,111,126	\$ 5,583,364
Year 27	\$ 2,807,540	\$ 804,334	\$ 819,885	\$ 226,077	\$ 1,157,237	\$ 5,815,074
Year 28	\$ 2,924,053	\$ 837,713	\$ 853,911	\$ 235,460	\$ 1,205,263	\$ 6,056,400
Year 29	\$ 3,045,401	\$ 872,479	\$ 889,348	\$ 245,231	\$ 1,255,281	\$ 6,307,740
Year 30	\$ 3,171,786	\$ 908,686	\$ 926,256	\$ 255,408	\$ 1,307,375	\$ 6,569,512
Year 31	\$ 3,303,415	\$ 946,397	\$ 964,695	\$ 266,008	\$ 1,361,632	\$ 6,842,146
Year 32	\$ 3,440,506	\$ 985,672	\$ 1,004,730	\$ 277,047	\$ 1,418,139	\$ 7,126,095
Year 33	\$ 3,583,287	\$ 1,026,578	\$ 1,046,427	\$ 288,544	\$ 1,476,992	\$ 7,421,828
Year 34	\$ 3,731,994	\$ 1,069,181	\$ 1,089,853	\$ 300,519	\$ 1,538,287	\$ 7,729,834
Year 35	\$ 3,886,872	\$ 1,113,552	\$ 1,135,082	\$ 312,991	\$ 1,602,126	\$ 8,050,622
Year 36	\$ 4,048,177	\$ 1,159,764	\$ 1,182,188	\$ 325,980	\$ 1,668,614	\$ 8,384,723
Year 37	\$ 4,216,176	\$ 1,207,894	\$ 1,231,249	\$ 339,508	\$ 1,737,862	\$ 8,732,689
Year 38	\$ 4,391,147	\$ 1,258,022	\$ 1,282,346	\$ 353,597	\$ 1,809,983	\$ 9,095,096
Year 39	\$ 4,573,380	\$ 1,310,230	\$ 1,335,563	\$ 368,272	\$ 1,885,097	\$ 9,472,542
Year 40	\$ 4,763,175	\$ 1,364,604	\$ 1,390,989	\$ 383,555	\$ 1,963,329	\$ 9,865,653
Year 41	\$ 4,960,847	\$ 1,421,236	\$ 1,448,715	\$ 399,473	\$ 2,044,807	\$ 10,275,077
Year 42	\$ 5,166,722	\$ 1,480,217	\$ 1,508,837	\$ 416,051	\$ 2,129,667	\$ 10,701,493
Year 43	\$ 5,381,141	\$ 1,541,646	\$ 1,571,453	\$ 433,317	\$ 2,218,048	\$ 11,145,605
Year 44	\$ 5,604,459	\$ 1,605,624	\$ 1,636,669	\$ 451,299	\$ 2,310,097	\$ 11,608,147
Year 45	\$ 5,837,044	\$ 1,672,257	\$ 1,704,590	\$ 470,028	\$ 2,405,966	\$ 12,089,886
Year 46	\$ 6,079,281	\$ 1,741,656	\$ 1,775,331	\$ 489,535	\$ 2,505,813	\$ 12,591,616
Year 47	\$ 6,331,571	\$ 1,813,935	\$ 1,849,007	\$ 509,850	\$ 2,609,805	\$ 13,114,168
Year 48	\$ 6,594,331	\$ 1,889,213	\$ 1,925,741	\$ 531,009	\$ 2,718,111	\$ 13,658,406
Year 49	\$ 6,867,996	\$ 1,967,616	\$ 2,005,659	\$ 553,046	\$ 2,830,913	\$ 14,225,230
Year 50	\$ 7,153,018	\$ 2,049,272	\$ 2,088,894	\$ 575,997	\$ 2,948,396	\$ 14,815,577
Year 50	\$ 7,449,868	\$ 2,134,316	\$ 2,175,583	\$ 599,901	\$ 3,070,754	\$ 15,430,423
Subtotal	\$ 162,485,631	\$ 46,550,587	\$ 47,450,637	\$ 13,084,167	\$ 66,974,804	\$ 336,545,825
Avg Annual	\$ 3,161,492	\$ 905,737	\$ 923,250	\$ 254,579	\$ 1,303,132	\$ 6,548,191
Avg monthly	\$ 263,458	\$ 75,478	\$ 76,937	\$ 21,215	\$ 108,594	\$ 545,683

Initial Fixed Costs

	Sheriff - Police Svcs.	District Attorney Criminal Div.	Probation Department	Public Defender	Sheriff - Jail	Total
FY2016-17	\$ 352,000	\$ -	\$ -	\$ -	\$ -	\$ 352,000
FY2017-18	\$ 366,608	\$ -	\$ -	\$ -	\$ -	\$ 366,608
Subtotal	\$ 366,608	\$ -	\$ -	\$ -	\$ -	\$ 366,608

