



AGENDA  
REGULAR MEETING  
OF THE BOARD OF HARBOR COMMISSIONERS  
MOSS LANDING HARBOR DISTRICT  
7881 Sandholdt Road  
MOSS LANDING, CA 95039  
April 22, 2015, 7 P.M.

**A. CLOSED SESSION**

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A closed session will be held immediately prior to the public open meeting, and will begin at **5:00 p.m.** The public open meeting will begin at **7:00 p.m., or as soon thereafter as the Closed Session is concluded**, and any action taken at the Closed Session will be reported out at that time.

1. Confer with real property negotiators pursuant to Government Code §54956.8 regarding Moss Landing Commercial Park (formerly National Refractories). Negotiating parties: General Manager and District Counsel.
2. Confer with real property negotiators pursuant to Government Code §54956.8 regarding APN 413.022.003 (NH Restaurant and Visitor Dock). Negotiating parties: General Manager and District Counsel.
3. Confer with real property negotiators pursuant to Government Code §54956.8 regarding parcel(s) currently used for E & F Dock access easements (MBARI). Negotiating parties: General Manager and District Counsel.
4. Confer with District Counsel regarding one matter of potential litigation pursuant to Government Code §54956.9D2.

**B. OPEN SESSION CALL TO ORDER - PLEDGE OF ALLEGIANCE**

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**Roll Call**

Russ Jeffries – President  
Tony Leonardini – Vice President  
Vince Ferrante – Secretary  
Frank Gomes, Jr. – Commissioner  
Andrew Amaral - Commissioner

Linda G. McIntyre – General Manager  
Mike Rodriguez – District Counsel  
Tom Razzeca – Assistant General Manager  
Marie Della Maggiore – Executive Assistant

**C. PRESIDENT'S REMARKS**

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The President will use this opportunity to inform the public of issues affecting the District and other items of a general nature not otherwise provided for on this agenda.

**D. PUBLIC COMMENTS**

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Members of the general public may address the Board of Harbor Commissioners regarding any item that is not on the Agenda. The President may limit the total amount of time of testimony on particular issues and for each individual speaker.

**E. MANAGER'S REPORTS**

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The General Manager will make oral or written presentations on the below listed subjects. The Board may take such action as deemed necessary. The Manager may present additional reports; however, the Board may not take action on any such item not on this Agenda.

1. Projects Status/Update

2. Community Relations; Requests/Issues
3. Summary of Permits Issued
4. Meeting Announcements
5. Assigned Liveboard Report
6. Slip Income Report
7. Incident Report

#### **F. CONSENT CALENDAR**

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All matters listed on the Consent Calendar are considered to be routine by the Board of Harbor Commissioners and will be enacted by one motion at the appropriate time. There will be no separate discussion on these items. If discussion is desired, that item will be removed from the Consent Calendar and will be considered separately.

8. Approval of the March 25, 2015 Regular Meeting Minutes.
9. Approve Amendment No. 5 to the ML Community Plan EIR Services Contract.

#### **G. TREASURER'S REPORT**

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10. Financial Reports – Month ending March 31, 2015

#### **H. COMMITTEE REPORTS**

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11. Finance Committee – Chair Ferrante/Vice Chair Leonardini
12. Elkhorn Slough Advisory Committee – Amaral/Alt. Leonardini
13. Special Districts/LAFCO – Jeffries/Ferrante
14. Liveboard Committee – Chair Jeffries/Vice Chair Amaral
15. Harbor Improvement Committee – Chair Gomes/Vice Chair Amaral
16. Real Property Committee I – Chair Jeffries/Vice Chair Leonardini
17. Real Property Committee II – Chair Gomes/Vice Chair Ferrante
18. Ad Hoc Budget Committee – Chair Gomes/Vice Chair Leonardini
19. Meetings attended by Commissioners at District expense since the last regular meeting of the Board (AB 1234 requirements). Such reports may be oral or written.

#### **I. NEW BUSINESS**

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20. ITEM – Consider adopting the preliminary budget for FY 2015-2016.
  - a. Staff report
  - b. Public comment
  - c. Board discussion
  - d. Board action
21. ITEM – Consider Resolution No. 15-06 awarding a CEQA Environmental Services contract relating to the People's Desal project.
  - a. Staff report
  - b. Public comment
  - c. Board discussion
  - d. Board action

#### **J. COMMISSIONERS COMMENTS AND CONCERNS**

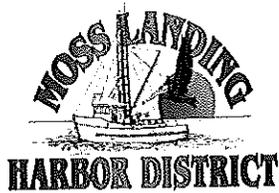
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Commissioners may address items of concern at this time, and may request that items be placed on future agendas in accordance with the By-laws of the Board.

## **K. ADJOURN MEETING**

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The next Regular Meeting of the Board of Harbor Commissioners is scheduled for May 27, 2015 at the offices of the Moss Landing Harbor District, 7881 Sandholdt Road, Moss Landing, CA 95039. Individuals who require special accommodations are requested to contact the Executive Assistant to the General Manager by calling 831.633.5417 or by emailing [dellamaggiore@mosslandingharbor.dst.ca.us](mailto:dellamaggiore@mosslandingharbor.dst.ca.us) no less than 72 hours prior to the meeting or in the case of a Special Meeting, as soon as possible after the Agenda is posted. Copies of the Regular Meeting agenda will be available 72 hours prior to the meeting and may be obtained by logging onto [www.mosslandingharbor.dst.ca.us](http://www.mosslandingharbor.dst.ca.us) or by contacting the District at 831.633.5417. All meetings are noticed and conducted in accordance with the Ralph M. Brown Act.



BOARD OF COMMISSIONERS  
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 Tony Leonardini  
 Vincent Ferrante  
 Frank Gomes, Jr.  
 Andrew Amaral

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GENERAL MANAGER  
 HARBORMASTER

Linda G. McIntyre, Esq.

## PROJECT STATUS REPORT

ITEM NUMBER 1  
 BOARD MEETING OF April 22, 2015

WHEN	WHAT	STATUS			COMMENTS
		DONE	ON TARGET	REVISED	
During NH Restaurant	Install electrical lights around the perimeter of NH parking lot as budget permits.			X	Awaiting relocation of electrical box in conjunction with NH Restaurant project. This will be an ongoing project. We will commence obtaining new permits as appropriate.
After NH Restaurant	Postponed due to budget constraints Repair Cannery Building unimproved parking lot				Awaiting scheduling of next vessel demolition before making these repairs plus budgeting for DG
After NH Restaurant	Postponed due to budget constraints Install hardwood in Assistant GM's, Executive Assistant's and the GM's offices			X	Postponed to next FY due to budgeting constraints.
2015 - 2017?	Improve area around B dock entrance to a park-like setting			X	Follows undergrounding of electric pole next to B Dock by PG&E.
After NH Restaurant	Postponed due to budget constraints Magnetic Key Card system installation		X		B, C & J Docks completed; Next Docks: G & I dock @ \$3K per gate plus \$2200 if a relay is needed.
Sometime in 2015 if extension granted	Tsunami Shoreline Erosion Project			X	FEMA granted extension of completion deadline to 12.31.14; impossible to meet deadline; requested additional extension. Also renewing permits.
After NH Restaurant	Postponed due to budget constraints NH pedestrian wharf and gangway access erosion		X		Purchased steel plate as temporary fix to erosion. Capital project to be included in a future FY budget.
Ongoing (started 2014)	Sea Lion deterrent fencing as needed		X		B Dock: Completed from the end tie (B178) to B165. Fingers on B131 and B137 + 6 or 7 other trouble spots on B dock. A Dock: Completed from the end tie (A100) to A98. Maintenance Dock; most of E Dock
After NH Restaurant	Postponed due to budget constraints NH visitor dock replacement		X		Visitor dock at NH destroyed by sea lions - obtained replacement quote with different structural engineering (no pilings). \$450,000 estimate.

BECAUSE OF HIGHER THAN EXPECTED ELECTION COSTS (\$450,000), ALL OF THE ABOVE ARE SUBJECT TO FUNDING AVAILABILITY. NORTH HARBOR RESTAURANT HAS PRIORITY.



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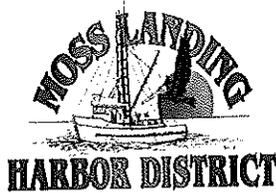
HARBORMASTER  
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## STAFF REPORT

### ITEM NUMBER 2 – COMMUNITY RELATIONS REPORT BOARD MEETING OF APRIL 22, 2015

1. The Salmon Project (STP) Update: Tom and Larry Wolfe found a suitable location – the remains of the visitor dock at North Harbor. The STP has purchased fencing to install around the remaining dock to keep the sea lions away from the pen. The fingerlings should be arriving sometime in May.
2. Sport Salmon Season opened April 4 but the bite was not that great. Nevertheless, Tom was interviewed on TV by KSBW and did an exceptional job of giving a positive message. The Harbor is still full with sport boats but there hasn't been as much parking and launching at North Harbor. The wind has also been a factor but the weather seems to be improving and lately fishermen are catching close to their limits.
3. Tom participated in a Tsunami Playbook Exercise consisting of a mock Tsunami and how each agency would respond.
4. Gravelle's Boatyard officially transferred to Gregg Drilling on April 1. Gregg has some employees who are training to use the travel lift and we believe the boatyard services will be improved in the coming months.

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## STAFF REPORT

### ITEM NUMBER 3 – SUMMARY OF PERMITS ISSUED BOARD MEETING OF APRIL 22, 2015

As April 16, 2015 Permittee	Issue Date	Renewal Status	Permit Type	Exp. Date
Kahuna Sportfishing	3/19/2014	Renewing	Facilities Use	3/19/2015
SSU Creative Services Dept	4/14/2015	Current	Facilities Use	5/2/2015
West Marine	4/16/2015	Current	Facilities Use	4/18/2015
Venture Quest Kayaking	5/16/2014	Current	Facilities Use	5/16/2015
Kayak Connection	5/18/2014	Current	Facilities Use	5/18/2015
Long Marine Lab - J. Tomoleoni	6/1/2014	Current	Facilities Use	6/1/2015
Sanctuary Cruises	6/6/2014	Current	Facilities Use	6/6/2015
Fast Raft	7/8/2014	Current	Facilities Use	7/8/2015
MLML San Jose State - R. Starr	8/16/2014	Current	Facilities Use	8/16/2015
Elkhorn Slough Safari - merchandising	10/1/2014	Current	Peddlers	10/1/2015
Elkhorn Slough Safari - tours	10/1/2014	Current	Facilities Use	10/1/2015
Meridian Charters - Brian Ackerman	10/15/2014	Current	Facilities Use	10/15/2015
Blue Water Adventures	10/31/2014	Current	Facilities Use	10/31/2015
Wild Fish - Vicki Crow	11/20/2014	Current	Peddlers	11/20/2015
Ray McDonnell - Crab	12/30/2014	Current	Peddlers	12/30/2015
Pacific Yachts - Chris Chrones	1/1/2015	Current	Facilities Use	01/1/2016
Elkhorn Slough Research Foundaiton	1/1/2015	Current	Facilities Use	1/1/2016
Blue Ocean Whale Watch	2/18/2015	Current	Facilities Use	2/18/2016
Whisper Charters	2/22/2015	Current	Facilities Use	2/22/2016
REI Outdoor School	3/26/2015	Current	Facilities Use	3/26/2016
Mtry Bay Aquarium Otter Studies	4/1/2015	Current	Facilities Use	4/1/2016

\*Permits are typically issued for a period of one year unless otherwise specified.

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### ITEM NUMBER 4 – MEETING ANNOUNCEMENTS BOARD MEETING OF APRIL 22, 2015

2015 Meeting Schedule Monterey Bay National Marine Sanctuary Advisory Council. For more information please contact Erin Ovalle at (831) 647-4206.

June 19, 2015, Carmel  
August 19, 2015, Half Moon Bay  
October 23, Cambria  
December 11, 2015, Monterey

2015 Meeting Schedule Special Districts Association of Monterey County  
(Tuesdays)  
April 21, 2015  
July 21, 2015  
October 20, 2015

April 25, 2015 - Monterey Bay National Marine Sanctuary Symposium "Sanctuary Currents 2015". CSUMB <http://montereybay.noaa.gov/research/symposium.html>

Monterey County Fish and Game Advisory Commission – Meetings are on the 2nd Tuesday of even months. <http://www.co.monterey.ca.us/bcandc/fishgame.html>

June 7 & 8, 2015 - World Oceans Day at the Monterey Bay Aquarium, 9:30 a.m.–6 p.m. general public/regular, 9 a.m.–6 p.m. Aquarium members. Included with admission. [www.montereybayaquarium.org](http://www.montereybayaquarium.org)

June 10-16, 2015 – Pacific Fisheries Management Council, Spokane Washington. 509.455.9600, [www.pccouncil.org](http://www.pccouncil.org)

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## STAFF REPORT

### ITEM NUMBER 5 - ASSIGNED LIVEBOARD REPORT BOARD MEETING OF APRIL 22, 2015

Pursuant to Ordinance Code §6.110 D) 1), attached is the report containing the names of all permitted liveboard vessels and all persons living aboard. The permits for these liveboards have automatically renewed through the last day of this month. As of this writing, there are zero (0) revocation actions pending.

### LIVEBOARDS

<u>Name</u>	<u>Vessel</u>
1. Avis, S.	<i>Sportfisher</i> , ON 556296
2. Anderson, Taylor	<i>Lanikat</i> CF 4134N
3. Auten, D.	<i>Serenity</i> , CF 8246 VH
4. Bohigian, D.	<i>Finesse</i> , CF 3764 ET
5. Burns, P.	<i>Tralfamadore</i> , CF 9430 GL
6. Byrnes, K.	<i>Grand Slam</i> , CF 4540 FE
7. Callahan, T.	<i>Deb on Air</i> , CF 3174 HA
8. Chojnowski, G.	<i>Moon Shadow</i> , CF 2325 SZ
9. Clark, N.	<i>China Cloud</i> , ON 999772
10. Cloer, J./Ajuria M.	<i>Laurie</i> , CF 2688 EX
11. Chambers, B.	<i>Pyxis</i> , ON 984193
12. Comendant, T.	<i>Mariah</i> , CF 9747 GR
13. Crow, F.	<i>Tortuga</i> , ON 1190479
14. Degnan, P.	<i>No Name</i> , CF 8344 GT
15. Delahanty, Glen	<i>Dreamer</i> 8370 EA
16. Elwell, G.	<i>Pearl</i> , ON 557575
17. Faneuf, Clifford L.	<i>Sanpiper</i> , CF 6280 EU
18. Felicano, J.	<i>Takara</i> , CF 3767 AS
19. Graham, D.	<i>Shelter Dog</i> , ON 593068
20. Harrington, H.	<i>Isle of View</i> , ON 997142
21. Ho, R.	<i>Carolynn Ann</i> CF 5796 FG
22. Heatley, J.	<i>Darla Jean</i> , CF 2303 UN
23. Groom, D./Schaffer M.	<i>Phoenix</i> , CF 5084 GJ
24. Jerred, D.	<i>Westwind</i> , CF8564 GM
25. Jordan, J.	<i>Valkyria</i> , ON 974018
26. Jones, H.	<i>Laetare</i> , CF 5495 YB
27. Jones, T.	<i>Sanity</i> , CF 5249 SC

SERVING COMMERCIAL FISHING AND RECREATIONAL BOATING SINCE 1947

28. Johnson, J. /LaFever M.
29. Johnston, D.
30. Kampas, B.
31. Knudson L./Knudson A.
32. Kurle L.
33. Latimer, T.
34. Larke, R.
35. Larmour J.
36. Maris, T.
37. Markley, S.
38. Nieman J.
39. Niswonger, R.
40. Nunes, D.
41. Otis, T.
42. Raaphorst, D./Raaphorst M.
43. Petree, S.
44. Phillips A/Flavin S. Flavin C .Flavin S.
45. Power, E.
46. Reins, D.
47. Rodrigues, W.
48. Rotger, M.
49. Roulet, J.
50. Scagliotti, B./Powers G.
51. Schuber, T.
52. Stegmann, R.
53. Stark, Howard
54. Snyder, R.
55. Thomas, B.
56. Tufts, M.
57. Warren, R./Malendrez R.
58. Whaley, C/ Whaley C.
59. Woytek, B.
60. Wolinski, Peter

*Aztlan*, ON 281903  
*Glass Slipper*, CF 4358 HN  
*Tee-Time* CF 5670 UY  
*Spellbound*, ON 082155  
*Sweet Liberty* ON 1052175  
*Tai Chi*, CF 0642 KD  
*Rhiannon*, CF 8551 CA  
*The Mar*, CF 0113 UP  
*Nimble*, CF 3730 KB  
*Olivia*, CF 0322 VP.  
*Inia*, ON 1074183  
*Illusion*, CF 0836 TA  
*Auroora*, ON 676686  
*Blue Moon*, CF 1886 GT  
*Spirit*, ON 664971  
*Danu*, CF 4085 GC  
*Odyle*, ON 559168  
*La Haina*, CF 1275 CV  
*Second Paradise*, ON 912484  
*Anam Cara*, CF 3367 TJ  
*Raven*, ON 241650  
*Double Eagle*, ON 519846  
*Breezing Up*, ON 559013  
*Bulldog*, ON 1219673  
*Wild Goose*, ON 589319  
*Outta Here*, CF 8370 EA  
*Jeannie B*, ON 261236  
*Coho*, CF 9974 KK  
*Enchantress*, CF 0878 SX  
*La Wanda*, CF 5014 FR  
*Karuna*, ON 653218  
*Menez La Vie*, ON 6700921  
*Ramona*, ON 1114657

Total Number Vessels: 60  
 Total Number Persons: 71  
 Pending Applications: 0



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## STAFF REPORT

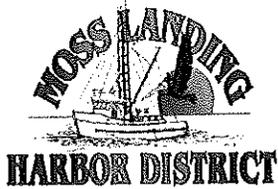
ITEM NUMBER 6 - SLIP INCOME REPORT  
 BOARD MEETING OF APRIL 22, 2015

Slip Rates 2014/2015 per linear foot:

Assigned: \$6.95/ft./month  
 Temporary: \$11.10/ft./month  
 Transient: 1.00/ft./day

	<u>INCOME</u>	
<u>March 2015</u>	<u>March 2014</u>	<u>Budget</u>
\$147,431	\$137,064	\$139,318

We are doing better than last year by \$10,367 and better than budget by \$8,113.



BOARD OF COMMISSIONERS

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## STAFF REPORT

### ITEM NUMBER 7 – INCIDENT REPORT BOARD MEETING of April 22, 2015

4/4/15 - Harbor staff had a confrontation with 2 male subjects in the Harbor parking lot. Both men were extremely intoxicated and the Monterey County Sheriff was dispatched after 1 subject became combative with staff. Deputies arrived and took the aggressive man into custody but the other man had run off and was unable to be located.

\*4/9/15 - Staff discovered the North Harbor launch ramp pay box missing. A review of our surveillance cameras shows at approximately 3am two male subjects repeatedly running into the box with a pickup truck until the box broke loose. There was very little money, if any, in the box. MCSO was called and also reviewed the camera footage; Case#15-2001 was issued.

\*4/13/15 - Staff noticed another North Harbor pay box missing. Night staff had checked on the box at 3am but apparently it was taken sometime shortly afterwards. The box had been emptied and no parking fees were in the box at the time it was taken. Staff again reviewed the surveillance footage resulting in some promising leads and contacted MCSO. Case#15-2001 (continued). When the criminals are located they will be arrested on felony charges.

No additional incidents as of April 17, 2015 (date of this report).

\* Although the parking boxes are emptied daily a new procedure has been implemented whereby after the boxes are emptied in the late afternoon the doors are left open and unlocked, showing they are empty. This should deter anyone who is looking for cash; if they are looking to cause vandalism we will find out shortly.

*SERVING COMMERCIAL FISHING AND RECREATIONAL BOATING SINCE 1947*



MINUTES  
REGULAR MEETING  
OF THE BOARD OF HARBOR COMMISSIONERS  
MOSS LANDING HARBOR DISTRICT  
7881 Sandholdt Road  
MOSS LANDING, CA 95039  
March 25, 2015, 7 P.M.

**A. CLOSED SESSION**

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The Board adjourned to closed session at 6:00 p.m. to discuss the following:

1. Confer with real property negotiators pursuant to Government Code §54956.8 regarding Moss Landing Commercial Park (formerly National Refractories). Negotiating parties: General Manager and District Counsel.
2. Confer with real property negotiators pursuant to Government Code §54956.8 regarding APN 413.022.003 (NH Restaurant and Visitor Dock). Negotiating parties: General Manager and District Counsel.
3. Confer with real property negotiators pursuant to Government Code §54956.8 regarding the Santa Cruz Cannery Building (lease proposal). Negotiating parties: General Manager and District Counsel.
4. Confer with real property negotiators pursuant to Government Code §54956.8 regarding parcel(s) currently used for E & F Dock access easements (MBARI). Negotiating parties: General Manager and District Counsel.
5. Confer with District Counsel regarding one matter of potential litigation pursuant to Government Code §54956.9D2.

**B. OPEN SESSION CALL TO ORDER - PLEDGE OF ALLEGIANCE**

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The meeting was called to order at 7:13 p.m. After the Pledge of Allegiance, roll was called.

Commissioners present:

Russ Jeffries – President  
Tony Leonardini – Vice President  
Vince Ferrante – Secretary  
Frank Gomes, Jr. – Commissioner  
Andrew Amaral - Commissioner

Staff present:

Linda G. McIntyre – General Manager  
Mike Rodriguez – District Counsel  
Tom Razzeca – Assistant General Manager  
Marie Della Maggiore – Executive Assistant

**C. PRESIDENT'S REMARKS**

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President Jeffries reported that the Board met in closed session; no reportable action was taken and direction was given to the General Manager and District Counsel.

**D. PUBLIC COMMENTS**

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No public comment.

**E. SPECIAL PRESENTATION**

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Mr. Brent Constantz, Founder, Manager and CEO, and members of the Deep Water Desal Project team; George Riley, Chief Development Officer, Dennis Ing, CFO, Jim Heisinger, Co-founder and General Counsel, Grant Gordon, COO, Scott Jackson, Co-founder and Program Manager, and Jane Ricci, Co-founder and Business Manager; were present to give an update on the status of their project. Mr. Constantz reviewed the basis of the desal project co-located with a 150 megawatt Data Center complex. Mr. Armanasco said the Monterey Bay region is greatly underserved by the lack of broadband fiber infrastructure and data storage capability and the Deep Water Desal Project addresses these issues,

and more, such as creating high tech fiber links to the Silicon Valley, and the corridor from Northern to Southern California and bringing high tech, high paying jobs to the area. Mr. Grant added that the integration of the data center with the desal allows them to use enough power to buy it "off the grid" which will reduce the cost of water which would provide Salinas and the extended agricultural growing with severely needed infrastructure required to remain competitive. This data center and high speed access will also enable regional municipalities to take advantage of broadband fiber assets to empower a remote workforce to compete for jobs on a minor or major scale without requiring workers to commute to Silicon Valley for good paying jobs. Mr. Armanasco also commented that local shareholders from Monterey and Santa Cruz Counties and the Silicon Valley have successfully funded the project so far. The project application was submitted to the State Lands Commission in January and they are now going into the EIR process with SLC as the Lead Agency. In response to comments by the SLC they will now slant drill under the water instead of a pipeline. In response to questions from the Board, Mr. Constance said that 1,000 acre feet of water has been dedicated to Castroville Water District, CAL AM will be using 10,000 acre feet, and the Soquel Creek Water District may also want an agreement after they conduct their independent verification of the project. He said they met with County and CalTrans department heads regarding the traffic concerns and also met with Castroville Community Services District regarding the septic and sewage capacities. He also said the data center would employ approximately 150 in three shifts. Mr. Jackson stated the TDS levels of the water will be less than 500 which are drinking water limits; the World Health Organization limit is 1,000. He added the levels can also be tiered and adjusted depending on use. Mr. Constantz spoke to the use of the existing Dynegy pipeline. He said although it is abandoned at the moment, it has been maintained in caretaker status and Deep Water Desal owns the easement and intends to repurpose it for conduit, cable and data lines. Mr. Jeffries said we may need a legal opinion on the use of the oil pipeline for other purposes.

With no further questions, President Jeffries called for a 5-minute break.

The Board returned to open session at 8:03 AM

#### **F. CONSENT CALENDAR**

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1. Adopt Resolution No. 15-04 renewing Monterey Bay Electronics lease of space at 7881 Sandholdt.
2. Adopt Resolution No. 15-05 authorizing the execution of a one-year lease with Running Stream Food and Beverage, Inc. for space in the Santa Cruz Cannery Building.
3. Approval of the February 25, 2015 Regular Meeting Minutes.

A motion was made by Commissioner Ferrante and seconded by Commissioner Gomes to adopt the Consent Calendar. The motion passed unanimously on a roll call vote, Commissioners Jeffries, Leonardini, Ferrante, Gomes and Amaral voting aye.

#### **G. TREASURER'S REPORT**

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4. Financial Reports – Month ending February 28, 2015 – Written report; in response to questions GM gave overview; we are on track. A motion was made by Commissioner Leonardini and seconded by Commissioner Ferrante to approve the month-ending February 28, 2015 financial report. The motion passed unanimously on a roll call vote, Commissioners Jeffries, Leonardini, Ferrante, Gomes and Amaral voting aye.

#### **H. COMMITTEE REPORTS**

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5. Finance Committee – Chair Ferrante/Vice Chair Leonardini – No meetings reported.

6. Elkhorn Slough Advisory Committee – Amaral/Alt. Leonardini – No meetings reported.
7. Special Districts/LAFCO – Jeffries/Ferrante – Next meeting in April.
8. Liveaboard Committee – Chair Jeffries/Vice Chair Amaral – No meetings reported.
9. Harbor Improvement Committee – Chair Gomes/Vice Chair Amaral – No meetings reported.
10. Real Property Committee I – Chair Jeffries/Vice Chair Leonardini – Nothing to report
11. Real Property Committee II – Chair Gomes/Vice Chair Ferrante – No meetings reported.
12. Ad Hoc Budget Committee – Chair Gomes/Vice Chair Leonardini – Meetings will begin next week.
13. Meetings attended by Commissioners at District expense since the last regular meeting of the Board (AB 1234 requirements). – No other meetings reported.

**I. NEW BUSINESS**

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14. ITEM – Consider adopting proposed Ordinance clarifying guest policies.
  - a. Staff report – Written report. GM McIntyre noted that this proposal was brought to the Board at the last meeting and based on input from the Board at that time; some changes were made to the language as submitted this evening.
  - b. Public comment – No public comment.
  - c. Board discussion – No further discussion.
  - d. Board action – A motion was made by Commissioner Leonardini and seconded by Commissioner Amaral to adopt Ordinance 198 amending Chapter 6, Section 6.115 “Guests and Contractors” of the Ordinance Code. The motion passed unanimously on a roll call vote, Commissioner Jeffries, Leonardini, Ferrante, Gomes and Amaral voting aye.

**J. COMMISSIONERS COMMENTS AND CONCERNS**

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Commissioner Ferrante mentioned that CSDA offers scholarships and webinars. No further comments.

**K. ADJOURN MEETING**

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The meeting adjourned at 8:13 pm.

Respectfully submitted,

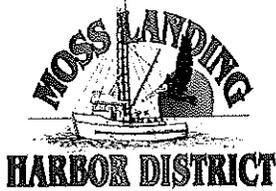
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Vince Ferrante, Secretary  
Board of Harbor Commissioners

ATTEST:

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Linda G. McIntyre, Deputy Secretary  
Board of Harbor Commissioners



BOARD OF COMMISSIONERS  
Russ Jeffries  
Tony Leonardini  
Vincent Ferrante  
Frank Gomes, Jr.  
Andrew Amarel

7881 SANDHOLDT ROAD  
MOSS LANDING, CA 95039

TELEPHONE – 831.633.5417  
FACSIMILE -- 831.633.4537

EXECUTIVE  
GENERAL MANAGER  
HARBORMASTER  
Linda G. McIntyre, Esq.

## STAFF REPORT

ITEM NUMBER 9 – ML COMMUNITY PLAN EIR  
BOARD MEETING OF APRIL 22, 2015

The General Manager received a letter from the County Planner regarding the Moss Landing Community Plan. The contract for the EIR consultant expires May 31, 2015; however, the EIR is not yet complete. The attached 5<sup>th</sup> Amendment to the Funding Agreement extends the contract to May 31, 2017. Staff believes this is reasonable and this extension will not cost the District additional money.

Staff requests that the Board approve the extension and authorize the General Manager acting as the Board Secretary and the President of the Board to execute the extension Amendment.

*SERVING COMMERCIAL FISHING AND RECREATIONAL BOATING SINCE 1947*

**AMENDMENT NO. 5  
TO FUNDING AGREEMENT  
BETWEEN COUNTY OF MONTEREY AND  
VARIOUS PROJECT APPLICANTS  
FOR THE MOSS LANDING COMMUNITY PLAN UPDATE  
ENVIRONMENTAL IMPACT REPORT**

THIS AMENDMENT NO. 5 to the Funding Agreement between the County of Monterey, a political subdivision of the State of California (hereinafter, "County") and Elkhorn Slough Foundation; Hamlin Properties, LLC; Monterey Bay Aquarium Research Institute; Moss Landing Commercial Park, LLC dba Moss Landing Business Park; Moss Landing Harbor District; Quin Delta, LLC; San Jose State University Research Foundation; Keith Family Investments, LLC and/or assignee; and Phil DiGirolamo (hereinafter, "PROJECT APPLICANTS") is hereby entered into between the County and the PROJECT APPLICANTS (collectively, the "Parties") as of the last date opposite the respective signatures below.

**WHEREAS**, PROJECT APPLICANTS entered into a Funding Agreement with County on February 9, 2011 (hereinafter, "Agreement"); and

**WHEREAS**, Agreement was amended by the Parties on May 31, 2011 (hereinafter, "Amendment No. 1"), June 4, 2012 (hereinafter, "Amendment No. 2"), May 29, 2013 (hereinafter, "Amendment No. 3"), and June 2, 2014 (hereinafter, "Amendment No. 4"); and

**WHEREAS**, an Environmental Impact Report (EIR) is required for the Moss Landing Community Plan Update (hereinafter, "PROJECT"); and

**WHEREAS**, County engaged EMC Planning Group, Inc. (hereinafter, "CONTRACTOR") to prepare the EIR for the PROJECT; and

**WHEREAS**, the EIR has not been completed for the PROJECT; and

**WHEREAS**, additional time is necessary to allow for the CONTRACTOR to continue analysis of compiled information for preparation of the Draft EIR and completion of the EIR for the PROJECT; and

**WHEREAS**, the Parties wish to further amend the Agreement to extend the term to May 31, 2017 with no associated dollar amount increase to continue to allow funding by the PROJECT APPLICANTS to the County for costs incurred by CONTRACTOR and County Departments to continue to provide tasks identified in the Agreement and as amended by this Amendment No. 5.

**NOW, THEREFORE**, the Parties agree to amend the Agreement as follows:

1. Amend the second sentence of the second paragraph of Paragraph 3, CONTRACTOR – CONTRACTOR'S Base Budget", to read as follows:  
Should AGREEMENT be terminated prior to May 31, 2017, any unearned balance of the \$242,236.70 deposited by PROJECT APPLICANTS to fund the base contract of CONTRACTOR shall be returned to PROJECT APPLICANTS within sixty days of

receipt of notice of termination by COUNTY in proportion to the percentage of funds contributed by each PROJECT APPLICANT.

2. Amend Paragraph 9, "Term", to read as follows:  
AGREEMENT shall become effective May 4, 2010 and continue through May 31, 2017, unless terminated pursuant to Paragraph 10 or amended pursuant to Paragraph 14 of AGREEMENT.

3. Amend Paragraph 10, "Termination", to read as follows:  
AGREEMENT shall terminate on May 31, 2017, but may be terminated earlier by PROJECT APPLICANTS or COUNTY, by giving thirty (30) days' written notice to the other.

4. All other terms and conditions of the Agreement remain unchanged and in full force.

5. This Amendment No. 5 shall be attached to the Agreement and incorporated therein as if fully set forth in the Agreement.

6. The recitals to this Amendment No. 5 are incorporated into the Agreement and this Amendment No. 5.

IN WITNESS WHEREOF, the Parties hereby execute this Amendment No. 5 to the Agreement as of the last date opposite the respective signatures below:

COUNTY OF MONTEREY

By: \_\_\_\_\_

Director of Planning

Date:

PROJECT APPLICANTS\*  
Moss Landing Harbor District

By: \_\_\_\_\_

(Signature)

Russ Jeffries, Board President

Date:

By: \_\_\_\_\_

(Signature)

Linda G. McIntyre, Board Secretary

Date:

\*INSTRUCTIONS: IF PROJECT APPLICANT is a corporation, including limited liability and non-profit corporations, the full legal name of the corporation shall be set forth in the Agreement together with the signatures of two specified officers. If PROJECT APPLICANT is a partnership, the name of the partnership shall be set forth in the Agreement together with the signature of a partner who has authority to execute this Agreement on behalf of the partnership. IF PROJECT APPLICANT is contracting in an individual capacity, the individual shall set forth the name of the business, if any, and shall personally sign this Agreement.

Amendment No. 5 to Funding Agreement  
Moss Landing Community Plan Update EIR Participants  
Moss Landing Community Plan Update EIR  
RMA - Planning  
Term: May 4, 2010 - May 31, 2017  
Not to Exceed: \$334,466.50

4:23 PM  
04/16/15  
Accrual Basis

## Moss Landing Harbor District Balance Sheet As of March 31, 2015

	Mar 31, 15	Mar 31, 14	\$ Change
<b>ASSETS</b>			
<b>Current Assets</b>			
<b>Checking/Savings</b>			
1018 · Union Bank- Trust Account	523,217	142,586	380,631
1002 · Petty Cash	500	500	-
1010 · Union - M.M.	1,402,855	1,139,914	262,942
1009 · Union - Operating	87,460	(14,576)	102,036
1011 · Union - Payroll	12,808	17,939	(5,130)
1015 · 1st Capital Bank	1,537,977	1,534,904	3,073
1014 · Pinnacle Bank CDARS CD	-	750,000	(750,000)
1016 · Pinnacle Bank Interest Account	22,922	21,636	1,285
1020 · Umpqua - Restricted	1,006,218	-	1,006,218
<b>Total Checking/Savings</b>	<b>4,593,957</b>	<b>3,592,903</b>	<b>1,001,054</b>
<b>Accounts Receivable</b>			
<b>11290 · Leases</b>			
1282 · NNN Receivable	42,362	21,496	20,866
<b>Total 11290 · Leases</b>	<b>42,362</b>	<b>21,496</b>	<b>20,866</b>
1200 · Marina Receivables	56,165	45,760	10,404
1201 · Marina - Allow for Bad Debt	(24,875)	(27,000)	2,125
<b>Total Accounts Receivable</b>	<b>73,652</b>	<b>40,257</b>	<b>33,395</b>
<b>Other Current Assets</b>			
<b>1271 · Prepaid Expenses</b>			
1270 · Insurance	15,283	19,771	(4,488)
1280 · Other	9,062	18,942	(9,880)
<b>Total 1271 · Prepaid Expenses</b>	<b>24,346</b>	<b>38,713</b>	<b>(14,368)</b>
1210 · Grants Receivable	286,344	98,402	187,942
<b>Total Other Current Assets</b>	<b>310,690</b>	<b>137,115</b>	<b>173,575</b>
<b>Total Current Assets</b>	<b>4,978,299</b>	<b>3,770,275</b>	<b>1,208,024</b>
<b>Fixed Assets</b>			
1650 · Construction in Progress	257,375	73,860	183,514
1670 · Equipment	766,671	751,113	15,557
<b>1700 · Improvements</b>			
1710 · NH Buildings & Improvements	7,868,580	7,868,580	-
1720 · NH Floating Docks	524,675	524,675	-
1725 · NH Offsite Improvements	632,218	632,218	-
1730 · SH Buildings & Improvements	8,246,852	8,226,171	20,681
1740 · SH Floating Docks	9,098,326	9,067,439	30,887
<b>Total 1700 · Improvements</b>	<b>26,370,652</b>	<b>26,319,084</b>	<b>51,568</b>
1900 · Land	1,642,860	1,642,860	-
<b>1800 · Less - Depreciation</b>			
1805 · Equipment	(747,540)	(725,710)	(21,830)
1810 · NH Buildings & Improvements	(2,930,800)	(2,715,603)	(215,197)
1820 · NH Floating Docks	(471,074)	(459,211)	(11,863)
1825 · NH Offsite Improvements	(388,025)	(358,092)	(29,933)
1830 · SH Buildings & Improvements	(5,315,631)	(5,106,222)	(209,409)