Butte County Fire Serv Within Lake Oroville Project Primary Impact Area

Exhibit 4 - Update June 2017

STATION	STATION NUMBER	FY 15-16 Actual Costs	DWR Annual Cost	
Biggs	73	\$ 1,271,079	\$ 108,295.89	8.52% Directly responds to Project
Richvale	71	\$ 1,271,079	\$ 108,295.89	8.52% Directly responds to Project
Oroville	63	\$ 1,271,079	\$ 108,295.89	8.52% Directly responds to Project
Kelly Ridge	64	\$ 1,271,079	\$ 108,295.89	8.52% Directly responds to Project
Upper Ridge	33	\$ 1,271,079	\$ 31,141.42	2.45% Partially responds w/in Primary Impact Area
Durham	45	\$ 1,271,079	\$ 31,141.42	2.45% Partially responds w/in Primary Impact Area
Palermo	72	\$ 1,271,079	\$ 31,141.42	2.45% Partially responds w/in Primary Impact Area
Gridley	74	\$ 1,271,079	\$ 31,141.42	2.45% Partially responds w/in Primary Impact Area
Butte College	25	\$ 80,099	\$ 6,824.42	8.52% Directly responds to Project
Upper Ridge	31	\$ 80,099	\$ 1,962.42	2.45% Partially responds w/in Primary Impact Area
Concow	37	\$ 80,099	\$ 6,824.42	8.52% Directly responds to Project
Concow Lake	38	\$ 80,099	\$ 1,962.42	2.45% Partially responds w/in Primary Impact Area
Feather Falls	52	\$ 80,099	\$ 1,962.42	2.45% Partially responds w/in Primary Impact Area
Brush Creek	60	\$ 80,099	\$ 1,962.42	2.45% Partially responds w/in Primary Impact Area
Berry Creek	61	\$ 80,099	\$ 6,824.42	8.52% Directly responds to Project
Wyandotte	66	\$ 80,099	\$ 6,824.42	8.52% Directly responds to Project
Cherokee	67	\$ 80,099	\$ 6,824.42	8.52% Directly responds to Project
Paradise	35	\$ 193,515	\$ 4,741.12	2.45% Partially responds w/in Primary Impact Area
Jarbo Gap	36	\$ 193,515	\$ 4,741.12	2.45% Partially responds w/in Primary Impact Area
Robinson Mill	54	\$ 193,515	\$ 4,741.12	2.45% Partially responds w/in Primary Impact Area
Harts Mill	62	\$ 193,515	\$ 4,741.12	2.45% Partially responds w/in Primary Impact Area
Feather Falls	51	N/A	N/A	N/A Not a County station
Subtotal		\$ 11,663,577	\$ 618,685	

- Butte County Fire Stations
- Volunteer Stations
- CDF/Butte County "Amador" Stations
- CAL FIRE Only - closed in Winter

Source: Butte County FY 2016-17 Budget

Butte County
Annual Costs for Fire and Rescue Services - Staffing, Operations, Engines - 50-year period

225,411 UPDATED
 11,334 NOT UPDATED
 5.03% NOT UPDATED
 67,930 NOT UPDATED
 16.68% NOT UPDATED
 4.15% UPDATED

	Annual Staffing/ Operations	Engine Replacement
FY 2015-16	\$ 618,685	\$ 473,000
Year 1	\$ 644,361	\$ 492,630
Year 2	\$ 671,102	\$ 513,074
Year 3	\$ 698,953	\$ 534,366
Year 4	\$ 727,959	\$ 556,542
Year 5	\$ 758,169	\$ 579,639
Year 6	\$ 789,634	\$ 603,694
Year 7	\$ 822,403	\$ 628,747
Year 8	\$ 856,533	\$ 654,840
Year 9	\$ 892,079	\$ 682,016
Year 10	\$ 929,100	\$ 710,320
Year 11	\$ 967,658	\$ 739,798
Year 12	\$ 1,007,816	\$ 770,500
Year 13	\$ 1,049,640	\$ 802,475
Year 14	\$ 1,093,200	\$ 835,778
Year 15	\$ 1,138,568	\$ 870,463
Year 16	\$ 1,185,819	\$ 906,587
Year 17	\$ 1,235,030	\$ 944,210
Year 18	\$ 1,286,284	\$ 983,395
Year 19	\$ 1,339,665	\$ 1,024,206
Year 20	\$ 1,395,261	\$ 1,066,711
Year 21	\$ 1,453,164	\$ 1,110,979
Year 22	\$ 1,513,471	\$ 1,157,085
Year 23	\$ 1,576,280	\$ 1,205,104
Year 24	\$ 1,641,695	\$ 1,255,116
Year 25	\$ 1,709,826	\$ 1,307,203
Year 26	\$ 1,780,783	\$ 1,361,452
Year 27	\$ 1,854,686	\$ 1,417,952
Year 28	\$ 1,931,655	\$ 1,476,797
Year 29	\$ 2,011,819	\$ 1,538,084
Year 30	\$ 2,095,309	\$ 1,601,915
Year 31	\$ 2,182,265	\$ 1,668,394
Year 32	\$ 2,272,829	\$ 1,737,632
Year 33	\$ 2,367,151	\$ 1,809,744
Year 34	\$ 2,465,388	\$ 1,884,849
Year 35	\$ 2,567,701	\$ 1,963,070
Year 36	\$ 2,674,261	\$ 2,044,537
Year 37	\$ 2,785,243	\$ 2,129,385
Year 38	\$ 2,900,831	\$ 2,217,755
Year 39	\$ 3,021,215	\$ 2,309,792
Year 40	\$ 3,146,595	\$ 2,405,648
Year 41	\$ 3,277,179	\$ 2,505,483
Year 42	\$ 3,413,182	\$ 2,609,460
Year 43	\$ 3,554,829	\$ 2,717,753
Year 44	\$ 3,702,355	\$ 2,830,539
Year 45	\$ 3,856,002	\$ 2,948,007
Year 46	\$ 4,016,026	\$ 3,070,349
Year 47	\$ 4,182,691	\$ 3,197,769
Year 48	\$ 4,356,273	\$ 3,330,476
Year 49	\$ 4,537,058	\$ 3,468,691
Year 50	\$ 4,725,346	\$ 3,612,641
Total	\$ 103,062,344	
Avg Annual Cost	\$ 2,032,961	
Avg Monthly Cost	\$ 169,413	

Source:

15-16 Actuals

Project Related Costs for Replacement Fire Stations in Project Area

The eight Butte County career stations that respond to the Project Area will all have to be replaced once during the 50-year period.