Moss Landing Harbor District  
**Balance Sheet**  
As of March 31, 2015

	Mar 31, 15	Mar 31, 14	\$ Change
1840 · SH Floating Docks	(4,240,842)	(3,771,558)	(469,284)
Total 1800 · Less - Depreciation	(14,093,913)	(13,136,397)	(957,516)
<b>Total Fixed Assets</b>	<b>14,943,644</b>	<b>15,650,521</b>	<b>(706,876)</b>
<b>Other Assets</b>			
1530 · Principal Financial CS	7,389	7,389	-
1320 · Workers Comp Deposit	200	200	-
Total Other Assets	7,589	7,589	-
<b>TOTAL ASSETS</b>	<b>19,929,532</b>	<b>19,428,385</b>	<b>501,147</b>
<b>LIABILITIES &amp; EQUITY</b>			
<b>Liabilities</b>			
<b>Current Liabilities</b>			
<b>Accounts Payable</b>			
2010 · Accounts Payable	(1,791)	20,276	(22,066)
Total Accounts Payable	(1,791)	20,276	(22,066)
<b>Other Current Liabilities</b>			
2082 · MLCP Cost Reimb. Deposit	73,143	-	73,143
2005 · Accrued Employee IRA	545	-	545
2021 · Accrued Vacation	83,226	82,756	470
2023 · Accrued Payroll Taxes	-	231	(231)
2030 · Customer Deposits	283,198	290,372	(7,175)
2050 · Employee 457 Payable	759	-	759
2080 · Prepaid Berth Fees	185,177	149,504	35,672
2087 · Lease Deposits	42,611	40,371	2,240
<b>2086 · Prepaid Leases</b>			
20861 · Duke	5,654	65,592	(59,939)
20862 · MBARI	2,360	2,226	134
Total 2086 · Prepaid Leases	8,014	67,818	(59,804)
2051 · Note Interest Payable			
2062 · Umpqua Accrued Interest	11,295	-	11,295
2055 · CIEDB Accrued Interest	-	23,667	(23,667)
2060 · DBAW - Accrued Interest	-	29,500	(29,500)
2061 · Muni. Finance Interest Payable	-	4,316	(4,316)
Total 2051 · Note Interest Payable	11,295	57,483	(46,188)
2072 · Current Portion			
2071 · Muni. Finance Lease - CP	-	31,080	(31,080)
2073 · Union Current Portion	-	47,791	(47,791)
2075 · CIEDB Current Portion	-	0	(0)
Total 2072 · Current Portion	-	78,871	(78,871)
Total Other Current Liabilities	687,967	767,407	(79,440)
<b>Total Current Liabilities</b>	<b>686,176</b>	<b>787,682</b>	<b>(101,506)</b>
<b>Long Term Liabilities</b>			
2605 · Umpqua Loan	4,755,901	-	4,755,901
2076 · Municipal Finance Lease	-	282,700	(282,700)
2603 · Union Bank NP	-	405,338	(405,338)
2600 · CIEDB LOAN	-	3,251,668	(3,251,668)

4:23 PM  
04/16/15  
Accrual Basis

**Moss Landing Harbor District**  
**Balance Sheet**  
As of March 31, 2015

	<u>Mar 31, 15</u>	<u>Mar 31, 14</u>	<u>\$ Change</u>
2601 · DBAW	-	857,887	(857,887)
Total Long Term Liabilities	<u>4,755,901</u>	<u>4,797,593</u>	<u>(41,692)</u>
Total Liabilities	5,442,077	5,585,275	(143,198)
Equity			
3050 · Prior Year Earnings	7,857,104	7,382,781	474,323
3020 · Retained Net Assets	6,456,231	6,456,231	-
Net Income	174,120	4,098	170,022
Total Equity	<u>14,487,455</u>	<u>13,843,109</u>	<u>644,345</u>
TOTAL LIABILITIES & EQUITY	<u>19,929,532</u>	<u>19,428,385</u>	<u>501,147</u>

**Moss Landing Harbor District**  
**Statement of Cash Flows**  
July 2014 through March 2015

Jul '14 - Mar 15

**OPERATING ACTIVITIES**

Net Income	174,120
Adjustments to reconcile Net Income	
to net cash provided by operations:	
1200 · Marina Receivables	(12,238)
1201 · Marina - Allow for Bad Debt	14,875
11290 · Leases:1282 · NNN Receivable	14,638
1271 · Prepaid Expenses:1270 · Insurance	100,180
1271 · Prepaid Expenses:1280 · Other	(9,062)
1800 · Less - Depreciation:1805 · Equipment	15,301
1800 · Less - Depreciation:1810 · NH Buildings & Improvements	194,245
1800 · Less - Depreciation:1820 · NH Floating Docks	9,028
1800 · Less - Depreciation:1825 · NH Offsite Improvements	22,037
1800 · Less - Depreciation:1830 · SH Buildings & Improvements	156,584
1800 · Less - Depreciation:1840 · SH Floating Docks	310,800
2010 · Accounts Payable	(72,151)
2005 · Accrued Employee IRA	545
2020 · Accrued Salaries Payable	(13,708)
2023 · Accrued Payroll Taxes	(5,754)
2030 · Customer Deposits	(4,160)
2051 · Note Interest Payable:2060 · DBAW - Accrued Interest	(35,388)
2051 · Note Interest Payable:2055 · CIEDB Accrued Interest	(50,536)
2050 · Employee 457 Payable	759
2080 · Prepaid Berth Fees	16,450
2086 · Prepaid Leases:20861 · Duke	(44,317)
2086 · Prepaid Leases:20862 · MBARI	(17,729)
2087 · Lease Deposits	2,240
2051 · Note Interest Payable:2062 · Umpqua Accrued Interest	11,295
2051 · Note Interest Payable:2061 · Muni. Finance Interest Payable	(8,978)
2072 · Current Portion:2071 · Muni. Finance Lease - CP	(32,618)
2072 · Current Portion:2073 · Union Current Portion	(50,274)

Net cash provided by Operating Activities 686,185

**FINANCING ACTIVITIES**

2072 · Current Portion:2070 · DBAW - Current Principal	(78,869)
2072 · Current Portion:2075 · CIEDB Current Portion	(140,429)
2076 · Municipal Finance Lease	(278,300)
2603 · Union Bank NP	(390,815)
2600 · CIEDB LOAN	(3,111,239)
2601 · DBAW	(779,018)
2605 · Umpqua Loan	4,755,901

Net cash provided by Financing Activities (22,768)

Net cash increase for period 663,417

Cash at beginning of period 3,930,541

Cash at end of period 4,593,957

**Moss Landing Harbor District**  
**Profit & Loss Budget vs. Actual**  
July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
Ordinary Income/Expense				
Income				
4000 · MARINA REVENUES				
4100 · Berthing Income				
4110 · Assigned Berthing	1,110,058	1,112,328	(2,270)	100%
4115 · Temporary Berthing	157,062	106,875	50,187	147%
4130 · Transient Berthing	48,075	33,367	14,708	144%
4112 · Qtrly/Annual Discount	(1,866)	(3,657)	1,791	51%
4113 · Commercial Vessel Dscnt	(11,313)	(11,250)	(63)	101%
4114 · Away (1 mnth) Dscnt	(1,622)	(1,800)	178	90%
4120 · Liveaboard Fees	77,742	74,997	2,745	104%
4260 · Towing - Intra Harbor	2,250	750	1,500	300%
4270 · Pumpouts	200	500	(300)	40%
4140 · Non Operable Surcharge	-	300	(300)	0%
4220 · Wait List	6,560	4,500	2,060	146%
4282 · Recovered Lien Costs	2,332	1,000	1,332	233%
4280 · Late Fees	21,697	22,500	(803)	96%
Total 4100 · Berthing Income	<u>1,411,175</u>	<u>1,340,410</u>	<u>70,765</u>	<u>105%</u>
4200 · Other Income - Operations				
4225 · Merchandise	284	700	(416)	41%
4285 · Dog Fee	1,200	1,296	(96)	93%
4230 · SH Parking	52,947	30,502	22,445	174%
4290 · Misc	2,935	954	1,981	308%
Total 4200 · Other Income - Operations	<u>57,365</u>	<u>33,452</u>	<u>23,913</u>	<u>171%</u>
4300 · Operating Grant Revenues	<u>30,000</u>	<u>20,000</u>	<u>10,000</u>	<u>150%</u>
Total 4000 · MARINA REVENUES	<u>1,498,540</u>	<u>1,393,862</u>	<u>104,678</u>	<u>108%</u>

**Moss Landing Harbor District**  
**Profit & Loss Budget vs. Actual**  
July 2014 through March 2015

Expense	Jul '14 - Mar 15	Budget	\$ Over Budget	% of Budget
<b>5200 · General &amp; Administrative</b>				
5100 · Advertising	1,065	7,500	(6,435)	14%
5921 · Internet Billing Service	1,393	1,791	(398)	78%
5210 · Dues & Subscriptions	4,638	3,192	1,446	145%
<b>5220 · Office Supplies</b>				
5223 · Administration	2,724	4,720	(1,996)	58%
5225 · Operations	13,690	6,407	7,283	214%
<b>Total 5220 · Office Supplies</b>	<u>16,413</u>	<u>11,127</u>	<u>5,286</u>	<u>148%</u>
<b>5230 · Postage &amp; Equip Lease</b>				
5232 · Meter Lease	360	1,107	(747)	33%
5235 · Postage	1,242	1,827	(585)	68%
<b>Total 5230 · Postage &amp; Equip Lease</b>	<u>1,602</u>	<u>2,934</u>	<u>(1,332)</u>	<u>55%</u>
<b>5240 · Copier Lease &amp; Supplies</b>				
5242 · Copier Lease	2,916	3,528	(612)	83%
5245 · Toner & Supplies	170			
<b>Total 5240 · Copier Lease &amp; Supplies</b>	<u>3,086</u>	<u>3,528</u>	<u>(442)</u>	<u>87%</u>
<b>5250 · Telephone &amp; Communications</b>				
5253 · Administration	7,019	8,442	(1,423)	83%
5255 · Operations	1,064	1,665	(601)	64%
<b>Total 5250 · Telephone &amp; Communications</b>	<u>8,083</u>	<u>10,107</u>	<u>(2,024)</u>	<u>80%</u>
<b>5260 · Professional Services</b>				
5269 · Payroll Processing	2,377	2,250	127	106%
5263 · Audit fees	14,000	14,000	-	100%
5262 · Accounting	26,730	30,000	(3,270)	89%
5265 · Legal	43,161	42,000	1,161	103%
5268 · Computer Consulting	928	2,205	(1,277)	42%
<b>Total 5260 · Professional Services</b>	<u>87,196</u>	<u>90,455</u>	<u>(3,259)</u>	<u>96%</u>
5270 · Licenses & Permits	-	18	(18)	0%
5290 · Credit Card Fees	5,913	2,187	3,726	270%
<b>Total 5200 · General &amp; Administrative</b>	<u>129,390</u>	<u>132,839</u>	<u>(3,449)</u>	<u>97%</u>
<b>5300 · Personnel</b>				
<b>5310 · Salaries</b>				
5313 · Administration	174,133	167,445	6,688	104%
5315 · Operations	111,333	116,235	(4,902)	96%
5318 · Maintenance	70,016	72,252	(2,236)	97%
<b>Total 5310 · Salaries</b>	<u>355,482</u>	<u>355,932</u>	<u>(450)</u>	<u>100%</u>
<b>5330 · Payroll Taxes</b>				
5333 · Administration	13,205	12,807	398	103%
5335 · Operations	9,779	8,487	1,292	115%
5338 · Maintenance	5,278	5,526	(248)	96%
<b>Total 5330 · Payroll Taxes</b>	<u>28,261</u>	<u>26,820</u>	<u>1,441</u>	<u>105%</u>
<b>5340 · Employee Benefits</b>				

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**Moss Landing Harbor District**  
**Profit & Loss Budget vs. Actual**  
July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
5343 · Administration	52,261	53,703	(1,442)	97%
5345 · Operations	29,185	31,271	(2,086)	93%
5348 · Maintenance	35,474	42,345	(6,871)	84%
<b>Total 5340 · Employee Benefits</b>	<b>116,920</b>	<b>127,319</b>	<b>(10,399)</b>	<b>92%</b>
5350 · Workers Compensation				
5353 · Administration	2,700	1,935	765	140%
5355 · Operations	5,283	3,006	2,277	176%
5358 · Maintenance	6,003	10,008	(4,005)	60%
<b>Total 5350 · Workers Compensation</b>	<b>13,986</b>	<b>14,949</b>	<b>(963)</b>	<b>94%</b>
5360 · Education & Training				
5363 · Administration	574			
<b>Total 5360 · Education &amp; Training</b>	<b>574</b>			
<b>Total 5300 · Personnel</b>	<b>515,223</b>	<b>525,020</b>	<b>(9,797)</b>	<b>98%</b>
5400 · Insurance				
5410 · Liability Insurance	99,143	86,310	12,833	115%
<b>Total 5400 · Insurance</b>	<b>99,143</b>	<b>86,310</b>	<b>12,833</b>	<b>115%</b>
5500 · Utilities				
5540 · Sewer	22,471	32,251	(9,780)	70%
5510 · Garbage	35,992	37,502	(1,510)	96%
5520 · Gas and Electric	150,000	131,251	18,749	114%
5530 · Water	21,194	23,251	(2,057)	91%
<b>Total 5500 · Utilities</b>	<b>229,657</b>	<b>224,255</b>	<b>5,402</b>	<b>102%</b>
5600 · Operating Supplies				
5610 · Vehicles	8,831	3,752	5,079	235%
5625 · Operations	11,602	14,500	(2,898)	80%
<b>Total 5600 · Operating Supplies</b>	<b>20,433</b>	<b>18,252</b>	<b>2,181</b>	<b>112%</b>
5700 · Depreciation	353,997	354,001	(4)	100%
5800 · Repairs & Maintenance				
5810 · Vehicles	218	667	(449)	33%
5820 · Vessels	176			
5830 · Equip Rental	2,583	23,946	(21,363)	11%
5850 · Repair Materials	23,324	50,374	(27,050)	46%
5860 · Outside Service Contracts	42,425	37,502	4,923	113%
5870 · Derelict Disposal	6,790	35,000	(28,211)	19%
<b>Total 5800 · Repairs &amp; Maintenance</b>	<b>75,516</b>	<b>147,489</b>	<b>(71,973)</b>	<b>51%</b>
5900 · Financial Expenses				
5928 · Loan Issuance Costs	73,463			
5920 · Bank Service Charges	1,498	693	805	216%
5990 · Bad Debt	14,875	25,328	(10,453)	59%
<b>Total 5900 · Financial Expenses</b>	<b>89,836</b>	<b>26,021</b>	<b>63,815</b>	<b>345%</b>
<b>Total · MARINA EXPENSES</b>	<b>1,513,195</b>	<b>1,514,187</b>	<b>(992)</b>	<b>100%</b>
<b>Net Ordinary Income - Marina Operations</b>	<b>(14,655)</b>	<b>(120,325)</b>	<b>105,670</b>	<b>12%</b>

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## Moss Landing Harbor District Profit & Loss Budget vs. Actual July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
<b>4400 · LEASE AND OTHER INCOME</b>				
<b>4500 · Leases</b>				
4501 · K-Pier Lease	11,851	11,967	(116)	99%
<b>4502 · Cannery Building</b>				
4518 · Suite 5	3,360			
4512 · Suites 7	17,584	17,757	(173)	99%
4520 · Suite 9	5,797	5,853	(56)	99%
4504 · Suite 3	59,427	60,000	(573)	99%
4511 · Suite 1 & 10	12,091	12,204	(113)	99%
4515 · Suite 4	57,472	58,029	(557)	99%
4517 · Suite 2	21,490	21,696	(206)	99%
4523 · Canary NNN	16,409	18,000	(1,591)	91%
<b>Total 4502 · Cannery Building</b>	<u>193,629</u>	<u>193,539</u>	<u>90</u>	<u>100%</u>
4530 · RV Lot	22,033	22,245	(212)	99%
4535 · MBARI	17,729	18,054	(325)	98%
4540 · Martin & Mason	23,045	22,624	421	102%
4541 · SH Spare Office	3,721	3,753	(32)	99%
4545 · Dynegy Outfall	44,317	45,963	(1,646)	96%
<b>4560 · North Harbor</b>				
4562 · Sea Harvest	30,626	25,990	4,636	118%
4568 · Monterey Bay Kayaks	27,485	19,917	7,568	138%
4572 · Pottery Planet	27,556	29,524	(1,968)	93%
<b>Total 4560 · North Harbor</b>	<u>85,667</u>	<u>75,431</u>	<u>10,236</u>	<u>114%</u>
<b>Total 4500 · Leases</b>	<u>401,991</u>	<u>393,576</u>	<u>8,415</u>	<u>102%</u>
4600 · District Property Taxes	142,344	50,000	92,344	285%
<b>4700 · Other Revenues &amp; Concessions</b>				
4727 · Key Sales	3,119			
4125 · Amenity Fee	196,223	192,375	3,848	102%
<b>4710 · Vending Activities</b>				
4711 · Washer/Dryer	7,016	5,400	1,616	130%
<b>Total 4710 · Vending Activities</b>	<u>7,016</u>	<u>5,400</u>	<u>1,616</u>	<u>130%</u>
4720 · Dry Storage	35,553	29,250	6,303	122%
4725 · North Harbor Use Fee	47,392	67,500	(20,108)	70%
4726 · Annual Launch Fee (Sm. Water)	-	9,000	(9,000)	0%
4730 · NH Washdown	1,379	1,876	(497)	74%
4735 · Camp/RV	4,102	1,550	2,552	265%
4740 · Equipment Rental	803	250	553	321%
4751 · Permits	4,557	1,750	2,807	260%
4755 · Floating Docks	-			
4765 · Faxes, Copies & Postage	49	27	22	183%
4770 · Surplus Auction/Sales	-	100	(100)	0%
<b>Total 4700 · Other Revenues &amp; Concessions</b>	<u>300,193</u>	<u>309,078</u>	<u>(8,885)</u>	<u>97%</u>