Station	Station #	Replacement Cost (2017\$)	Project Portion	Project Cost	
Biggs	73	\$ 1,500,000	8.52%	\$ 127,800	Directly responds to Project
Richvale	71	\$ 1,500,000	8.52%	\$ 127,800	Directly responds to Project
Oroville	63	\$ 1,500,000	8.52%	\$ 127,800	Directly responds to Project
Kelly Ridge	64	\$ 1,500,000	8.52%	\$ 127,800	Directly responds to Project
Upper Ridge	33	\$ 1,500,000	2.45%	\$ 36,750	Partially responds w/in Primary Impact Area
Durham	45	\$ 1,500,000	2.45%	\$ 36,750	Partially responds w/in Primary Impact Area
Palermo	72	\$ 1,500,000	2.45%	\$ 36,750	Partially responds w/in Primary Impact Area
Gridley	74	\$ 1,500,000	2.45%	\$ 36,750	Partially responds w/in Primary Impact Area
TOTAL		\$ 12,000,000		\$ 658,200	

The \$1,500,000 cost to build a fire station is based upon the County's actual cost to build Station 55 - Bangor in 2011 multiplied by the Construction Cost Index (CCI) for San Francisco change from 2011-2017.

Construction Cost Index (CCI)	
June 2017	11722.16
June 2011	10167.29
	<u>1554.87</u>
1554.87 / 10167.29 =	15.29%
2011 Construction cost	\$ 1,291,493
2017 Est. Cost	\$ 1,488,999.29

Fire Vehicle Replacement Needs related to Lake Oroville Primary Impact Area over a 50-year period

Assumes replacement every 12 years.

4.15% 50-year average National Consumer Price Index

Station	Vehicle #	Vehicle Type	Replacement Year	Replacement Cost	Portion Related to Project	Licensee Mitigation
Biggs	E73	Engine	2026	\$ 710,320	8.52%	\$ 60,519
			2038	\$ 1,737,632	8.52%	\$ 148,046
			2050	\$ 2,830,539	8.52%	\$ 241,162
			2062	\$ 3,070,349	8.52%	\$ 261,594
Richvale	E71	Engine	2030	\$ 835,778	8.52%	\$ 71,208
			2042	\$ 1,361,452	8.52%	\$ 115,996
			2054	\$ 2,217,755	8.52%	\$ 188,953
Oroville	E63	Engine	2030	\$ 835,778	8.52%	\$ 71,208
			2042	\$ 1,361,452	8.52%	\$ 115,996
			2054	\$ 2,217,755	8.52%	\$ 188,953
Kelly Ridge	E64	Engine	2022	\$ 603,694	8.52%	\$ 51,435
			2034	\$ 983,395	8.52%	\$ 83,785
			2046	\$ 1,601,915	8.52%	\$ 136,483
			2058	\$ 2,609,460	8.52%	\$ 222,326
Upper Ridge	E33	Engine	2026	\$ 710,320	2.45%	\$ 17,403
			2038	\$ 1,737,632	2.45%	\$ 42,572
			2050	\$ 2,830,539	2.45%	\$ 69,348
			2062	\$ 3,070,349	2.45%	\$ 75,224
Durham	E45	Engine	2030	\$ 835,778	2.45%	\$ 20,477
			2042	\$ 1,361,452	2.45%	\$ 33,356
			2054	\$ 2,217,755	2.45%	\$ 54,335
Palermo	E72	Engine	2030	\$ 835,778	2.45%	\$ 20,477
			2042	\$ 1,361,452	2.45%	\$ 33,356
			2054	\$ 2,217,755	2.45%	\$ 54,335
Gridley	E74	Engine	2022	\$ 603,694	2.45%	\$ 14,791
			2034	\$ 983,395	2.45%	\$ 24,093
			2046	\$ 1,601,915	2.45%	\$ 39,247
			2058	\$ 2,609,460	2.45%	\$ 63,932
Subtotal				\$ 45,954,549		\$ 358,397

**Butte County
Communication System Upgrade Costs Associated with Project**

<u>Motorola Project</u>	<u>Actual Cost</u>
Replacement System – One-time Costs	\$7,166,380
Oroville Facilities Project portion (8.52%)	\$610,576 (one-time)
<ul style="list-style-type: none"> • 700 MHz to meet FCC requirements. • Eight (8) fixed-radio sites located within County borders – provides additional talk groups, coverage, and capacity • New microwave backhaul network to interconnect fixed-radio sites. • Redundancy. • New system equipment including fixed-site radio equipment, 9-1-1 Dispatch consoles, and approximately 1,000 handheld/mobile radios. 	
On-going Maintenance (4-year contract)	\$594,217 or \$148,555/year
Oroville Facilities Project portion (8.52%)	\$12,657/year

**Future-Present Worth of 50 Year Maintenance Cycle
(Including Construction & Engineering)**

SURFACE TREATMENT COSTS TRANSLATED INTO PRESENT WORTH

Phase 1- Chip Seal	Phase 2- Cape Seal	Phase 3- AC Overlay	Phase 1- Chip Seal	Phase 2- Cape Seal	Phase 3- AC Overlay	Total Cost
Year 0	Year 7	Year 14	Year 25	Year 32	Year 39	
\$23,339,899	\$29,170,642	\$52,452,439	\$23,339,899	\$29,170,642	\$52,452,439	\$209,925,960
7 year treatment life	7 year treatment life	11 year treatment life	7 year treatment life	7 year treatment life	11 year treatment life	
Years 0-6	Years 7-13	Years 14-24	Years 25-31	Years 32-38	Years 39-50	

Total Present Cost for 50-year Cycle	Average Annual Cost
\$209,925,960	\$4,198,519
\$291,587,158	\$5,831,743

Average Length of Road (mi)	Average Annual Cost Per Mile
293.56	\$14,302
293.56	\$19,866

Apply Change in CCI 2006-2017 (38.9%)

Butte County Property Tax Estimate - Lake Oroville Facilities - 2017 Update
2006 Estimates by FMY

Year	Annual Property Tax - Alternate Use of Property	Annual Property Tax - Big Bend Hydro and Alternate Use of Excess Property	Investor Owned Utility
	(if land developed over time in the same fashion as the County as a whole)	(private hydro plant/other land developed in same fashion as the County as a whole)	(discounted cash flow valuation)
2006 (FMY Study)	\$2,985,489	\$3,265,488	\$6,870,535
2007	\$3,038,870	\$3,323,875	\$6,993,380
2008	\$3,093,205	\$3,383,306	\$7,118,422
2009	\$3,148,511	\$3,443,799	\$7,245,699
2010	\$3,204,806	\$3,505,374	\$7,375,252
2011	\$3,262,108	\$3,568,051	\$7,507,122
2012	\$3,320,435	\$3,631,847	\$7,641,349
2013	\$3,379,804	\$3,696,785	\$7,777,976
2014	\$3,440,235	\$3,762,883	\$7,917,047
2015	\$3,501,747	\$3,830,164	\$8,058,603
2016	\$3,564,358	\$3,898,647	\$8,202,691
2017	\$3,628,088	\$3,968,355	\$8,349,355
2018	\$3,692,959	\$4,039,309	\$8,498,642
2019	\$3,758,989	\$4,111,532	\$8,650,598
2020	\$3,826,200	\$4,185,046	\$8,805,270
2021	\$3,894,612	\$4,259,875	\$8,962,709
2022	\$3,964,248	\$4,336,041	\$9,122,962
2023	\$4,035,128	\$4,413,570	\$9,286,080
2024	\$4,107,276	\$4,492,484	\$9,452,115
2025	\$4,180,715	\$4,572,810	\$9,621,119
2026	\$4,255,466	\$4,654,572	\$9,793,145
2027	\$4,331,553	\$4,737,795	\$9,968,246
2028	\$4,409,002	\$4,822,507	\$10,146,479
2029	\$4,487,835	\$4,908,734	\$10,327,898
2030	\$4,568,077	\$4,996,502	\$10,512,560
2031	\$4,649,754	\$5,085,839	\$10,700,525
2032	\$4,732,892	\$5,176,774	\$10,891,850
2033	\$4,817,516	\$5,269,335	\$11,086,597
2034	\$4,903,653	\$5,363,550	\$11,284,825
2035	\$4,991,331	\$5,459,451	\$11,486,598
2036	\$5,080,575	\$5,557,066	\$11,691,978
2037	\$5,171,416	\$5,656,426	\$11,901,031
2038	\$5,263,881	\$5,757,563	\$12,113,821
2039	\$5,357,999	\$5,860,508	\$12,330,416
2040	\$5,453,800	\$5,965,294	\$12,550,884
2041	\$5,551,314	\$6,071,953	\$12,775,294
2042	\$5,650,572	\$6,180,520	\$13,003,716
2043	\$5,751,604	\$6,291,028	\$13,236,222
2044	\$5,854,443	\$6,403,511	\$13,472,886
2045	\$5,959,120	\$6,518,006	\$13,713,781
2046	\$6,065,669	\$6,634,548	\$13,958,984
2047	\$6,174,123	\$6,753,174	\$14,208,570
2048	\$6,284,517	\$6,873,920	\$14,462,620
2049	\$6,396,884	\$6,996,826	\$14,721,211
2050	\$6,511,260	\$7,121,929	\$14,984,427
2051	\$6,627,681	\$7,249,269	\$15,252,348
2052	\$6,746,184	\$7,378,886	\$15,525,060
2053	\$6,866,806	\$7,510,821	\$15,802,648
2054	\$6,989,585	\$7,645,114	\$16,085,199
2055	\$7,114,558	\$7,781,809	\$16,372,803
2056	\$7,241,767	\$7,920,948	\$16,665,549
2057	\$7,371,250	\$8,062,574	\$16,963,529
2058	\$7,503,047	\$8,206,733	\$17,266,836
2059	\$7,637,202	\$8,353,470	\$17,575,567
2060	\$7,773,755	\$8,502,830	\$17,889,819
2061	\$7,912,750	\$8,654,860	\$18,209,689
2062	\$8,054,230	\$8,809,609	\$18,535,278
2063	\$8,198,239	\$8,967,125	\$18,866,689
2064	\$8,344,824	\$9,127,457	\$19,204,025
2065	\$8,494,029	\$9,290,656	\$19,547,393
2066	\$8,645,903	\$9,456,773	\$19,896,900
2067	\$8,800,491	\$9,625,860	\$20,252,657
50-year average	\$5,844,799	\$6,392,964	\$13,450,694
2017-2067 (Annual)			
Monthly	\$487,067	\$532,747	\$1,120,891

40-year inflation factor = 1.788% - SOURCE: Board of Equalization - letter to Assessors dated 12/13/16



APPENDIX C

USFWS Information for Planning and Consultation (IPaC) Resource List

Oroville Facilities Project (FERC No. 2100)

Retrieved October 12, 2017

IPaC Information for Planning and Consultation U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as trust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Butte and Yuba counties, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

**2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846**

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Birds

NAME

STATUS

Yellow-billed Cuckoo *Coccyzus americanus***Threatened**

There is **proposed** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3911>

Reptiles

NAME

STATUS

Giant Garter Snake *Thamnophis gigas***Threatened**

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4482>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii***Threatened**

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

Sierra Nevada Yellow-legged Frog *Rana sierrae***Endangered**

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/9529>

Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus***Threatened**

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/321>

Steelhead *Oncorhynchus (=Salmo) mykiss***Threatened**

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/1007>

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Butte County Meadowfoam <i>Limnanthes floccosa</i> ssp. <i>californica</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/4223	Endangered
Greene's Tuctoria <i>Tuctoria greenei</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1573	Endangered

Slender Orcutt Grass *Orcuttia tenuis***Threatened**

There is final critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1063>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Butte County Meadowfoam <i>Limnanthes floccosa</i> ssp. californica https://ecos.fws.gov/ecp/species/4223#crithab	Final
California Red-legged Frog <i>Rana draytonii</i> https://ecos.fws.gov/ecp/species/2891#crithab	Final
Chinook Salmon <i>Oncorhynchus</i> (=Salmo) tshawytscha California Coastal ESU For information on why this critical habitat appears for your project, even though Chinook Salmon is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/8091#crithab	Final
Chinook Salmon <i>Oncorhynchus</i> (=Salmo) tshawytscha Central Valley spring-run ESU For information on why this critical habitat appears for your project, even though Chinook Salmon is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/8091#crithab	Final
Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Southern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final
Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final

Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss California Central Valley DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final
Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss South-Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final
Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Northern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> https://ecos.fws.gov/ecp/species/2246#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are [USFWS Birds of Conservation Concern](#) that might be affected by

activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the [E-bird data mapping tool](#) (year-round bird sightings by birders and the general public) and [Breeding Bird Survey](#) (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the [E-bird Explore Data Tool](#).