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**Moss Landing Harbor District**  
**Profit & Loss Budget vs. Actual**  
 July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
<b>4800 · Interest</b>				
4846 · Umpqua Interest	1,263			
4843 · First Capital Bank	2,307	2,326	(19)	99%
4841 · Union Bank Interest	1,416	1,214	202	117%
4825 · Pinnacle Bank CDs	350	2,808	(2,458)	12%
<b>Total 4800 · Interest</b>	<u>5,336</u>	<u>6,348</u>	<u>(1,012)</u>	<u>84%</u>
<b>Total 4400 · LEASE AND OTHER INCOME</b>	<u>849,865</u>	<u>759,002</u>	<u>90,863</u>	<u>112%</u>
<b>7000 · LEASE AND OTHER EXPENSES</b>				
<b>7100 · Interest Expense</b>				
7134 · Umpqua Accrued Interest	79,067			
7132 · Municipal Finance	674	11,541	(10,867)	6%
7135 · Union Bank Interest	2,910	15,936	(13,026)	18%
7110 · DBAW Loans	6,365	28,955	(22,590)	22%
7130 · CIEDB	45,287	96,693	(51,406)	47%
<b>Total 7100 · Interest Expense</b>	<u>134,303</u>	<u>153,125</u>	<u>(18,822)</u>	<u>88%</u>
<b>7200 · Other Financial Expenses</b>				
7230 · LAFO Administrative Charges	5,303	4,781	522	111%
7221 · CSDA Dues	5,288	4,919	369	108%
<b>Total 7200 · Other Financial Expenses</b>	<u>10,591</u>	<u>9,700</u>	<u>891</u>	<u>109%</u>
5700 · Depreciation	353,997	354,001	(4)	100%
<b>7300 · Commissioner Expenses</b>				
7310 · Election Costs	-	300,000	(300,000)	0%
7320 · Monthly Stipend	8,700	12,749	(4,049)	68%
7330 · Incurred Expenses	1,067	2,250	(1,183)	47%
<b>Total 7300 · Commissioner Expenses</b>	<u>9,767</u>	<u>314,999</u>	<u>(305,232)</u>	<u>3%</u>
<b>Total 7000 · LEASE AND OTHER EXPENSES</b>	<u>508,659</u>	<u>831,825</u>	<u>(323,166)</u>	<u>61%</u>
<b>Net Ordinary Income - Lease &amp; Other Operations</b>	<u>341,207</u>	<u>(72,823)</u>	<u>414,030</u>	<u>-469%</u>
<b>Net Ordinary Income - Combined Operations</b>	<u>326,551</u>	<u>(193,148)</u>	<u>519,699</u>	<u>-169%</u>

**Moss Landing Harbor District**  
**Profit & Loss Budget vs. Actual**  
 July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
Other Income/Expense				
Other Expense				
9000 · CAPITAL PROJECT EXPENSES				
9054 · Sea Lion Deterrent Fencing	25,969	297,353	(271,384)	9%
9053 · Dock Maintenance	-	25,000	(25,000)	0%
9052 · NH Wharf Entrance Repair	-	100,000	(100,000)	0%
9051 · Sewer Lift Station	-	175,000	(175,000)	0%
5880 · Dredging	20,448	25,000	(4,552)	82%
9225 · Keyless Entry	-	6,000	(6,000)	0%
9305 · Piling Replacement Proj. - Dist	-	20,000	(20,000)	0%
9302 · Tsunami shoreline repairs	31,148	961,889	(930,742)	3%
9800 · Dock Replacement	10,854	300,000	(289,146)	4%
9750 · Office Computers	-	5,000	(5,000)	0%
9309 · New NH Restaurant	52,336	2,500,000	(2,447,664)	2%
9250 · Security Camera	2,300	7,500	(5,200)	31%
9565 · Miscellaneous Capital Projects	9,376	80,000	(70,624)	12%
9410 · NH Master Plan	-	20,000	(20,000)	0%
9450 · Restaurant Pad	-	250,000	(250,000)	0%
9125 · North Harbor Parking Lot LTG	-	10,000	(10,000)	0%
9470 · NH Visitor Dock	-	150,000	(150,000)	0%
Total 9000 · CAPITAL PROJECT EXPENSES	<u>152,431</u>	<u>4,932,742</u>	<u>(4,780,311)</u>	<u>3%</u>
Total Other Expense	<u>152,431</u>	<u>4,932,742</u>	<u>(4,780,311)</u>	<u>3%</u>
Net Other Income	<u>(152,431)</u>	<u>(4,932,742)</u>	<u>4,780,311</u>	<u>3%</u>
Net Income	<u><u>174,120</u></u>	<u><u>(5,125,890)</u></u>	<u><u>5,300,010</u></u>	<u><u>-3%</u></u>

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**Moss Landing Harbor District**  
**Profit & Loss Prev Year Comparison**  
July 2014 through March 2015

	<u>Jul '14 - Mar 15</u>	<u>Jul '13 - Mar 14</u>	<u>\$ Change</u>	<u>% Change</u>
<b>Ordinary Income/Expense</b>				
<b>Income</b>				
<b>4000 · MARINA REVENUES</b>				
<b>4100 · Berthing Income</b>				
4110 · Assigned Berthing	1,110,058	1,063,468	46,589	4%
4115 · Temporary Berthing	157,062	114,130	42,931	38%
4130 · Transient Berthing	48,075	34,215	13,860	41%
4112 · Qtrly/Annual Discount	(1,866)	(4,026)	2,160	54%
4113 · Commercial Vessel Dscnt	(11,313)	(10,838)	(475)	-4%
4114 · Away (1 mnth) Dscnt	(1,622)	(2,034)	412	20%
4120 · Liveaboard Fees	77,742	68,115	9,627	14%
4260 · Towing - Intra Harbor	2,250	1,050	1,200	114%
4270 · Pumpouts	200	550	(350)	-64%
4220 · Wait List	6,560	6,320	240	4%
4282 · Recovered Lien Costs	2,332	1,165	1,167	100%
4280 · Late Fees	21,697	20,481	1,216	6%
<b>Total 4100 · Berthing Income</b>	<u>1,411,175</u>	<u>1,292,597</u>	<u>118,578</u>	<u>9%</u>
<b>4200 · Other Income - Operations</b>				
4225 · Merchandise	284	459	(175)	-38%
4285 · Dog Fee	1,200	1,165	35	3%
4230 · SH Parking	52,947	29,584	23,363	79%
4290 · Misc	2,935	3,673	(739)	-20%
<b>Total 4200 · Other Income - Operations</b>	<u>57,365</u>	<u>34,881</u>	<u>22,485</u>	<u>64%</u>
<b>4300 · Operating Grant Revenues</b>	30,000	-	30,000	100%
<b>Total 4000 · MARINA REVENUES</b>	<u>1,498,540</u>	<u>1,327,478</u>	<u>171,063</u>	<u>13%</u>
<b>Expense</b>				
<b>5200 · General &amp; Administrative</b>				
5100 · Advertising	1,065	11,786	(10,721)	-91%
5921 · Internet Billing Service	1,393	1,392	1	0%
5210 · Dues & Subscriptions	4,638	2,336	2,302	99%
<b>5220 · Office Supplies</b>				
5223 · Administration	2,724	5,418	(2,694)	-50%
5225 · Operations	13,690	6,039	7,651	127%
<b>Total 5220 · Office Supplies</b>	<u>16,413</u>	<u>11,457</u>	<u>4,957</u>	<u>43%</u>
<b>5230 · Postage &amp; Equip Lease</b>				
5232 · Meter Lease	360	1,031	(671)	-65%
5235 · Postage	1,242	1,500	(258)	-17%
<b>Total 5230 · Postage &amp; Equip Lease</b>	<u>1,602</u>	<u>2,531</u>	<u>(929)</u>	<u>-37%</u>
<b>5240 · Copier Lease &amp; Supplies</b>				
5242 · Copier Lease	2,916	2,345	571	24%
5245 · Toner & Supplies	170	-	170	100%
<b>Total 5240 · Copier Lease &amp; Supplies</b>	<u>3,086</u>	<u>2,345</u>	<u>741</u>	<u>32%</u>

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## Moss Landing Harbor District Profit & Loss Prev Year Comparison July 2014 through March 2015

	Jul '14 - Mar 15	Jul '13 - Mar 14	\$ Change	% Change
<b>5250 · Telephone &amp; Communications</b>				
5253 · Administration	7,019	6,504	515	8%
5255 · Operations	1,064	1,234	(170)	-14%
<b>Total 5250 · Telephone &amp; Communications</b>	<b>8,083</b>	<b>7,738</b>	<b>345</b>	<b>4%</b>
<b>5260 · Professional Services</b>				
5269 · Payroll Processing	2,377	2,159	218	10%
5263 · Audit fees	14,000	13,500	500	4%
5262 · Accounting	26,730	27,189	(459)	-2%
5265 · Legal	43,161	24,578	18,583	76%
5268 · Computer Consulting	928	935	(7)	-1%
<b>Total 5260 · Professional Services</b>	<b>87,196</b>	<b>68,361</b>	<b>18,835</b>	<b>28%</b>
5290 · Credit Card Fees	5,913	4,446	1,467	33%
<b>Total 5200 · General &amp; Administrative</b>	<b>129,390</b>	<b>112,392</b>	<b>16,998</b>	<b>15%</b>
<b>5300 · Personnel</b>				
<b>5310 · Salaries</b>				
5313 · Administration	174,133	163,533	10,600	6%
5315 · Operations	111,333	118,874	(7,541)	-6%
5318 · Maintenance	70,016	71,347	(1,331)	-2%
<b>Total 5310 · Salaries</b>	<b>355,482</b>	<b>353,754</b>	<b>1,728</b>	<b>0%</b>
<b>5330 · Payroll Taxes</b>				
5333 · Administration	13,205	12,348	857	7%
5335 · Operations	9,779	13,268	(3,489)	-26%
5338 · Maintenance	5,278	5,536	(259)	-5%
<b>Total 5330 · Payroll Taxes</b>	<b>28,261</b>	<b>31,152</b>	<b>(2,891)</b>	<b>-9%</b>
<b>5340 · Employee Benefits</b>				
5342 · Vehicle Allowance	-	3,600	(3,600)	-100%
5343 · Administration	52,261	56,697	(4,436)	-8%
5345 · Operations	29,185	25,103	4,082	16%
5348 · Maintenance	35,474	35,409	65	0%
<b>Total 5340 · Employee Benefits</b>	<b>116,920</b>	<b>120,809</b>	<b>(3,889)</b>	<b>-3%</b>
<b>5350 · Workers Compensation</b>				
5353 · Administration	2,700	2,700	-	0%
5355 · Operations	5,283	6,267	(984)	-16%
5358 · Maintenance	6,003	6,036	(33)	-1%
<b>Total 5350 · Workers Compensation</b>	<b>13,986</b>	<b>15,003</b>	<b>(1,017)</b>	<b>-7%</b>
<b>5360 · Education &amp; Training</b>				
5363 · Administration	574	417	157	38%
5365 · Operations	-	325	(325)	-100%
<b>Total 5360 · Education &amp; Training</b>	<b>574</b>	<b>742</b>	<b>(168)</b>	<b>-23%</b>
<b>5370 · Uniforms</b>				
5375 · Operations	-	1,823	(1,823)	-100%
5378 · Maintenance	-	1,823	(1,823)	-100%

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## Moss Landing Harbor District Profit & Loss Prev Year Comparison July 2014 through March 2015

	Jul '14 - Mar 15	Jul '13 - Mar 14	\$ Change	% Change
Total 5370 · Uniforms	-	3,646	(3,646)	-100%
Total 5300 · Personnel	515,223	525,106	(9,882)	-2%
5400 · Insurance				
5410 · Liability Insurance	99,143	81,811	17,332	21%
Total 5400 · Insurance	99,143	81,811	17,332	21%
5500 · Utilities				
5540 · Sewer	22,471	29,098	(6,628)	-23%
5510 · Garbage	35,992	36,464	(472)	-1%
5520 · Gas and Electric	150,000	102,654	47,346	46%
5530 · Water	21,194	22,116	(922)	-4%
Total 5500 · Utilities	229,657	190,333	39,324	21%
5600 · Operating Supplies				
5610 · Vehicles	8,831	3,977	4,854	122%
5625 · Operations	11,602	12,539	(937)	-7%
Total 5600 · Operating Supplies	20,433	16,516	3,917	24%
5700 · Depreciation	353,997	349,787	4,210	1%
5800 · Repairs & Maintenance				
5810 · Vehicles	218	759	(541)	-71%
5820 · Vessels	176	-	176	100%
5830 · Equip Rental	2,583	2,668	(85)	-3%
5850 · Repair Materials	23,324	47,184	(23,860)	-51%
5860 · Outside Service Contracts	42,425	45,214	(2,789)	-6%
5870 · Derelict Disposal	6,790	94,578	(87,789)	-93%
Total 5800 · Repairs & Maintenance	75,516	190,404	(114,888)	-60%
5900 · Financial Expenses				
5928 · Loan Issuance Costs	73,463	-	73,463	100%
5920 · Bank Service Charges	1,498	1,909	(411)	-22%
5990 · Bad Debt	14,875	17,000	(2,125)	-13%
Total 5900 · Financial Expenses	89,836	18,909	70,927	375%
Total · MARINA EXPENSES	1,513,195	1,485,258	27,938	2%
Net Ordinary Income - Marina Operations	(14,655)	(157,780)	143,125	91%
4400 · LEASE AND OTHER INCOME				
4500 · Leases				
4501 · K-Pier Lease	11,851	11,678	173	1%
4502 · Cannery Building				
4518 · Suite 5	3,360	-	3,360	100%
4512 · Suites 7	17,584	35,414	(17,830)	-50%
4520 · Suite 9	5,797	6,370	(574)	-9%
4504 · Suite 3	59,427	58,703	723	1%
4511 · Suite 1 & 10	12,091	11,885	206	2%
4515 · Suite 4	57,472	56,632	839	1%
4517 · Suite 2	21,490	21,174	316	1%

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## Moss Landing Harbor District Profit & Loss Prev Year Comparison July 2014 through March 2015

	Jul '14 - Mar 15	Jul '13 - Mar 14	\$ Change	% Change
4523 · Canary NNN	16,409	1,586	14,823	935%
<b>Total 4502 · Cannery Building</b>	<b>193,629</b>	<b>191,765</b>	<b>1,864</b>	<b>1%</b>
4530 · RV Lot	22,033	21,711	322	1%
4534 · MBARI - MARS Cable	-	1,182	(1,182)	-100%
4535 · MBARI	17,729	17,685	44	0%
4540 · Martin & Mason	23,045	22,570	475	2%
4541 · SH Spare Office	3,721	3,678	43	1%
4545 · Dynegy Outfall	44,317	44,208	109	0%
4560 · North Harbor				
4562 · Sea Harvest	30,626	27,252	3,373	12%
4568 · Monterey Bay Kayaks	27,485	24,900	2,585	10%
4572 · Pottery Planet	27,556	26,488	1,068	4%
<b>Total 4560 · North Harbor</b>	<b>85,667</b>	<b>78,640</b>	<b>7,026</b>	<b>9%</b>
<b>Total 4500 · Leases</b>	<b>401,991</b>	<b>393,116</b>	<b>8,875</b>	<b>2%</b>
4600 · District Property Taxes	142,344	146,791	(4,447)	-3%
4700 · Other Revenues & Concessions				
4727 · Key Sales	3,119	-	3,119	100%
4125 · Amenity Fee	196,223	189,445	6,778	4%
4710 · Vending Activities				
4711 · Washer/Dryer	7,016	5,501	1,515	28%
<b>Total 4710 · Vending Activities</b>	<b>7,016</b>	<b>5,501</b>	<b>1,515</b>	<b>28%</b>
4720 · Dry Storage	35,553	32,880	2,673	8%
4725 · North Harbor Use Fee	47,392	31,086	16,305	52%
4730 · NH Washdown	1,379	1,322	58	4%
4735 · Camp/RV	4,102	1,962	2,140	109%
4740 · Equipment Rental	803	7	796	11371%
4751 · Permits	4,557	3,907	650	17%
4755 · Floating Docks	-	52	(52)	-100%
4765 · Faxes, Copies & Postage	49	55	(6)	-11%
<b>Total 4700 · Other Revenues &amp; Concessions</b>	<b>300,193</b>	<b>266,217</b>	<b>33,976</b>	<b>13%</b>
4800 · Interest				
4846 · Umpqua Interest	1,263	-	1,263	100%
4843 · First Capital Bank	2,307	2,319	(12)	-1%
4841 · Union Bank Interest	1,416	5,771	(4,354)	-75%
4825 · Pinnacle Bank CDs	350	2,816	(2,466)	-88%
4845 · SBB Interest	-	154	(154)	-100%
<b>Total 4800 · Interest</b>	<b>5,336</b>	<b>11,060</b>	<b>(5,724)</b>	<b>-52%</b>
<b>Total 4400 · LEASE AND OTHER INCOME</b>	<b>849,865</b>	<b>817,184</b>	<b>32,681</b>	<b>4%</b>
<b>7000 · LEASE AND OTHER EXPENSES</b>				
<b>7100 · Interest Expense</b>				
7134 · Umpqua Accrued Interest	79,067	-	79,067	100%
7132 · Municipal Finance	674	14,233	(13,558)	-95%

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## Moss Landing Harbor District Profit & Loss Prev Year Comparison July 2014 through March 2015