NAME	BREEDING SEASON
Black Rail <i>Laterallus jamaicensis</i> https://ecos.fws.gov/ecp/species/7717	Breeds Mar 1 to Sep 15
Black Swift <i>Cypseloides niger</i> https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Burrowing Owl <i>Athene cunicularia</i> https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
California Spotted Owl <i>Strix occidentalis occidentalis</i> https://ecos.fws.gov/ecp/species/7266	Breeds Mar 10 to Jun 15
California Thrasher <i>Toxostoma redivivum</i>	Breeds Jan 1 to Jul 31
Calliope Hummingbird <i>Stellula calliope</i> https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Cassin's Finch <i>Carpodacus cassinii</i> https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Costa's Hummingbird <i>Calypte costae</i> https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Lawrence's Goldfinch <i>Carduelis lawrencei</i> https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker <i>Melanerpes lewis</i> https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30

Long-billed Curlew <i>Numenius americanus</i> https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit <i>Limosa fedoa</i> https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker <i>Picoides nuttallii</i> https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher <i>Contopus cooperi</i> https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird <i>selasphorus rufus</i> https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Snowy Plover <i>Charadrius alexandrinus</i>	Breeds Mar 5 to Sep 15
Song Sparrow <i>Melospiza melodia pusillula</i> https://ecos.fws.gov/ecp/species/3509	Breeds Feb 20 to Sep 5
Spotted Towhee <i>Pipilo maculatus clementae</i> https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Tricolored Blackbird <i>Agelaius tricolor</i> https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Whimbrel <i>Numenius phaeopus</i> https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
White Headed Woodpecker <i>Picoides albolarvatus</i> https://ecos.fws.gov/ecp/species/9411	Breeds May 1 to Aug 15
Williamson's Sapsucker <i>Sphyrapicus thyroideus</i> https://ecos.fws.gov/ecp/species/8832	Breeds May 1 to Jul 31

Willow Flycatcher *Empidonax traillii*
<https://ecos.fws.gov/ecp/species/3482>

Breeds May 20 to Aug 31

Yellow-billed Magpie *Pica nuttalli*
<https://ecos.fws.gov/ecp/species/9726>

Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (☺)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (☺)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

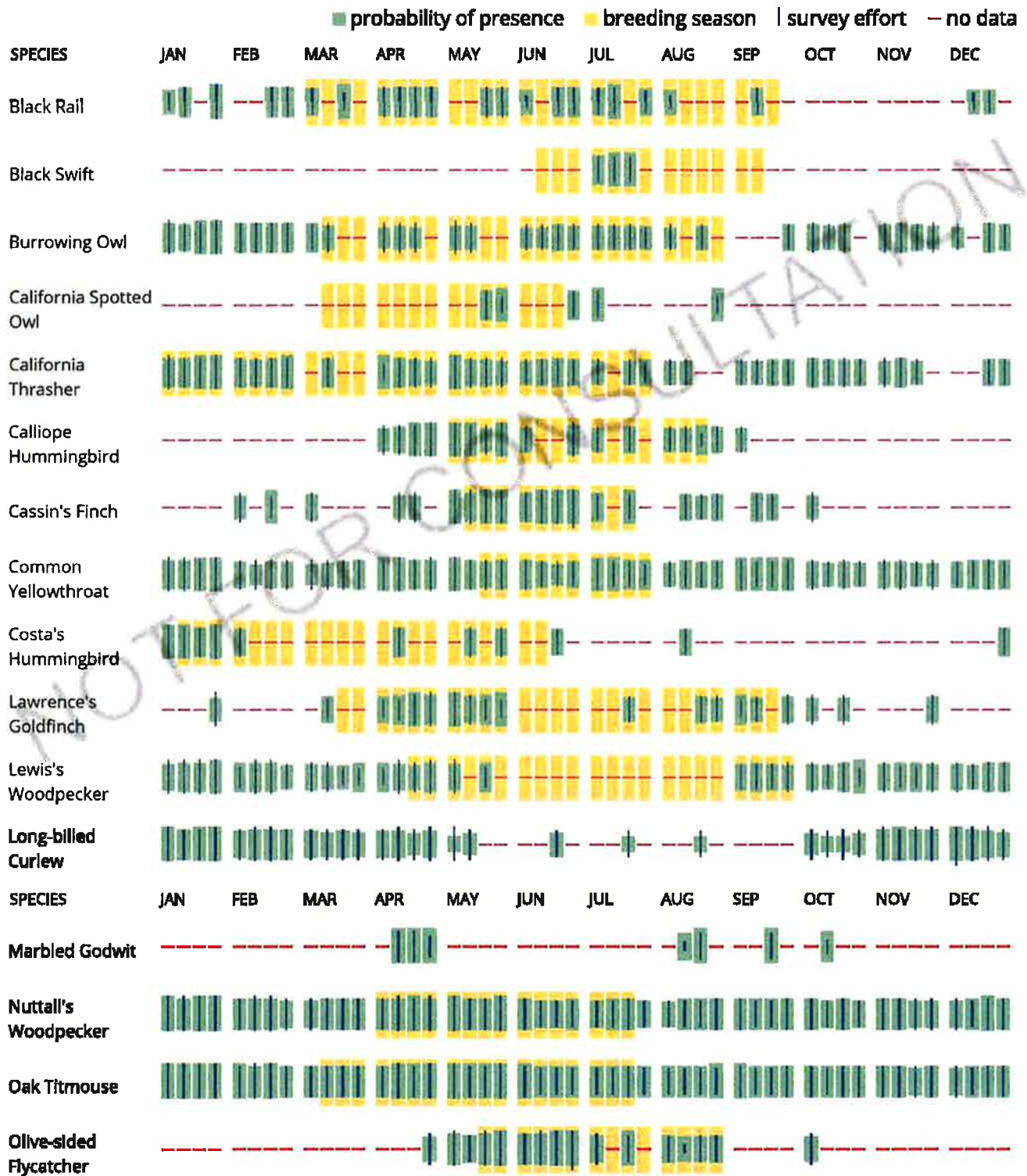
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

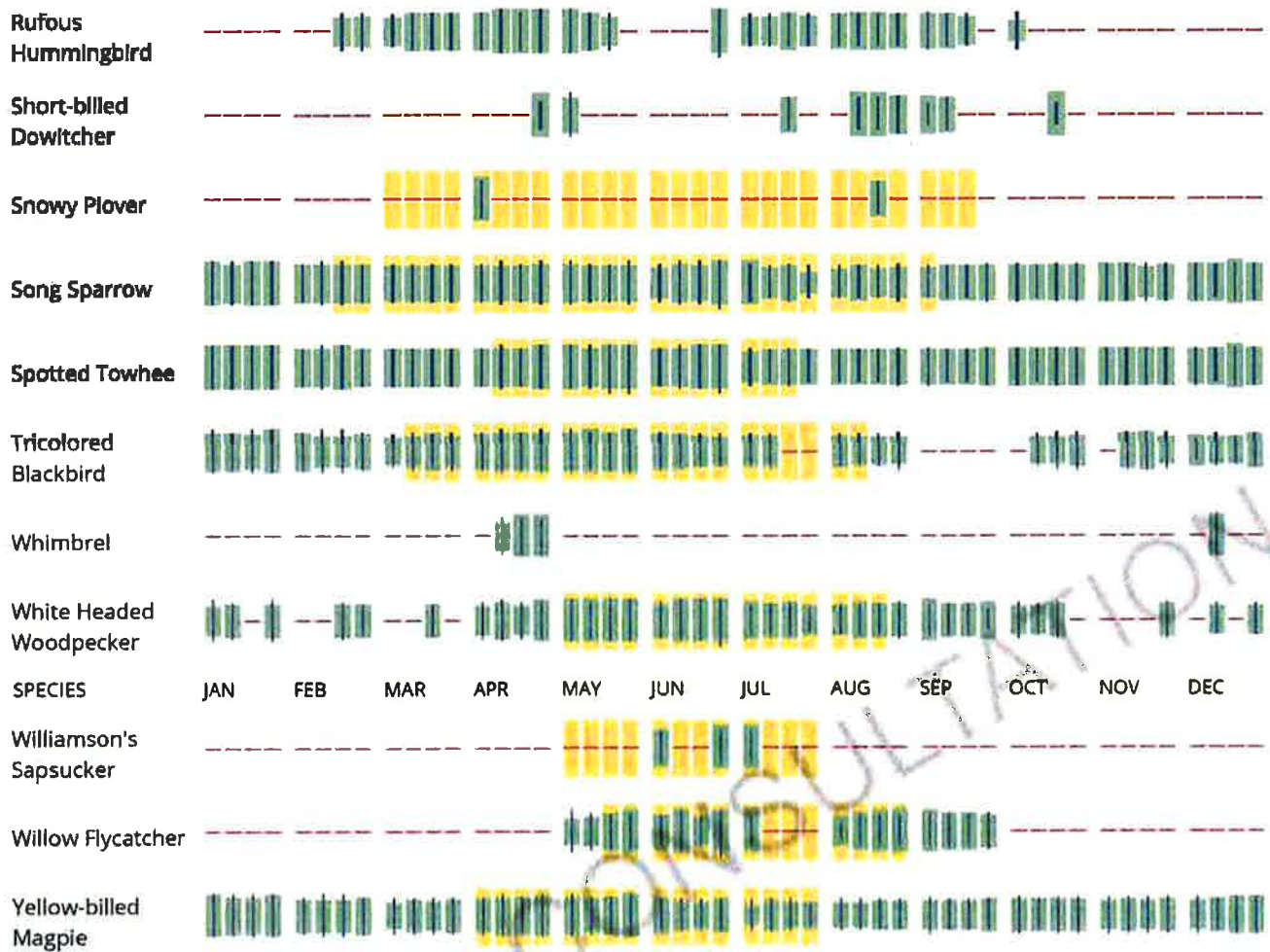
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in [Birds of North America \(BNA\) Online](#) under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a [subscription](#). [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the [Endangered Species Act \(ESA\)](#).

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#). The AKN list represents all birds reported to be occurring at some level throughout the year in the

counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1Ei](#)

[PEMCh](#)

[PEM1H](#)

[PEM1F](#)

[PEMC](#)

[PEM1C](#)

[PEMA](#)

[PEM1A](#)

[PEMKAx](#)

[PEM1Ci](#)

[PEMKCx](#)

[PEMCx](#)

[PEM1Ah](#)

[PEM1Ch](#)

[PEM1Fh](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PSSC](#)

[PFOA](#)

[PFOC](#)

[PFOJ](#)

[PSSCx](#)

[PSS/EM1C](#)

[PSS1A](#)

[PSS1C](#)

[PSSA](#)

[PFO/USC](#)

[PFOAx](#)

[PFO/SSC](#)

[PFOCx](#)

FRESHWATER POND

[PUBFx](#)

[PUBK](#)

[PABFx](#)
[PUSC](#)
[PUBFh](#)
[PUBHh](#)
[PABKx](#)
[PUBKGx](#)
[PUSA](#)
[PUBH](#)
[PABKx](#)
[PUBKx](#)
[PUBF](#)

LAKE

[L1UBK](#)
[L2UBHh](#)
[L2UBH](#)
[L2UBHx](#)
[L2UBFx](#)
[L2USC](#)

OTHER

[PUSCx](#)
[PUSCh](#)

RIVERINE

[R2UBH](#)
[R3UBH](#)
[R2UBHx](#)
[R2USC](#)
[R2USA](#)
[R2UBKHx](#)
[R4SBC](#)
[R2USJ](#)
[R2ABKHx](#)
[R4SBCx](#)