	Jul '14 - Mar 15	Jul '13 - Mar 14	\$ Change	% Change
7135 · Union Bank Interest	2,910	17,885	(14,976)	-84%
7110 · DBAW Loans	6,365	33,000	(26,635)	-81%
7130 · CIEDB	45,287	105,000	(59,713)	-57%
<b>Total 7100 · Interest Expense</b>	<b>134,303</b>	<b>170,118</b>	<b>(35,815)</b>	<b>-21%</b>
7200 · Other Financial Expenses				
7230 · LAFO Administrative Charges	5,303	4,677	626	13%
7221 · CSDA Dues	5,288	4,919	369	8%
<b>Total 7200 · Other Financial Expenses</b>	<b>10,591</b>	<b>9,596</b>	<b>995</b>	<b>10%</b>
5700 · Depreciation	353,997	349,787	4,210	1%
7300 · Commissioner Expenses				
7320 · Monthly Stipend	8,700	8,100	600	7%
7330 · Incurred Expenses	1,067	810	257	32%
<b>Total 7300 · Commissioner Expenses</b>	<b>9,767</b>	<b>8,910</b>	<b>857</b>	<b>10%</b>
<b>Total 7000 · LEASE AND OTHER EXPENSES</b>	<b>508,659</b>	<b>538,411</b>	<b>(29,753)</b>	<b>-6%</b>
<b>Net Ordinary Income - Lease &amp; Other Operations</b>	<b>341,207</b>	<b>278,773</b>	<b>62,433</b>	<b>22%</b>
<b>Net Ordinary Income - Combined Operations</b>	<b>326,551</b>	<b>120,993</b>	<b>205,558</b>	<b>170%</b>
<b>Other Income/Expense</b>				
<b>Other Expense</b>				
9000 · CAPITAL PROJECT EXPENSES				
9054 · Sea Lion Deterrent Fencing	25,969	-	25,969	100%
5880 · Dredging	20,448	11,534	8,914	77%
9225 · Keyless Entry	-	3,299	(3,299)	-100%
9302 · Tsunami shoreline repairs	31,148	-	31,148	100%
9800 · Dock Replacement	10,854	-	10,854	100%
9750 · Office Computers	-	7,889	(7,889)	-100%
9309 · New NH Restaurant	52,336	76,373	(24,037)	-31%
9250 · Security Camera	2,300	7,669	(5,369)	-70%
9565 · Miscellaneous Capital Projects	9,376	10,131	(755)	-7%
<b>Total 9000 · CAPITAL PROJECT EXPENSES</b>	<b>152,431</b>	<b>116,895</b>	<b>35,536</b>	<b>30%</b>
<b>Total Other Expense</b>	<b>152,431</b>	<b>116,895</b>	<b>35,536</b>	<b>30%</b>
<b>Net Other Income</b>	<b>(152,431)</b>	<b>(116,895)</b>	<b>(35,536)</b>	<b>-30%</b>
<b>Net Income</b>	<b>174,120</b>	<b>4,098</b>	<b>170,022</b>	<b>4149%</b>

4:34 PM  
04/16/15

**Moss Landing Harbor District**  
**A/P Aging Summary**  
As of March 31, 2015

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>&gt; 90</u>	<u>TOTAL</u>
AT&T	76.93	0.00	0.00	0.00	0.00	76.93
CalPERS	0.00	-6,838.23	0.00	0.00	0.00	-6,838.23
Cintas	578.29	0.00	0.00	0.00	0.00	578.29
Corralitos Electric	325.25	0.00	0.00	0.00	0.00	325.25
Doug Hays	575.50	0.00	0.00	0.00	0.00	575.50
Integral Consulting, Inc.	0.00	1,386.25	0.00	0.00	8,547.00	9,933.25
Linda G. McIntyre	0.00	-400.00	0.00	0.00	0.00	-400.00
MP Express	2,866.28	0.00	0.00	0.00	0.00	2,866.28
MRWPCA	0.00	5,997.19	0.00	0.00	0.00	5,997.19
Pajaro/Sunny Mesa C.S.D.	2,266.58	0.00	0.00	0.00	0.00	2,266.58
PG&E	0.00	-20,000.00	0.00	0.00	0.00	-20,000.00
Principal Financial	0.00	-678.52	0.00	0.00	-604.50	-1,283.02
Rabobank	612.19	0.00	0.00	0.00	0.00	612.19
Royal Wholesale Electric	0.00	237.72	0.00	0.00	0.00	237.72
SDRMA	0.00	-4,661.00	0.00	0.00	0.00	-4,661.00
Social Vocational Services, Inc.	0.00	-929.50	0.00	0.00	0.00	-929.50
U.S. Bank	2,738.95	0.00	0.00	0.00	0.00	2,738.95
Unisource Worldwide, Inc.	993.27	0.00	0.00	0.00	0.00	993.27
VALIC	5,257.99	0.00	0.00	0.00	0.00	5,257.99
Verizon Wireless	26.81	0.00	0.00	0.00	0.00	26.81
Vision Sevice Plan	0.00	-164.99	0.00	0.00	0.00	-164.99
<b>TOTAL</b>	<u><u>16,318.04</u></u>	<u><u>-26,051.08</u></u>	<u><u>0.00</u></u>	<u><u>0.00</u></u>	<u><u>7,942.50</u></u>	<u><u>-1,790.54</u></u>

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**Moss Landing Harbor District**  
**Warrant Listing**  
As of March 31, 2015

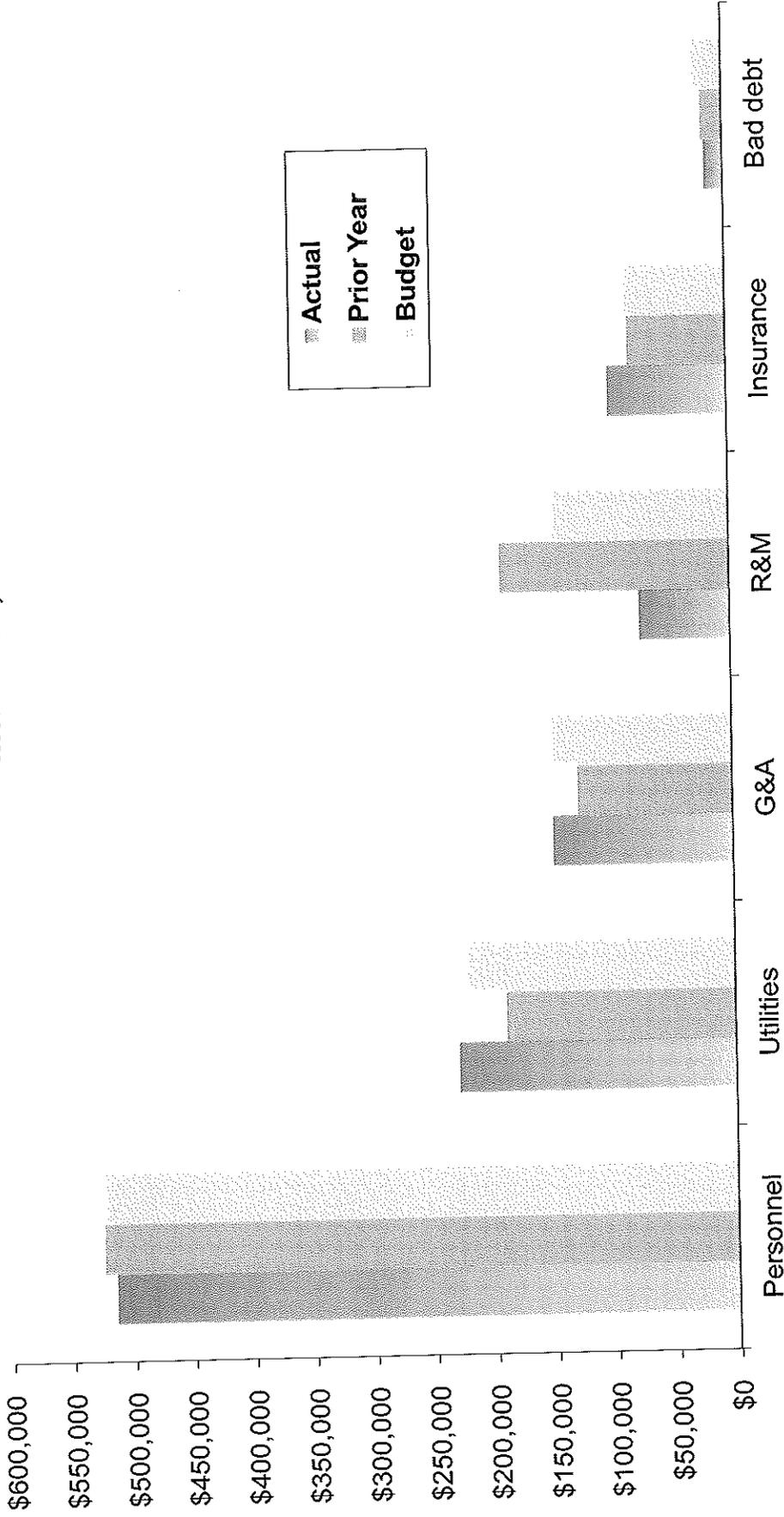
<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Amount</u>
1009 - Union - Operating				
Bill Pmt -Check	03/02/2015	15595	Byte Technology	-112.50
Bill Pmt -Check	03/02/2015	15596	Carmel Marina Corporation	-2,029.00
Bill Pmt -Check	03/02/2015	15597	Jim Kemp	-25.00
Bill Pmt -Check	03/02/2015	15598	Kent Penning	-500.00
Bill Pmt -Check	03/02/2015	15599	Mark Boyd	-333.00
Bill Pmt -Check	03/02/2015	15601	Paul Scionti	-525.00
Bill Pmt -Check	03/02/2015	15602	Phillip Slaymaker	-368.00
Bill Pmt -Check	03/02/2015	15603	Premier Materials Technology, Inc.	-6,353.58
Bill Pmt -Check	03/02/2015	15604	Soil Control Lab	-476.00
Bill Pmt -Check	03/02/2015	15605	Thomas Love	-525.00
Bill Pmt -Check	03/02/2015	15606	U.S. Bank	-736.70
Bill Pmt -Check	03/02/2015	15607	Wendy L. Cumming, CPA	-2,463.75
Check	03/05/2015	1117	Communication Service Co	-2,300.00
Bill Pmt -Check	03/12/2015	15608	Airgas	-64.37
Bill Pmt -Check	03/12/2015	15609	CalPERS	-6,838.23
Bill Pmt -Check	03/12/2015	15610	Castroville "ACE" Hardware	-47.86
Bill Pmt -Check	03/12/2015	15611	Cintas	-476.96
Bill Pmt -Check	03/12/2015	15612	Decio Nascimento	-376.10
Bill Pmt -Check	03/12/2015	15613	Eric Mailander	-478.00
Bill Pmt -Check	03/12/2015	15614	Howard Jaquith	-338.30
Bill Pmt -Check	03/12/2015	15615	Integral Consulting, Inc.	-2,786.00
Bill Pmt -Check	03/12/2015	15616	Jeff Gibson	-500.00
Bill Pmt -Check	03/12/2015	15617	Kent Penning	-25.00
Bill Pmt -Check	03/12/2015	15618	PG&E	-20,000.00
Bill Pmt -Check	03/12/2015	15619	Principal Financial	-678.52
Bill Pmt -Check	03/12/2015	15620	Rabobank	-741.46
Bill Pmt -Check	03/12/2015	15621	SDRMA	-4,661.00
Bill Pmt -Check	03/12/2015	15622	Sea Engineering, Inc.	-2,415.00
Bill Pmt -Check	03/12/2015	15623	Social Vocational Services, Inc.	-929.50
Bill Pmt -Check	03/12/2015	15624	U.S. Bank Equipment Finance	-260.59
Bill Pmt -Check	03/12/2015	15625	Unisource Worldwide, Inc.	-839.69
Bill Pmt -Check	03/12/2015	15626	Valero Marketing and Supply Company	-245.13
Bill Pmt -Check	03/12/2015	15627	VALIC	-5,257.99
Bill Pmt -Check	03/12/2015	15628	Verizon Wireless	-214.26
Bill Pmt -Check	03/12/2015	15629	Vision Sevice Plan	-164.99
Bill Pmt -Check	03/13/2015	15630	Amaral, Andrew -	-100.00
Bill Pmt -Check	03/13/2015	15631	AT&T	-88.32
Bill Pmt -Check	03/13/2015	15632	Carmel Marina Corporation	-2,021.08
Bill Pmt -Check	03/13/2015	15633	Ferrante, Vincent	-200.00
Bill Pmt -Check	03/13/2015	15634	Gomes, Jr., Frank	-200.00
Bill Pmt -Check	03/13/2015	15635	Jeffries, Russell	-300.00
Bill Pmt -Check	03/13/2015	15636	Pajaro/Sunny Mesa C.S.D.	-1,994.14
Bill Pmt -Check	03/13/2015	15637	Redshift	-136.85

**Moss Landing Harbor District**  
**Warrant Listing**  
As of March 31, 2015

<u>Type</u>	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Amount</u>
Bill Pmt -Check	03/13/2015	15638	Sunrise Express	-43.33
Bill Pmt -Check	03/13/2015	15639	Tatiana Priestley	-333.00
Bill Pmt -Check	03/13/2015	15640	Tony Leonardini	-400.00
Bill Pmt -Check	03/13/2015	15641	WASH	-202.08
Bill Pmt -Check	03/27/2015	15642	Amaral, Andrew -	-100.00
Bill Pmt -Check	03/27/2015	15643	AT&T	-153.94
Bill Pmt -Check	03/27/2015	15644	Big Bear Bottled Water	-57.75
Bill Pmt -Check	03/27/2015	15645	Byte Technology	-112.50
Bill Pmt -Check	03/27/2015	15646	Carmel Marina Corporation	-106.12
Bill Pmt -Check	03/27/2015	15647	Carol Jones	-1,749.80
Bill Pmt -Check	03/27/2015	15648	Ferrante, Vincent	-100.00
Bill Pmt -Check	03/27/2015	15649	Global Equipment Company	-375.85
Bill Pmt -Check	03/27/2015	15650	Gomes, Jr., Frank	-100.00
Bill Pmt -Check	03/27/2015	15651	Good Earth Industries	-985.00
Bill Pmt -Check	03/27/2015	15652	Greg Gibbons	-525.00
Bill Pmt -Check	03/27/2015	15653	Henderson Marine Supply	-1,265.55
Bill Pmt -Check	03/27/2015	15654	Jarvis, Fay, Doport & Gibson, LLP	-6,750.00
Bill Pmt -Check	03/27/2015	15655	Jeffries, Russell	-200.00
Bill Pmt -Check	03/27/2015	15656	KLift Service Co., Inc.	-2,344.86
Bill Pmt -Check	03/27/2015	15657	Linda G. McIntyre	-400.00
Bill Pmt -Check	03/27/2015	15658	Port Supply	-252.61
Bill Pmt -Check	03/27/2015	15659	Reserve Account	-300.00
Bill Pmt -Check	03/27/2015	15660	Scotts Valley Sprinkler and Pipe Supply	-213.95
Bill Pmt -Check	03/27/2015	15661	Tony Leonardini	-200.00
Bill Pmt -Check	03/27/2015	15662	United Site Services of Calif., Inc.	-111.39
Bill Pmt -Check	03/27/2015	15663	Verizon Wireless	-214.26
Bill Pmt -Check	03/27/2015	15664	Wald, Ruhnke & Dost Architects, LP	-4,299.45
Bill Pmt -Check	03/27/2015	15665	AT&T	-459.81
Bill Pmt -Check	03/27/2015	15666	Wendy L. Cumming, CPA	-3,645.00
Total 1009 · Union - Operating				-96,128.12
<b>TOTAL</b>				<b>-96,128.12</b>

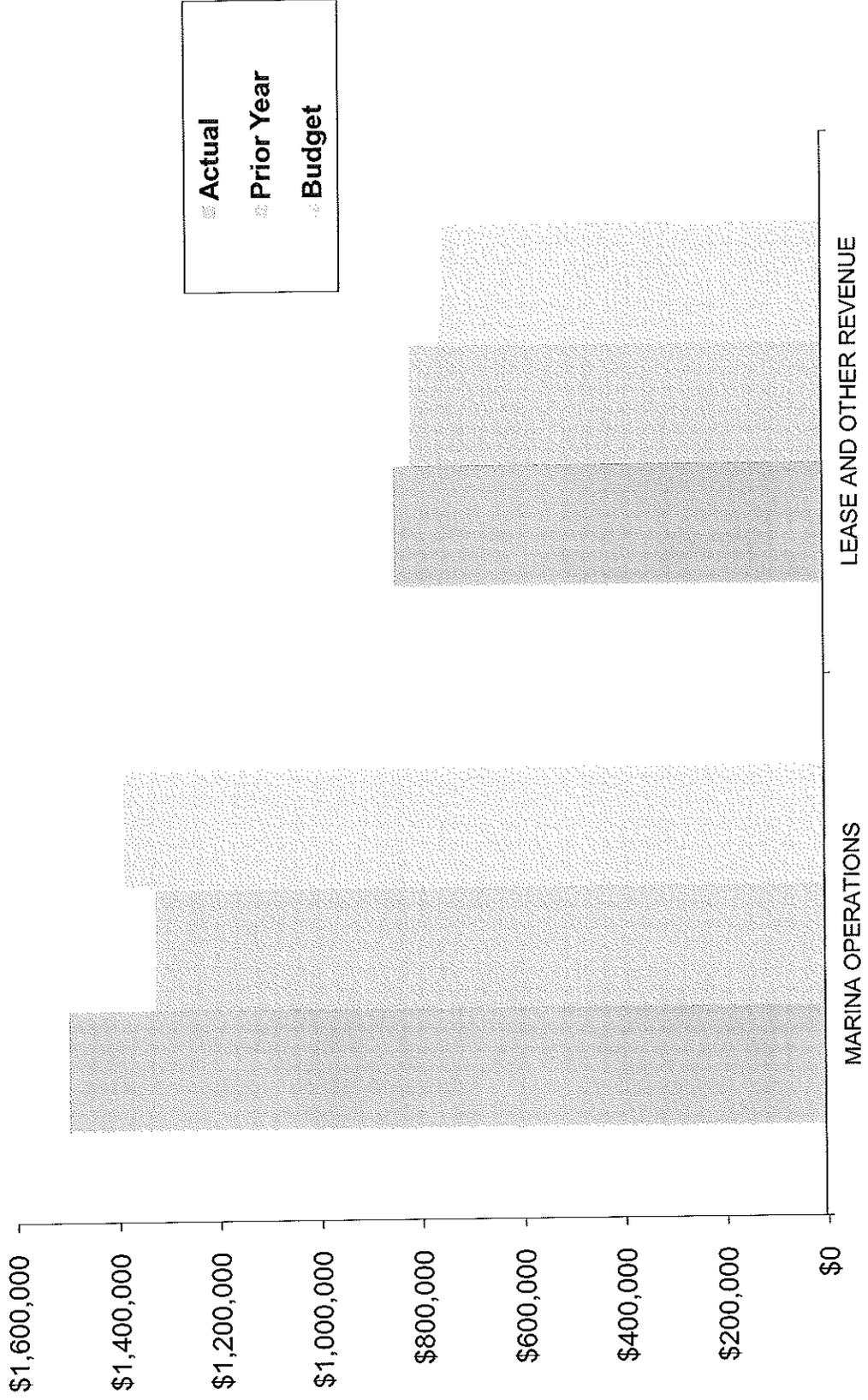
18

**Operating Expenses  
Year to Date Actuals vs. Budget and Prior Year  
March 31, 2015**



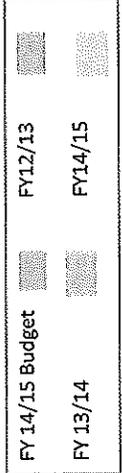
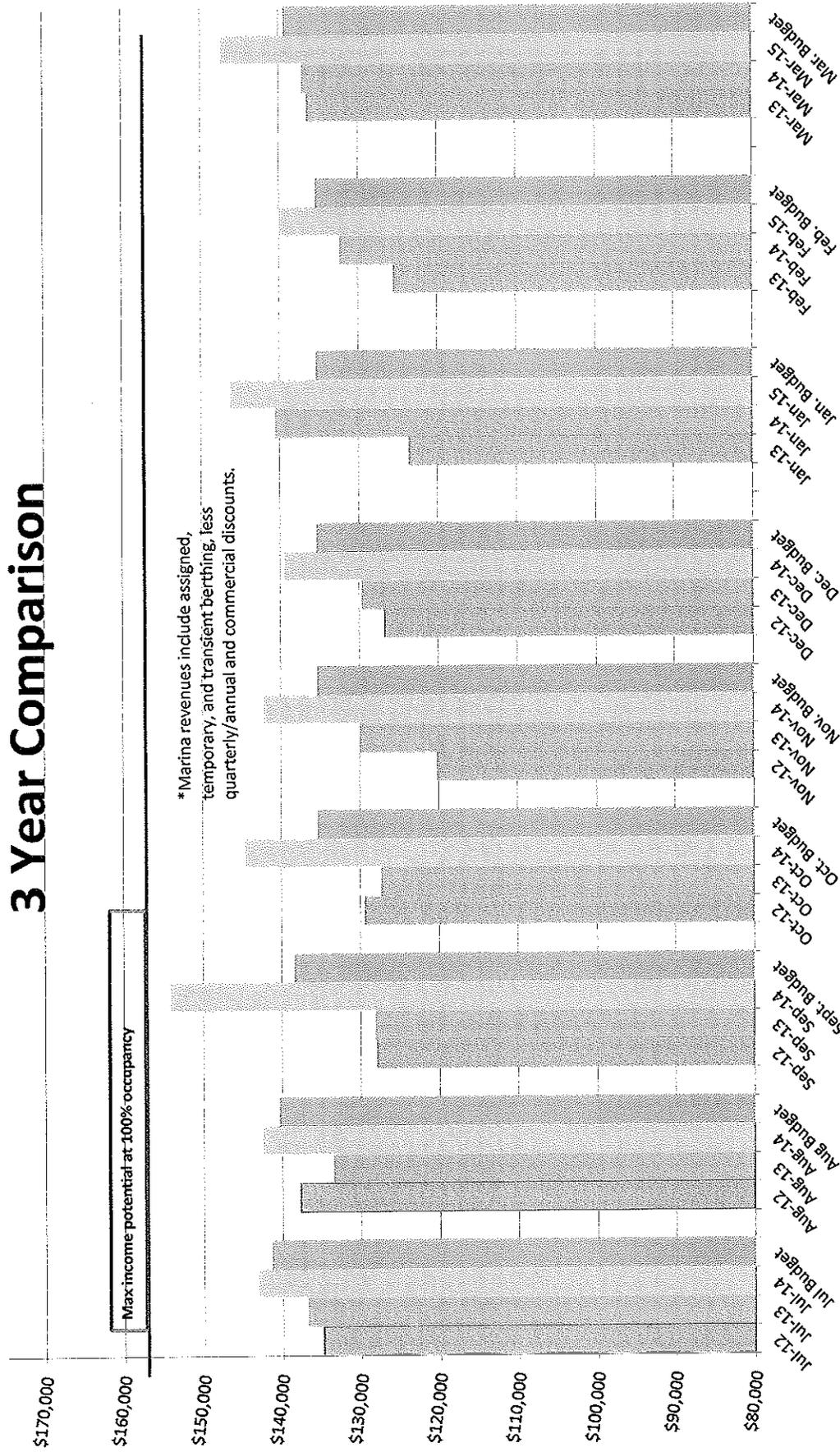
**\*\*Expenses Exclude Dredging, Depreciation and Interest Expenses\*\***

**Marina, Lease and Other Revenue  
Year to Date Actual vs. Budget and Prior Year  
March 31, 2015**



# Moss Landing Harbor District Marina Revenue\* (Berthing)

## 3 Year Comparison





BOARD OF COMMISSIONERS  
Russ Jeffries  
Tony Leonardini  
Vincent Ferrante  
Frank Gomes, Jr.  
Andrew Amaral

7881 SANDHOLDT ROAD  
MOSS LANDING, CA 95039

TELEPHONE – 831.633.5417  
FACSIMILE – 831.633.4537



EXECUTIVE  
GENERAL MANAGER  
HARBORMASTER  
Linda G. McIntyre, Esq.

## STAFF REPORT

### ITEM NUMBER 20 – ADOPT 2015-2016 PRELIMINARY BUDGET BOARD MEETING OF APRIL 22, 2015

Harbors & Navigation Code §6093 requires that the Board adopt a Preliminary Budget on or before June 15 of each year and publish a notice that the Preliminary Budget has been adopted, specifying a date not less than 30 days from the publication of the notice for the purpose of fixing the Final Budget.

The Ad Hoc Budget Committee has held two publicly noticed meetings to discuss and prepare its recommendations for the FY 2015-2016 budget.

The COLA based on CPI for 2014 was 2.84% so increases in slip and lease fees were based on that percentage, most notably on Assigned Slip Fees which are proposed at \$7.15 per foot per month, up from \$6.95 per foot per month. Amenity fees are based on actual costs incurred during the prior year for utilities, and the Amenity Fee is scheduled to increase from \$48 per month to \$52 per month.

Commissioner Gomes is the Chair of the Ad Hoc Budget Committee and Commissioner Leonardini is Vice-chair, and they will make the presentation to the Board of other recommendations of the Committee.

After the Budget Committees' presentation, the Board should hear from the public regarding any comments, issues or questions, consider the Preliminary Budget, make any recommended changes, and adopt the preliminary budget.

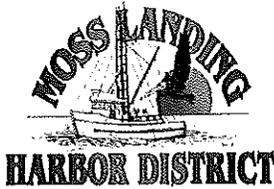
After adopting the Preliminary Budget, staff recommends the Board direct the General Manager to specify a date no earlier than May 27, 2015 at 7:00 p.m. as the date and time to fix the final budget, and to publish the appropriate notice of the public hearing for fixing the final budget.

*SERVING COMMERCIAL FISHING AND RECREATIONAL BOATING SINCE 1947*

	A		B		C		D		E		F		G		H	
	FYE 6/30/10	FYE 6/30/11	FYE 6/30/12	FYE 6/30/13	FYE 6/30/14	FYE 6/30/15	Projected FYE 6/30/15	FYE 6/30/15	FYE 6/30/16	Budget FYE 6/30/15	Budget FYE 6/30/16					
	19.49%	16.27%	19.42%	20.18%	20.76%	17.87%	6.95/ft	6.95/ft	7.15/ft	20.00%	19.00%					
MOSS LANDING HARBOR DISTRICT																
BUDGET FYE 6/30/2016																
Revenues	6.25/ft	6.31/ft	6.40/ft	6.60/ft	6.80/ft	6.95/ft	6.95/ft	6.95/ft	7.15/ft	6.95/ft	7.15/ft					
Marina Revenues																
1 Assigned Berthing	1,332,061	1,399,246	1,361,276	1,331,429	1,427,124	1,479,050	1,479,050	1,483,104	1,533,821	1,483,104	1,533,821					
2 Temporary Berthing	52,562	100,623	144,229	137,851	177,190	210,000	210,000	154,500	213,780	154,500	213,780					
3 Transient Berthing	35,509	50,353	52,449	60,500	64,865	59,000	59,000	57,500	58,000	57,500	58,000					
4 City/Annual Discount	(15,968)	(13,848)	(10,439)	(10,830)	(6,961)	(4,500)	(4,500)	(7,500)	(7,500)	(7,500)	(7,500)					
5 Commercial Discount	(16,457)	(17,735)	(15,982)	(15,543)	(14,596)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)					
6 Liveboard Fees	105,135	96,300	95,790	92,790	93,265	103,000	103,000	100,000	102,000	100,000	102,000					
7 Intra-Harbor Towing	2,100	750	1,800	1,500	1,800	1,750	1,750	1,000	1,000	1,000	1,000					
8 Pump outs	1,000	1,750	400	400	950	300	300	300	350	300	350					
9 Non-Op Surcharge	-	-	-	-	-	-	-	-	350	-	350					
10 Assigned Slip/LA App. Fee	5,262	4,743	6,867	8,999	10,895	8,500	8,500	6,000	7,000	6,000	7,000					
11 Recovered Lien Costs	780	-	648	1,308	1,358	2,300	2,300	2,000	2,000	2,000	2,000					
12 Late Fees	31,232	35,936	30,408	25,670	26,681	29,000	29,000	30,000	30,000	30,000	30,000					
13 Total Marina Revenues	1,533,216	1,657,578	1,667,446	1,714,074	1,782,571	1,873,400	1,873,400	1,812,754	1,926,251	1,812,754	1,926,251					
14 Trust Lands Lease Revenue																
15 MBARI - Dock	21,799	22,493	22,529	22,850	23,930	24,108	24,108	24,079	24,793	24,079	24,793					
16 MBARI-MARS Cable	1,086	2,183	1,097	1,156	1,182	1,208	1,208	1,208	1,281	1,208	1,281					
17 Dynegy Outfall	53,561	55,206	55,914	56,418	59,830	60,817	60,817	61,284	62,544	61,284	62,544					
18 Total Trust Lands Lease Revenue	76,446	79,882	79,540	80,424	84,942	86,133	86,133	86,572	88,618	86,572	88,618					
19 Leases																
20 Cannery Suites - (3)	83,236	82,951	74,680	76,656	78,512	79,446	79,446	80,385	81,702	80,385	81,702					
21 - (4)	70,079	70,724	72,394	74,109	75,790	77,716	77,716	77,743	79,923	77,743	79,923					
22 - (1&10)	14,920	14,904	15,194	15,459	15,914	16,349	16,349	16,350	16,813	16,350	16,813					
23 - (2)	26,415	27,696	27,087	27,599	28,340	29,059	29,059	29,065	29,809	29,065	29,809					
24 - (5A)	-	-	-	-	-	2,394	2,394	-	5,609	-	5,609					
25 - (5B)	-	-	-	-	-	6,720	6,720	-	7,872	-	7,872					
26 - (6A, B & D)	53,586	46,000	21,577	37,375	41,276	23,777	23,777	23,788	24,452	23,788	24,452					
27 - (9)	9,107	2,103	7,285	7,478	7,658	7,840	7,840	7,841	8,063	7,841	8,063					
28 - (8)	-	-	-	-	-	-	-	-	-	-	-					
30 - K-Pier	9,020	14,624	14,834	15,220	15,628	16,024	16,024	16,033	16,479	16,033	16,479					
31 Cannery NIN	54,217	26,966	61,967	64,851	39,611	30,000	30,000	30,000	30,000	30,000	30,000					
32 Floating Docks	624	624	520	520	520	-	-	-	-	-	-					
33 Sea Harvest Restaurant	33,897	36,181	34,684	34,496	36,156	38,429	38,429	34,654	35,515	34,654	35,515					
34 Pot Stop	33,458	33,612	33,708	33,352	35,449	40,720	40,720	39,364	41,791	39,364	41,791					
35 MB Kayak	26,979	37,844	28,155	26,350	30,251	31,123	31,123	26,556	29,556	26,556	29,556					
36 Martin/Mason	21,105	21,673	20,886	21,300	22,571	23,045	23,045	22,624	23,639	22,624	23,639					
37 MBARI - Dock	21,799	22,493	22,529	22,850	23,930	24,108	24,108	24,079	24,793	24,079	24,793					
38 MBARI-MARS Cable	1,086	2,183	1,097	1,156	1,182	1,208	1,208	1,208	1,281	1,208	1,281					
39 Dynegy Outfall	53,561	55,206	55,914	56,418	59,830	60,817	60,817	61,284	62,544	61,284	62,544					
40 S.H. Spare Office	1,786	3,947	4,678	4,396	4,917	5,032	5,032	5,028	5,174	5,028	5,174					
41 RV Lot	24,943	26,738	27,629	28,358	29,055	29,793	29,793	29,802	30,639	29,802	30,639					
42 Total Lease Revenue	539,818	526,469	524,876	552,423	546,070	543,601	543,601	525,805	555,791	525,805	555,791					
43 Revenues - Other																
44 Amenities Fee	245,716	230,432	245,348	245,878	254,070	260,000	260,000	256,500	276,388	256,500	276,388					
45 Dry Storage (2)-Gear & Trailer	36,463	40,717	42,686	42,225	47,831	46,000	46,000	39,000	42,000	39,000	42,000					
46 North Harbor Use Fee	42,473	39,907	87,328	77,094	66,291	83,100	83,100	102,000	80,000	102,000	80,000					
47 NH Boat Wash	1,797	1,563	2,182	2,739	2,919	2,200	2,200	2,500	2,500	2,500	2,500					
48 ISH Parking	17,230	26,294	44,162	46,348	44,872	72,000	72,000	50,000	60,000	50,000	60,000					
49 Camping/RV	3,547	2,202	2,632	3,923	4,786	6,000	6,000	3,600	4,000	3,600	4,000					
50 Equipment Rental	85	300	756	1,398	7	1,000	1,000	250	250	250	250					
51 Facilities Use Permits	3,573	3,530	2,715	2,575	4,971	5,000	5,000	3,000	6,000	3,000	6,000					
52 Vending (Soda/Laundry)	7,711	7,491	8,701	8,507	7,723	9,000	9,000	7,500	7,500	7,500	7,500					
53 Merchandise - Clothing, etc.	80	835	1,739	522	592	400	400	1,000	500	1,000	500					
54 Copies, Key Sales, Bid Packages, etc.	80	94	127	113	448	2,900	2,900	40	3,000	40	3,000					
55 Grant - DBW Derelict Disposal	19,998	-	-	30,000	26,857	30,000	30,000	20,000	20,000	20,000	20,000					
56 Desal Reimbursement	-	-	-	-	-	-	-	-	35,000	-	35,000					
57 Misc. Charge/Pet Fee	4,133	2,885	9,338	2,259	5,624	4,000	4,000	3,000	3,000	3,000	3,000					
58 Surplus Sale & Misc.	-	348	500	-	-	-	-	100	100	-	100					
59 Total Other Revenue	382,806	376,598	448,214	463,587	466,991	521,600	521,600	488,490	540,238	488,490	540,238					
60 TOTAL REVENUES	2,532,286	2,640,527	2,720,076	2,810,508	2,880,574	3,024,734	3,024,734	2,913,620	3,110,898	2,913,620	3,110,898					

	A		B		C		D		E		F		G		H	
	FYE 6/30/10	FYE 6/30/11	FYE 6/30/12	FYE 6/30/13	FYE 6/30/14	Projected FYE 6/30/15	Budget FYE 6/30/15	Budget FYE 6/30/16	CPI = 2.84%							
MOSS LANDING HARBOR DISTRICT																
BUDGET FYE 6/30/2016																
61 Expenses																
62 Media/Publications/Advertising	4,684	18,324	11,444	14,911	12,155	1,400	10,000	5,000	Including real property vacancies, NH Dev., and TV Ad							
63 General & Administrative	68,792	113,965	50,340	40,350	92,139	58,600	55,000	57,000	Telephone, office supplies, postage, etc.							
64 Accountant	38,025	37,419	37,931	38,178	37,922	38,000	40,000	40,000								
65 Auditor	11,000	13,950	14,450	14,950	13,500	14,000	14,000	14,000								
66 Attorney	32,779	48,997	60,546	41,923	43,490	60,000	55,000	65,000								
67 Attorney - CEQA-Desal								35,000								
68 Personnel	633,428	660,890	686,036	694,000	712,287	695,000	698,000	745,000								
69 Insurance & Bonding	102,920	100,492	108,098	109,211	115,019	115,000	115,000	115,000	Estimate							
70 PG&E	185,335	165,602	192,358	193,295	162,654	190,000	175,000	194,750	CPI							
71 Sewer	30,452	28,779	32,511	31,849	48,227	42,000	43,000	43,050	CPI							
72 Water	26,476	27,309	27,163	26,633	30,971	31,000	31,000	31,775	CPI							
73 Trash	45,366	52,246	52,045	46,072	49,072	50,000	50,000	51,250	CPI							
74 Maintenance & Repairs	63,613	51,275	52,482	57,390	91,668	75,000	100,000	100,000	dock/mat/roofing/gangway/rip-rap							
75 Operating Supplies	25,166	15,396	24,183	27,015	22,371	24,000	25,000	25,000	Fuel, paper products, parking envelopes, uniforms/CPI adj							
76 Outside Service Contracts	30,329	43,147	59,010	38,980	63,650	45,000	50,000	60,000	CPI (welder, plumber, electric, janitorial, arborist, roofer, SEI, Inc. etc.)							
77 Bad Debt	25,738	28,051	29,204	25,000	16,928	23,000	35,000	25,000								
78 Commissioner Expenses	13,224	18,841	16,631	17,333	13,620	16,000	20,000	20,000	Only if incumbent challenged, \$3-\$5 per voter							
79 Comm Election								300,000								
80 Derelict Disposal	30,710	-	13,769	90,318	113,078	10,000	50,000	30,000	Mandatory membership fee							
81 LAFCO	5,280	5,054	4,846	4,781	4,677	5,303	4,781	5,500	Optional membership (required for workers comp policy)							
82 CSDA	2,869	4,141	4,257	4,576	4,919	5,288	4,919	-	Moss Landing Community planning							
83 County EIR			8,288													
84 Dredging	18,649	133,181	90,405	1,176,600	11,534	16,000	50,000	50,000	Increase due to piling replacement project.							
85 Depreciation	764,202	768,434	762,708	766,841	949,095	944,000	944,000	945,000								
86 Total Expenses	2,159,037	2,336,493	2,338,705	3,460,206	2,608,976	2,456,591	2,869,700	2,662,725								
87 Net Operating Income (Loss)	373,249	304,034	381,371	(649,693)	271,598	568,143	43,920	448,173								
88																
89 Interest and Tax Income																
90 Interest - Pinnacle Bank CD's	28,567	25,170	6,216	4,319	3,750	350	3,750	-	Account closed out							
91 Interest - First Capital Bank	3,238	9,459	14,391	5,700	3,085	3,050	3,100	-	20% on \$1,55M							
92 Interest Umpqua						1,600	-	-	10% on \$1.0M							
93 Interest Union Bank - Trust Account						1,500	1,650	-	25% on 500k							
94 Interest Union Bank	3,470	3,631	4,014	2,190	6,571	1,500	100,000	200,000	15% on 1.4M							
95 Property Taxes	232,872	224,833	221,319	233,340	285,693	220,000	108,500	201,250								
96 Total Other Income	268,147	263,143	245,940	245,549	269,099	226,500	108,500	201,250								
97																
98 Interest Expenses																
99 Interest - UMPQUA						124,247	-	129,654	Note interest 2.85%							
100 Interest - CIEB	162,067	144,974	142,213	132,500	131,870	45,287	128,925	-	Refinanced 2014							
101 Interest - DBAW	51,338	45,754	45,251	38,501	36,888	6,365	38,606	-	Refinanced 2014							
102 Interest - Union	34,342	28,445	28,592	25,797	23,723	2,910	21,246	-	Borrowed from Trust account, approx. 1M at 2.5% interest							
103 Interest - Trust Funds						674	15,390	-	Refinanced 2014							
104 Interest - Municipal Finance	23,517	20,346	19,587	16,928	16,032	800	800	800	Insurance policy, financed through AFCO							
105 Interest - Premium Finance	800	-	800	800	800	800	800	800								
106 Total Other Expenses	262,064	239,519	236,443	214,527	211,313	180,283	204,967	132,954								
107																
108 NET INCOME (LOSS)	379,332	327,658	390,868	(618,676)	329,384	614,360	(52,547)	516,469								
109																
110 Capital Projects									Formerly Harris and Associates							
111 Project Consultant		4,830							Grading and base							
112 NH Parking lot (N. or EYC)		4,243					7,500	7,500								
113 Security Camera																
114 Keyless Entry				3,002					\$11K each							
115 Piling replacement project				571,804					Costs to be reimbursed by FEMA							
116 Piling replacement project (FEMA)				1,752,078					4 miles of fencing							
117 Sea Lion Detention fencing				76,575					Lumber, material, electrical and floats							
118 Dock maintenance									Replacement (B165-B184) including fingers							
119 Concrete docks replacement									Proposed NH Restaurant pad							
120 Computers (incl software)	3,275								New North Harbor Restaurant							
121 Restaurant Pad																
122 New NH Restaurant				73,880												