A full description for each wetland code can be found at the National Wetlands Inventory website: <https://ecos.fws.gov/ipac/wetlands/decoder>

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



APPENDIX D

Date of Listing of Threatened and Endangered Species and Critical Habitats Under the Federal Endangered Species List

Date of Listing of Species and Critical Habitat
Federal Endangered Species Act

Common Name	Scientific Name	Federal Status	Year Species Designated	Critical Habitat in Project Area	Year Critical Habitat Designated	Addressed in 2007 EIS as Federal T/E	DWR Survey Years
FISH SPECIES							
Central Valley Spring-Run Chinook Salmon ESU	<i>Oncorhynchus tshawytscha</i>	Threatened	2005	Yes	2005	Yes	2002-2005
California Coastal Chinook Salmon ESU	<i>Oncorhynchus tshawytscha</i>	Threatened	2005	Yes	2005	No	2002-2005
Central Valley Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	2006	Yes	2005	Yes	Prior to 2005
Central California Coast DPS Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	2006	Yes	2005	No	Prior to 2005
South-Central California Coast DPS Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	2006	Yes	2005	No	Prior to 2005
Southern California DPS Steelhead	<i>Oncorhynchus mykiss</i>	Endangered	2006	Yes	2005	No	Prior to 2005
Northern California DPS Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	2006	Yes	2005	No	Prior to 2005
Southern DPS North American Green Sturgeon	<i>Acipenser medirostris</i>	Threatened	2006	N/A	N/A	Yes	2004
Delta Smelt	<i>Hypomesus transpacificus</i>	Threatened	1993	No	1994	Yes	N/A
WILDLIFE SPECIES							
Vernal Pool Tadpole Shrimp	<i>Lepidurus packardii</i>	Endangered	1994	Yes	2002	Yes	2003
Conservancy Fairy Shrimp	<i>Branchinecta conservatio</i>	Endangered	1994	No	2005	Yes	2003
Vernal Pool Fairy Shrimp	<i>Branchinecta lynchi</i>	Threatened	1994	No	2005	Yes	2003
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Delisted	2007	No	N/A	Yes	2003
Giant Garter Snake	<i>Thamnophis gigas</i>	Threatened	1993	N/A	N/A	Yes	2002-2004
California Red-Legged Frog	<i>Rana draytonii</i>	Threatened	1996	Yes	2010	Yes	2002
Valley Elderberry Longhorn Beetle	<i>Desmocerus californicus</i>	Threatened	1980	No	1980	Yes	2002
Yellow-Billed Cuckoo	<i>Coccyzus americanus</i>	Threatened	2014	No	2014	No	2002
Sierra Nevada Yellow-Legged Frog	<i>Rana sierrae</i>	Endangered	2014	No	2016	No	2002-2004
PLANT SPECIES							
Butte County Meadofoam	<i>Limnanthes floccosa ssp californica</i>	Endangered	1992	Yes	2005	Yes	2002-2004
Hairy Orcutt Grass	<i>Orcuttia pilosa</i>	Endangered	1997	No	2005	Yes	2002-2004
Hartweg's Golden Sunburst	<i>Pseudobahia bahiifolia</i>	Endangered	1997	No	N/A	Yes	2002-2004
Greene's Tuctoria	<i>Tuctoria greenei</i>	Endangered	1997	No	2005	Yes	2002-2004
Hoover's Spurge	<i>Chamaesyce hooveri</i>	Threatened	1997	No	2005	Yes	2002-2004
Slender Orcutt Grass	<i>Orcuttia tenuis</i>	Threatened	1997	No	2005	Yes	2002-2004
Layne's Ragwort	<i>Senecio layneae</i>	Threatened	1996	No	N/A	Yes	2002-2004

Notes:

1. Current species list developed from October 12, 2017, USFWS IPaC Online Tool for approximate FERC project area; additional species might be listed if the entire FERC boundary was used in the IPaC Online Tool.
2. Additional species information obtained from December 2016 NOAA NMFS response to FERC.

**OROVILLE CITY COUNCIL
STAFF REPORT**

TO: MAYOR AND CITY COUNCIL MEMBERS

**FROM: MIKE MASSARO, PE, CONTRACT CITY ENGINEER
PUBLIC WORKS DEPARTMENT**

**RE: CANYON HIGHLANDS AND ORO-QUINCY INTERSECTION SAFETY –
POTENTIAL REALIGNMENT**

DATE: NOVEMBER 21, 2017

SUMMARY

Based on the Technical Memorandum provided, staff is seeking direction from City Council on whether or not to proceed to a project estimate phase. If approved, Bennett Engineering will provide a scope and fee for re-design of this intersection to improve safety.

If approved for further study, the City Engineer will return to a future council meeting with a scope and fee for design and a conceptual level construction cost estimate to evaluate the project's fiscal impact relative to Local Transportation Fund budget and for approval to proceed.

DISCUSSION

On October 10, 2017, the City Administrator asked the Contract City Engineer to investigate the intersection of Canyon Highlands Drive, Oro-Quincy Highway, and Eucalyptus Avenue to improve safety due to impaired sight lines and a past fatality at this intersection.

The City Engineer asked Bennett Engineering Services to look at options for how this intersection might be improved. Bennett's Project Manager, Jorge Renteria, PE, provided Technical Memorandum (TM) detailing a preliminary option for improvement.

The TM suggests a realignment of Canyon Highlands as it intersects Oro-Quincy Hwy and the incorporation of one-way corridors. The TM also suggests additional delineation and signage.

FISCAL IMPACT

Fiscal impact is to be determined. Intersection realignment will require field survey and mapping to support a re-design. Construction will require temporary traffic control and flaggers, re-striping, and signage installation.

RECOMMENDATIONS

Provide direction, as necessary.

ATTACHMENTS

A – Technical Memorandum

TECHNICAL MEMORANDUM

TO: Mike Massaro, City Engineer, City of Oroville

FROM: Jorge Renteria P.E.