BOARD OF COMMISSIONERS  
Russ Jeffries  
Tony Leonardini  
Vincent Ferrante  
Frank Gomes, Jr.  
Andrew Amaral

7881 SANDHOLDT ROAD  
MOSS LANDING, CA 95039

TELEPHONE – 831.633.5417  
FACSIMILE – 831.633.4537



EXECUTIVE  
GENERAL MANAGER  
HARBORMASTER  
Linda G. McIntyre, Esq.

## STAFF REPORT

### ITEM NUMBER 21 – ASPEN ENVIRONMENTAL CEQA SERVICES BOARD MEETING OF APRIL 22, 2015

As you are aware, the District issued a Request for Proposals (“RFP”) for California Environmental Quality Act (“CEQA”) consulting services for the People’s Moss Landing Water Desalination Project (“Project”) on February 6, 2015. In response to the RFP the District received only one proposal, from Aspen Environmental Group. (“Aspen”)

The Aspen Proposal, included with your agenda packet, has been reviewed by Staff and has been determined to be complete and responsive to the RFP’s requirements. In summary, Aspen’s proposal offers a team of professionals with considerable experience providing environmental services to and working with governmental entities such as the California Coastal Commission and California Energy Commission. Proposed Project Manager Susan Lee has significant coastal project experience, including work on the Morro Bay Power Plant and technical analysis of the Huntington Beach Desalination Project. The proposed team includes personnel with expertise in a wide variety of relevant fields, including affiliation with Paul Herman of GHD, an experienced desalination engineering consultant who has worked on issues associated with the planning and design of desalination plants in Carlsbad and San Diego.

The Aspen proposal demonstrates that the firm has provided a wide variety of environmental services to both public entities and private developers, and has the experience desired by the District in the preparation as well as peer review of environmental documents.

Aspen has provided a rough estimate of thirteen months for the completion of the involved work, although there is an indication that they believe that additional analysis may need to be performed under the National Environmental Protection Act (“NEPA”), the federal equivalent of CEQA. The estimated total cost for CEQA services is \$172,872; a separate scope of services and budget would need to be prepared and added to this cost if, as suspected, NEPA compliance is necessary. All consultant costs will be paid by the Moss Landing Commercial Park, LLC and/or Nader Agha pursuant to the previously approved and executed Reimbursement Agreement and First Amendment.

A representative from Aspen will be present at the meeting to respond to any questions the Board may have regarding the proposal or Aspen’s qualifications. At this juncture, the Board has several options:

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1. Award the Contract to Aspen. The Board may consider accepting the proposal and conditionally awarding the contract for services to Aspen. Final execution of the contract would be conditioned on Staff's meeting with the Aspen Project Team to ensure compatibility and a complete meeting of the minds on the desired scope of services, and completion of a reference check. (Staff has already commenced contact with several of the references provided by Aspen, and will request writing samples for review.)

Although the District only received one proposal, the Board should keep in mind that in procuring professional services, the emphasis is on the analysis of the qualifications of a proposing party. If the Board determines that Aspen's qualifications meet the District's needs, there is nothing that prohibits the Board from awarding the contract to Aspen, even without additional proposals for comparison purposes.

From a Staff perspective, it appears that Aspen has demonstrated the ability to provide the services the District desires, with a team of professionals that should be able to adequately address the many challenging issues posed by the Project. It is clear that real thought and effort went into the preparation of the Proposal.

Awarding the contract to Aspen also has the advantage of avoiding a long interview and vetting process. In theory, the Board could award the contract in April and Aspen can immediately commence work on the Project. Aspen has provided a very rough estimate of 13 months of work, which would result in a completion date for the environmental review process sometime in June of 2016.

2. Re-solicit Proposals. The Board can reject the one proposal received, without prejudice, and direct staff to re-solicit proposals. This can be done in one of two ways:

A. Staff can distribute the exact same RFP to a broader group of potential applicants. There may also be publications in which we can publish the RFP. Staff estimates that a re-solicitation of this type will postpone the selection process to at least June or July.

B. Staff can modify and re-issue the RFP. Staff heard from at least one potential service provider that the reason they did not submit a proposal was because they lacked the ability to provide an employee for on-site planning services. This has caused Staff to wonder whether it might have been more viable to split the proposal into two proposals, one for the CEQA peer review services and one for basic planning services. If the Board were interested in going through this modification and re-issue process, Staff might contact some of the parties on the previous list and request information as to why they did not submit a proposal, and to then attempt to make appropriate modifications to the RFP.

Staff awaits the Board's direction on this matter. It may also be helpful to hear if the Project Proponent, The Moss Landing Commercial Park, LLC, has any particular opinion on the consultant selection. In the event the Board wishes to move forward with awarding the contract to Aspen, a resolution has been prepared for consideration and adoption.

## RESOLUTION 15-06

### A RESOLUTION OF THE MOSS LANDING HARBOR DISTRICT ACCEPTING A PROPOSAL FROM ASPEN ENVIRONMENTAL GROUP FOR ENVIRONMENTAL IMPACT REPORT REVIEW AND CEQA PROCESSING SERVICES FOR THE PEOPLE'S MOSS LANDING WATER DESALINATION PROJECT AND CONDITIONALLY AUTHORIZING THE GENERAL MANAGER TO ENTER INTO A PROFESSIONAL SERVICE AGREEMENT WITH ASPEN ENVIRONMENTAL GROUP FOR SUCH SERVICES

**WHEREAS**, by way of a Reimbursement Agreement dated March of 2014, and a First Amendment" thereto dated September 30, 2014, the Moss Landing Harbor District ("District") has agreed, among other matters, to assume "Lead Agency" status for purposes of oversight of the preparation of the appropriate review document for the People's Moss Landing Water Desalination Project (the "Project") in accordance with the California Environmental Quality Act ("CEQA"); and

**WHEREAS**, on February 6, 2015, District issued a Request for Proposals ("RFP") for Consultant Services for Environmental Impact Report Review and CEQA Processing for the Project; and

**WHEREAS**, at the close of the proposal submission period, March 6, 2015, the District had received only one proposal, from Aspen Environmental Group ("Aspen"); and

**WHEREAS**, District Staff has reviewed the Aspen Proposal and believes that Aspen is capable and qualified to provide all of the environmental consulting and processing services desired by the District; and

**WHEREAS**, the cost for Aspen's services, initially estimated at \$172,872:00, will be paid exclusively by The Moss Landing Commercial Park, LLC and/or Nader Agha, pursuant to the terms of the aforementioned Reimbursement Agreement and First Amendment.

**NOW THEREFORE, BE IT RESOLVED** that the Board of Harbor Commissioners of the Moss Landing Harbor District hereby accepts the Proposal for Services from Aspen Environmental Group, and conditionally authorizes the General Manager to enter into a Professional Services Agreement with Aspen, in the form attached hereto as Exhibit A, and by this reference incorporated herein, subject to the General Manager's meeting with and approval of the proposed "Key Aspen Team Personnel" and satisfactory responses from Aspen's listed references.

#### \*\*\*\* CERTIFICATION \*\*\*\*

Resolution 15-06 was duly passed and adopted by the Board of Harbor Commissioners of the Moss Landing Harbor District at a regular meeting of the Board held on the 22<sup>nd</sup> day of April, 2015, a quorum present and acting throughout, by the following vote, to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

\_\_\_\_\_  
Russ Jeffries, President  
Board of Harbor Commissioners

\_\_\_\_\_  
Linda G. McIntyre, Deputy Secretary  
Board of Harbor Commissioners

**Moss Landing Harbor District - EIR Review, CEQA Processing Services - Cost Estimate**

Key Personnel/Category	Project Role	Hourly Rate	TASK 1		TASK 2		TASK 3		TASK 4		TASK 5		TASK 6		TASK 7		TASK 8		TASK 9		Totals	
			Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt
Susan Lee	PM; Alternatives	\$230.00	16	\$3,680	16	\$3,680	24	\$5,520	4	\$920	20	\$4,600	20	\$4,600	30	\$6,900	24	\$5,520	8	\$1,840	162	\$37,260
Brewster Birdsall	AQ, PD, Noise, GHG	\$170.00	16	\$2,720	—	—	34	\$5,780	—	—	16	\$2,720	4	\$680	4	\$680	—	—	—	—	70	\$11,900
Sandra Alarcon-Lopez	Pub Inv; Land Use	\$165.00	6	\$990	—	—	20	\$3,300	—	—	8	\$1,320	6	\$990	4	\$660	—	—	—	—	44	\$7,260
Negar Vahidi	Social Sciences	\$165.00	16	\$2,640	—	—	28	\$4,620	—	—	—	—	16	\$2,640	8	\$1,320	—	—	—	—	68	\$11,220
Chris Huntley	Bio Terrestrial	\$155.00	4	\$620	—	—	6	\$930	—	—	—	—	4	\$620	4	\$620	—	—	—	—	18	\$2,790
Heather Blair	Bio Terrestrial	\$145.00	14	\$2,030	—	—	20	\$2,900	—	—	—	—	16	\$2,320	6	\$870	—	—	—	—	56	\$8,120
Emily Capello	DPM; Alts; support	\$125.00	20	\$2,500	16	\$2,000	30	\$3,750	8	\$1,000	24	\$3,000	16	\$2,000	20	\$2,500	—	—	50	\$6,250	184	\$23,000
Michael McGowan	Marine Bio	\$120.00	16	\$1,920	—	—	20	\$2,400	—	—	8	\$960	20	\$2,400	20	\$2,400	12	\$1,440	—	—	96	\$11,520
Scott Debauche	Traffic, Soc Sci.	\$102.00	8	\$816	—	—	20	\$2,040	—	—	—	—	6	\$612	6	\$612	—	—	—	—	40	\$4,080
Aubrey Mescher	Geo, Water Rsrce	\$100.00	16	\$1,600	—	—	40	\$4,000	—	—	—	—	12	\$1,200	10	\$1,000	—	—	—	—	78	\$7,800
Enviro Science Staff	Technical support	\$95.00	4	\$380	—	—	30	\$2,850	—	—	—	—	6	\$570	16	\$1,520	—	—	—	—	56	\$5,320
Maral Koshkarian	Invoicing	\$65.00	2	\$130	—	—	2	\$130	2	\$130	2	\$130	2	\$130	4	\$260	2	\$130	—	—	16	\$1,040
Freeman/Chitea	Admin support	\$65.00	4	\$260	—	—	4	\$260	—	—	—	—	2	\$130	4	\$260	2	\$130	—	—	16	\$1,040
Mark Tangard	Doc production	\$105.00	8	\$840	—	—	6	\$630	8	\$840	—	—	2	\$210	6	\$630	—	—	6	\$630	36	\$3,780
<b>SUBTOTAL Aspen</b>			<b>142</b>	<b>\$20,286</b>	<b>40</b>	<b>\$6,520</b>	<b>284</b>	<b>\$39,110</b>	<b>22</b>	<b>\$2,890</b>	<b>62</b>	<b>\$10,010</b>	<b>144</b>	<b>\$21,142</b>	<b>142</b>	<b>\$20,232</b>	<b>40</b>	<b>\$7,220</b>	<b>64</b>	<b>\$630</b>	<b>940</b>	<b>\$136,130</b>

Hourly rates include benefits, overhead, and fee.

Direct Project Cost Item	Unit Cost	Hours	Amt
Sub: Hermann/GHD	Desal design, alts	24	\$5,280
Sub: Cailliet	Marine biology	16	\$2,000
Sub: Clayton/MCA	Visual resources	12	\$1,596
Rental Car (per day w/gas)		5	\$500
Airfare (at \$500/roundtrip)		2	\$200
Meals		—	—
Miscellaneous		—	—
<b>Subtotal Subs + ODC Cost</b>			<b>\$11,976</b>
Aspen Fee 10% on Subs and Direct Costs		—	\$20
<b>Total Cost, Non-Aspen Labor</b>			<b>\$13,174</b>
<b>TOTAL HOURS &amp; COST BY TASK</b>		<b>194</b>	<b>\$33,460</b>

Note: Cost assumptions for each task have been developed and can be provided upon request.



**Aspen Environmental Group**  
**Proposal to Moss Landing Harbor District**  
**Consultant Services EIR Review and CEQA Processing:**  
**People's Moss Landing Water Desalination Project**

Aspen Environmental Group's three most important qualifications for supporting the Moss Landing Harbor District during its consideration of the People's Moss Landing Water Desalination Project are summarized below.

**1. Aspen's Focus on Public Agency Support**

Since Aspen's founding over 25 years ago, we have worked primarily for public agencies — in particular those responsible for reviewing, approving, or implementing major infrastructure projects. In this capacity we serve as an extension of agency staff, providing technical and administrative support by preparing CEQA and/or NEPA documents, setting up and testifying at hearings and public workshops, and preparing agency findings. When critically reviewing a project, we first ensure that we understand all design and engineering components in enough detail that our comprehensive and defensible CEQA or NEPA document covers each potential impact and provides appropriate mitigation where it is needed.

Clients recognize and greatly appreciate our strong technical knowledge, our independence, and our objectivity. Repeatedly, Aspen has been awarded multi-year contracts to act as the CEQA and NEPA contractor for agencies charged with reviewing and assessing some of California's largest and most controversial projects. Examples of our ongoing contracts include:

- The **California Energy Commission** for coastal and inland power plants, including assessment of once-through cooling and alternative cooling technologies. Our CEC work also includes the recently published multi-agency Desert Renewable Energy Conservation Plan EIR/EIS.
- The **California Public Utilities Commission** for major transmission lines, pipelines, and substations.
- Several counties, including **San Benito and San Luis Obispo Counties** in their assessment of utility-scale solar energy facilities.
- The **California Department of Conservation** for new oil and gas hydraulic fracturing regulations.

**2. Aspen's Strong Coastal Project Experience**

The energy and infrastructure projects Aspen has evaluated for state and local agencies include a number of coastal projects that are highly relevant to the District's needs. Aspen is fully knowledgeable regarding the complex permitting requirements for such facilities, given the applicable state, local, and federal jurisdictions. Our work for the Energy Commission has been particularly relevant, because it includes extensive work on **coastal power plants**, their cooling intake and outfall systems, and their presence and visibility in heavily used recreational areas. We have participated in the review of the **Carlsbad and Huntington Beach Desalination Projects** through two different agency processes. In addition, Aspen prepared the EIR for the **California State Lands Commission** for the **Monterey Accelerated Research System Cabled Observatory**, a research node installed within Monterey Bay.

**3. Aspen's Expertise in CEQA and NEPA Compliance for Controversial Projects**

The heart of Aspen's work is in preparation of CEQA and NEPA compliance documents, many of which have evaluated high-profile and controversial infrastructure projects. We have prepared or reviewed hundreds of these documents in the past 25 years, including the State's most controversial projects (e.g., Sunrise Powerlink Transmission, Diablo Canyon and San Onofre Nuclear Generating Stations, Senate Bill 4 Fracking Regulations, and Desert Renewable Energy Conservation Plan). Given the profile of controversial projects, we carefully focus on providing advice and support to responsible public agencies to ensure that our CEQA and NEPA documents are adequate and complete, and will survive legal challenges.

**Section I Organizational Information**

**Aspen Environmental Group** (Aspen) was established in the State of California in 1992 as a C-Corporation. Prior to its incorporation, the firm was a Partnership. Aspen's staff of 65 scientists, planners, engineers, GIS special-

ists, and support personnel serves clients from 6 offices, located in San Francisco, Sacramento, Agoura Hills, Inland Empire, Palm Springs, and Phoenix. Additional detail is available on our webpage at [www.AspenEG.com](http://www.AspenEG.com).

Susan Lee, Vice-President and manager of Aspen's San Francisco Office, will manage the project. She will be fully responsible for the timely completion of all tasks and will work closely with the District throughout the project term, ensuring the work complies fully with the contract and the District's needs and expectations. Questions regarding our proposal should be directed to her.

Hamid Rastegar, President and located in Aspen's corporate headquarters, is the authorized representative to execute the contract with the District. Contact information and office addresses for the two Aspen managers are shown here.