DATE: 10/31/2017

SUBJECT: Reconfiguration of Striping at Intersection

PROJECT: Canyon Highlands Dr. and Oro-Quincy Hwy Re-design

BEN|EN
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On Tuesday October 10th, the City of Oroville instructed Bennett Engineering services to investigate the configuration of the intersection between Canyon Highlands Drive and Oroville–Quincy Hwy. The current configuration has led to concerns about safety and was the scene of a recent fatal accident.

Background:

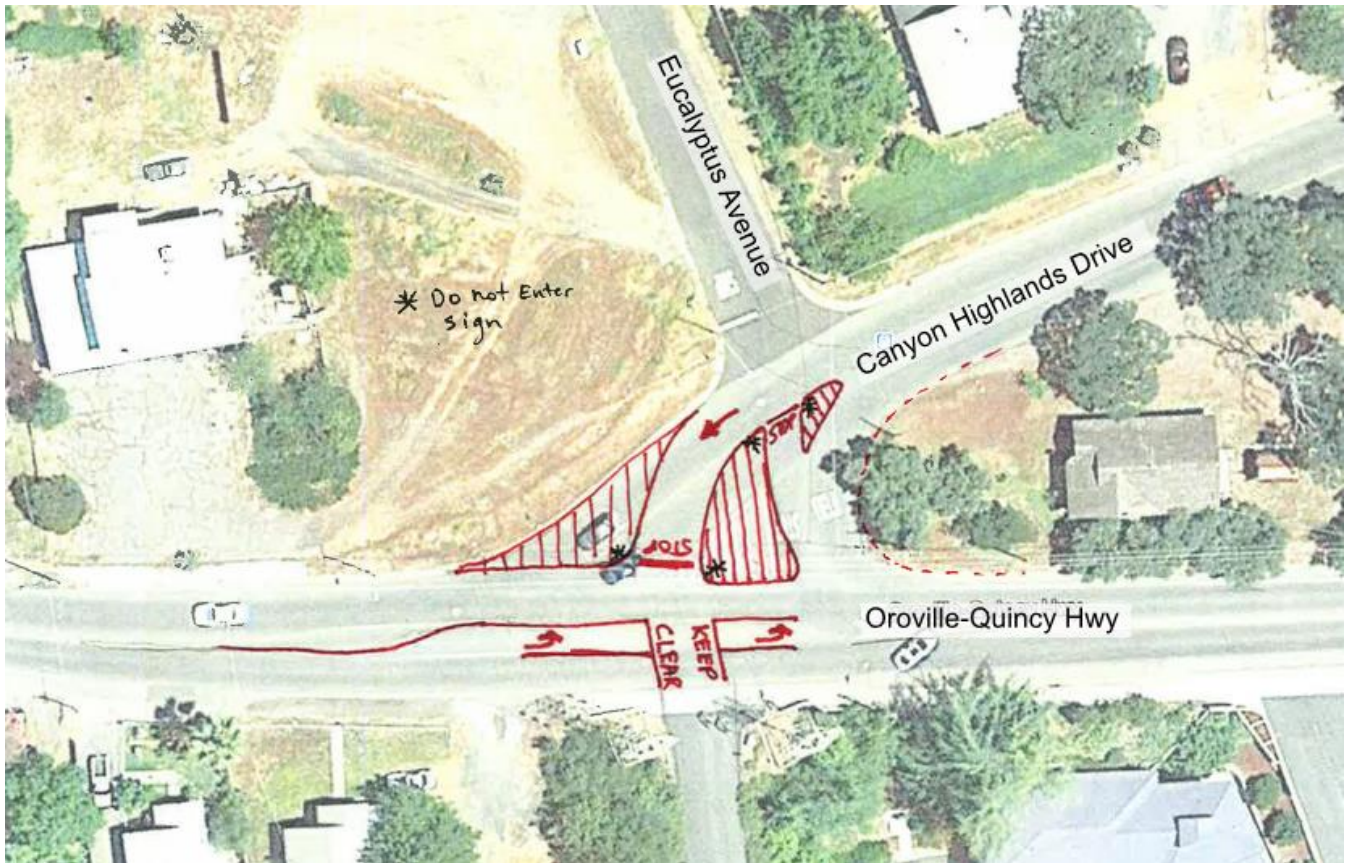
The current configuration of this intersection has stopping-sight distance issues due to the acute angle at which Canyon Highlands Drive connect to Oroville-Quincy Hwy. A vehicle making a left onto Oro-Quincy from Eucalyptus Avenue (T1) might not have enough clear sight distance to spot vehicles traveling westbound on Oro-Quincy Hwy. A vehicle making a right turn onto Eucalyptus Avenue from Oroville-Quincy Hwy (T2) could have a potential conflict with a vehicle turning left onto Canyon Highlands Drive from Oroville-Quincy Hwy. A vehicle turning from Oroville-Quincy Hwy (T2) to Eucalyptus could have a conflict with vehicles transitioning onto Canyon Highlands eastbound from Oroville-Quincy (T2) at speed.

Current Configuration:



Proposed Design Considerations:

Bennett Engineering is advising the City to potentially reconfigure Canyon Highlands Drive @ Oroville-Quincy Hwy intersection with a striping pattern similar to what is shown below.



This configuration minimizes conflict points between vehicles and allows for all turning movements to take place. We recommend the placement of Caltrans Type Q (CA) Surface Mounted Object Marker (per A73A of standard plans) around the perimeter of the marked islands, along with thermoplastic pavement markings in a diagonal pattern to signify areas where traffic is not allowed. Also, the installation of “Do Not Enter” (R5-1) signs mounted on breakaway street sign posts at the locations shown above.

Please note that if the City decides to pursue this reconfiguration, a topographic survey of the area would be required to insure that the existing topography can accommodate the reconfiguration. The new striping plan would have to meet design speed criteria and turning movements for large trucks would need to be further investigated.

As local traffic become accustomed to the new striping and delineations, the City may pursue funding from the Highway Safety Improvement Plan (HSIP) to add hardscape elements (curb, gutter, and sidewalks) for improved traffic control and pedestrian safety.