**Primary Contact:**  
**SUSAN V. LEE, VICE PRESIDENT**

235 Montgomery Street, Suite 935  
San Francisco, CA 94104  
Phone: (415) 696-5311  
Email: [SLee@aspeneg.com](mailto:SLee@aspeneg.com)

**Contract:**  
**DR. HAMID RASTEGAR, PRESIDENT**

5020 Chesebro Road, Suite 200  
Agoura Hills, CA 91301  
Phone: (818) 338-6655  
Email: [HRastegar@aspeneg.com](mailto:HRastegar@aspeneg.com)

## Section II Qualifications and Experience

This section provides information on qualifications and experience in four sections: (1) References, (2) Firm description; (3) Personnel descriptions; and (4) Examples of completed projects. Resumes for each proposed staff member are provided in Appendix A, at the end of the proposal. Appendix B provides additional relevant project information.

As requested, Aspen confirms that we have not been debarred or disqualified as a vendor by any federal, state, or local entity.

### References

*Power Plant Siting Support*

**Roger Johnson**

Deputy Director  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512  
(916) 654-5100  
[Rjohnson@energy.state.ca.us](mailto:Rjohnson@energy.state.ca.us)

*CVSR and Topaz Solar Projects*

**Ellen Carroll**

Environmental Coordinator  
San Luis Obispo County  
976 Osos Street, Room 200  
San Luis Obispo, CA 93408  
(805) 781-5028  
[elcarroll@co.slo.ca.us](mailto:elcarroll@co.slo.ca.us)

*Panoche Solar Project*

**Byron Turner**

Interim Planning Director  
San Benito County  
2301 Technology Parkway  
Hollister, CA 95023  
(831) 637-5313  
[bturner@planning.co.san-benito.ca.us](mailto:bturner@planning.co.san-benito.ca.us)

### Firm Description

Since 1991, Aspen's multidisciplinary staff has provided environmental compliance, impact assessment, and mitigation services for a wide spectrum of infrastructure, public works, and industrial projects. Aspen has effectively managed many complex, high-profile energy, infrastructure, and public works projects and directed large teams of subcontractors, primarily on behalf of public agency clients. Aspen builds lasting client relationships through our responsiveness, loyalty, anticipation of client needs, problem solving, and efficient management. Our clients demonstrate their satisfaction by selecting us for multiple repeat contracts – including ones with the U.S. Army Corps of Engineers, the California Energy Commission, the California Public Utilities Commission, San Luis Obispo County, the Los Angeles Department of Water and Power, and others.

### Personnel Descriptions

Our team brings a unique set of skills and experience to the contract. These include knowledge of: infrastructure development processes; CEQA and coastal permitting requirements; seawater intake/outfall design and impact concerns; mitigation; adequacy of technical studies; and issues unique to coastal facilities. Project team members are described below briefly; resumes are provided in Appendix A. Additional technical staff members are available as needed, depending on issues and concerns that arise during project review.

**Project Manager Susan Lee**, a Vice President at Aspen, has been with the firm for over 21 years, joining shortly after its founding. She will be fully responsible for overall project management and will be the primary point of contact for District staff. She will manage the team and its scope and budget, ensuring the timeliness and quality of our work. Ms. Lee is a highly experienced CEQA and NEPA project manager, with extensive coastal project experience, including alternatives analysis at the Morro Bay Power Plant and an ongoing alternatives technical feasibility assessment for the Huntington Beach Desalination Project. Personal references for Ms. Lee include:

- **Kristy Chew**, California Energy Commission — (916) 654-4818 or [KChew@energy.state.ca.us](mailto:KChew@energy.state.ca.us)  
 – *Project:* Desert Renewable Energy Conservation Plan Draft EIR/EIS.
- **John McKenzie**, San Luis Obispo County — (805) 781-5452 or [jdmckenzie@co.slo.ca.us](mailto:jdmckenzie@co.slo.ca.us)  
 – *Project:* California Valley Solar Ranch EIR.
- **Billie Blanchard**, California Public Utilities Commission — (415) 703-2068 or [Billie.Blanchard@cpuc.ca.gov](mailto:Billie.Blanchard@cpuc.ca.gov)  
 – *Projects:* Sunrise Powerlink Transmission Line EIR/EIS, Devers–Palo Verde Transmission Line EIR/EIS

**Aspen Team Technical Experts** are listed in Table 1, which provides the name, education, and key project experience for each. We provide specialists in the disciplines typically considered for nearly any infrastructure project review, as well as specialists knowledgeable about desalination plants, pipelines, and the marine and coastal environment. After our Project Manager, team members are listed alphabetically. For consultants, the firm is identified in parentheses after the staff name.

**Table 1. Key Aspen Team Personnel**

Name / Role / Education	Relevant Experience
<b>Susan Lee</b> <i>Project Manager</i> <b>Education</b> MS, Applied Earth Science BS, Geology <b>Experience</b> Total: 32 years (21 years with Aspen)	<ul style="list-style-type: none"> <li>■ Member: Independent Scientific Technical Advisory Panel to California Coastal Commission and Poseidon Water, <b>Huntington Beach Desalination Project</b></li> <li>■ Manager, <b>Morro Bay Cooling Options Alternatives Report</b>, California Energy Commission (alternatives to once-through cooling at repowered power plant)</li> <li>■ Manager, <b>El Segundo Cooling Options Alternatives Report</b>, California Energy Commission (alternatives to once-through cooling at repowered power plant)</li> <li>■ US Department of the Interior, <b>Minerals Management Service, Regulatory and NEPA Specialist</b>, 8 years assessing offshore oil and gas facilities and permitting</li> </ul>
<b>Sandra Alarcon-Lopez</b> <i>Public Involvement; Land Use; Rec.</i> <b>Education</b> MA, Architecture and Urban Planning BA, Speech and Hearing Sciences <b>Experience</b> Total: 31 years (15 years with Aspen)	<ul style="list-style-type: none"> <li>■ Project Manager, <b>Moss Landing Power Plant: Elkhorn Slough Environmental Enhancement and Mitigation Program Plan</b>, California Energy Commission</li> <li>■ Project Manager, <b>Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port Project EIR/EIS Document Review</b>, City of Oxnard</li> <li>■ Project Manager, <b>Avila Point Project EIR</b>, County of San Luis Obispo (remediation of soil contamination and redevelopment project at Avila Beach)</li> </ul>
<b>Elizabeth Bagwell</b> <i>Cultural and Paleo Resources, Native American Concerns</i> <b>Education</b> PhD, MA Anthropology BA, Anthropology & Creative Writing <b>Experience</b> Total: 23 years (5 years with Aspen)	<ul style="list-style-type: none"> <li>■ Work authorization manager and technical reviewer, <b>Redondo Beach Energy Project Architectural History Technical Report</b>, California Energy Commission</li> <li>■ Cultural resources technical staff, <b>Eagle Rock Aggregate Terminal Project Initial Study</b>, Port of Long Beach</li> <li>■ Registered Professional Archaeologist (#16564) who meets the Secretary of the Interior's qualification criteria as a prehistoric archaeologist</li> <li>■ Specialization in NEPA and CEQA analyses, cumulative analyses, and third party review of compliance documents for large infrastructure projects</li> </ul>
<b>Brewster Birdsall, PE</b> <i>Air Quality, Greenhouse Gas, Noise</i> <b>Education</b> MS, Civil Engineering BS, Mechanical Engineering PE (Mechanical, California #32565) <b>Experience</b> Total: 19 years (13 years with Aspen)	<ul style="list-style-type: none"> <li>■ Air quality and noise technical staff, <b>Monterey Accelerated Research System Cabled Observatory</b>, California State Lands Commission</li> <li>■ Deputy Project Manager, <b>San Onofre Nuclear Generating Station and Diablo Canyon Power Plant, Steam Generator Replacement Projects</b>, California Public Utilities Commission</li> <li>■ Lead technical staff for air quality and greenhouse gas assessment for coastal power plants, including: <b>Redondo Beach Energy Project, Marsh Landing Generating Station, Humboldt Bay Repowering Project</b></li> </ul>

**Table 1. Key Aspen Team Personnel**

Name / Role / Education	Relevant Experience
<p><b>Heather Blair</b>  <i>Terrestrial Biology</i>                      Education                      MS, Conservation Biology                      BS, Ecology                      Experience                      Total: 11 years (11 years with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Technical staff, <b>Diablo Canyon Power Plant Steam Generator Replacement Project</b>, California Public Utilities Commission</li> <li>■ Technical reviewer for biological resources, <b>Tule Wind EIS, Third Party NEPA Review</b>, Bureau of Land Management</li> <li>■ Lead technical staff for biological resources assessment for coastal power plants, including the <b>Carlsbad Energy Center</b> and <b>Alamitos Energy Center</b>, California Energy Commission</li> </ul>
<p><b>Emily Capello</b>  <i>Alternatives, Management Support</i>                      Education                      MPA, Environmental Science &amp; Policy                      BA, History &amp; English                      Experience                      Total: 14 years (8 years with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Technical staff for alternatives analysis for <b>Ivanpah Solar Electric Generating System Project</b>, California Energy Commission</li> <li>■ Principal author of the alternatives analysis for the <b>SunPower California Valley Solar Ranch EIR</b>, County of San Luis Obispo</li> <li>■ Deputy Project Manager, <b>San Luis Obispo County Renewable Energy Streamlining Program and EIR</b>, County of San Luis Obispo</li> </ul>
<p><b>Gregor Cailliet (Independent)</b>  <i>Marine Biology; Intake</i>                      Education                      PhD, Biology, BA Biology                      Experience                      Total: 20 years</p>	<ul style="list-style-type: none"> <li>■ Twenty years of experience on Technical Work Groups for the Regional Water Quality Control Board in San Luis Obispo and the California Energy Commission</li> <li>■ Evaluation of marine biology impacts for the <b>Diablo Canyon, Moss Landing, Morro Bay, Huntington Beach, and El Segundo Power Plants</b></li> <li>■ Co-author of 2007 California Energy Commission report: "<b>Assessing Power Plant Cooling Water Intake System Entrainment Impacts</b>"</li> </ul>
<p><b>Michael Clayton (MCA)</b>  <i>Visual Resources</i>                      Education                      MS, Environmental Management                      BA, Biology                      Experience                      Total: 30 years</p>	<ul style="list-style-type: none"> <li>■ Visual resources analysis for California Energy Commission Staff Assessments for the <b>Morro Bay Power Plant Project</b> in San Luis Obispo County and the <b>Potrero Power Plant Project</b> in San Francisco County</li> <li>■ Visual impact analysis for the <b>Hercules Wastewater Treatment Plant EIR</b>, City of Hercules</li> <li>■ Authored a visual impact analysis for the <b>South Bay Power Plant Replacement Project</b>, a coastal power plant in San Diego County</li> </ul>
<p><b>Scott Debauche</b>  <i>Traffic and Transportation</i>                      Education                      BS, Urban Planning                      Experience                      Total: 17 years (11 years with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Technical analysis for <b>Monterey Accelerated Research System Cabled Observatory</b>, California State Lands Commission</li> <li>■ Traffic and transportation impact analysis for <b>Carlsbad Energy Center Project</b>, California Energy Commission</li> <li>■ Technical analyst on California Energy Commission's <b>Coastal Plant Study</b> (evaluated the re-tooling or expansion of California's 25 coastal power plants)</li> <li>■ Recently completed the Transportation/Traffic analysis for a joint EIS/EIR document of the US Army Corps of Engineers and the Port of Long Beach analyzing the expansion of the Eagle Rock Terminal</li> </ul>
<p><b>Paul Hermann (GHD)</b>  <i>Desalination Engineering</i>                      Education                      Bachelor of Engineering                      Experience                      Total: 15 years</p>	<ul style="list-style-type: none"> <li>■ Lead engineer for the <b>Poseidon Resources Desalination Plant</b> in the City of Carlsbad (technical lead for engineering, procurement, and construction)</li> <li>■ Project Manager for the Site Evaluations Study for the <b>Camp Pendleton Desalination Plant</b> (including conceptual designs and alternatives)</li> <li>■ Project planning, concept design, procurement, and engineering for several confidential desalination plants in North America and the Pacific region</li> </ul>
<p><b>Chris Huntley</b>  <i>Terrestrial Biological Resources</i>                      Education                      Graduate Studies, Biology                      BA, Biology                      Experience                      Total: 21 years (16 with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Deputy Project Manager, <b>Monterey Accelerated Research System Cabled Observatory</b>, California State Lands Commission</li> <li>■ Deputy Project Manager and biologist for California Energy Commission's <b>Coastal Plant Study</b> (conducted biological surveys at 21 coastal power plants)</li> <li>■ Technical lead for biological resources impact analysis for the <b>California Valley Solar Ranch EIR</b>, County of San Luis Obispo</li> </ul>

**Table 1. Key Aspen Team Personnel**

Name / Role / Education	Relevant Experience
<p><b>Michael McGowan</b>  <i>Marine Biology</i></p> <p><b>Education</b>                      PhD, Marine Biology and Fisheries,                      Biological Oceanography                      MA Marine Biology, BA Biology</p> <p><b>Experience</b>                      Total: 20 years</p>	<ul style="list-style-type: none"> <li>■ Co-authored a report on impacts to marine life from coastal seawater entrainment and power plant outfall for the San Onofre Nuclear Generating Station</li> <li>■ Reviewed environmental analysis of marine biology impacts of a coastal desalination project in Santa Cruz, California</li> <li>■ Designed a study to monitor for entrainment and other impacts of a proposed LNG terminal in coastal Mexico</li> </ul>
<p><b>Aubrey Mescher</b>  <i>Geology and Soils, Hydrology and Water Quality</i></p> <p><b>Education</b>                      Masters in Environmental Science and Management (MESM)                      BA, Environmental Studies</p> <p><b>Experience</b>                      Total: 10 years (all with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Technical author for hydrology and water quality for the California Public Utilities Commission's <b>Embarcadero-Potrero Transmission Line MND</b> (transmission line installed under the San Francisco Bay)</li> <li>■ Deputy Project Manager and hydrology/water quality technical author for the <b>TTI Grain Export Terminal Installation Project</b> in the Port of Long Beach</li> <li>■ Technical author for hydrology and water quality impact analysis for the <b>Sulex Demolition Project MND</b>, in the Port of Long Beach</li> <li>■ Technical author for hydrology and water quality analysis for the California Valley Solar Ranch EIR and the Topaz Solar Farm Project EIR, San Luis Obispo County</li> </ul>
<p><b>Negar Vahidi</b>  <i>Socioeconomics, Population/Housing, Public Services</i></p> <p><b>Education</b>                      Master of Public Administration (MPA)                      BA, Political Science</p> <p><b>Experience</b>                      Total: 20 years (17 years with Aspen)</p>	<ul style="list-style-type: none"> <li>■ Social Sciences Task Manager for the California Energy Commission's <b>Coastal Plant Study</b> (identification of potential political, social, community, and physical land use impacts from coastal power plant re-tooling or expansion)</li> <li>■ Senior Technical Specialist and expert witness for the <b>Carlsbad Energy Center Project, Redondo Beach Energy Project, Huntington Beach Energy Project, Potrero Power Plant Project, and Marsh Landing Generating Station</b>, California Energy Commission</li> <li>■ Project Manager, <b>Tule Wind EIS, Third Party NEPA Review</b>, Bureau of Land Management</li> </ul>

**Examples of Completed Projects**

Appendix B to this proposal provides supplementary information on work of a similar nature completed by Aspen Team members, as well as additional detail about our CEQA and NEPA experience.

**Coastal and Energy Projects.** Our most relevant coastal infrastructure projects are summarized here:

- **Carlsbad Energy Center Project and Huntington Beach Energy Project.** As part of Aspen's work supporting the CEC in its licensing of replacement power plants (that would result in demolition of the existing plants and elimination of the current use of once-through cooling), the team considered the effects of the adjacent Poseidon Water Carlsbad and Huntington Beach Desalination Projects.
- **Independent Scientific and Technical Review Panel, Huntington Beach Desalination Alternatives.** Susan Lee, Aspen's proposed Project Manager, currently serves as an independent panel member supporting the California Coastal Commission and Poseidon Water to investigate alternatives to open water intake for the proposed Huntington Beach Desalination Project.
- **Moss Landing Power Plant, Elkhorn Slough Environmental Enhancement and Mitigation Program Plan, CEC.** Aspen staff facilitated a series of meetings of the Elkhorn Slough Advisory Team, responsible for selecting projects that could be funded through the mitigation fees imposed on the adjacent Moss Landing Power Plant. The team was composed of State agency representatives and local technical experts.
- **Monterey Accelerated Research System (MARS) Cabled Observatory.** Aspen completed a joint EIR/EIS for the California State Lands Commission and the Monterey Bay National Marine Sanctuary for the undersea scientific cabled observatory proposed by the Monterey Bay Aquarium Research Institute. The project consists of a science node and 31.7 miles of submarine cable extending from shore into the Bay.

- **Coastal Power Plant Cooling Options Reports.** For the CEC, Aspen staff managed preparation of several comprehensive dry cooling analyses for coastal power plants using once-through cooling. Plants included the **Morro Bay Power Plant Modernization Project**, where Aspen managed a team that developed a preliminary cooling design and provided impact analyses. These included conceptual design of dry cooling systems, hybrid cooling systems, and water supply options, such as use of reclaimed water in both once through and hybrid cooling systems.
- **Power plant licensing support to the CEC** in consideration of numerous coastal power plants, including Morro Bay, Moss Landing, and several projects on the Carquinez Strait and the San Francisco Bay.

**Review of Applicant-Prepared Documents.** Another highly relevant service provided to agency clients by Aspen is to provide independent technical review of applicant-prepared CEQA and NEPA documents. Aspen has performed in this review role for the following:

- **SDG&E East County Substation/Tule Wind/Energía Suarez Gen-Tie Projects.** Aspen was selected by BLM to serve as its third-party NEPA reviewer for the Administrative Draft EIR/EIS and Final EIR/EIS. In this role, Aspen reviewed the documents for thoroughness, accuracy, and compliance with BLM's NEPA Handbook.
- **Desert Sunlight Solar EIS.** Aspen reviewed and provided comments on the Desert Sunlight EIS prepared by the solar developer in order to ensure CEQA equivalency for CPUC's needs under CEQA Guidelines Section 15221, which allows use of an adequate NEPA document by a state agency.
- **Newhall Ranch Resource Management and Development Plan & Spineflower Conservation Plan.** Aspen assisted CDFW in administering the EIR process for this project and provided expert technical review services for all environmental issue areas.
- **Long Beach LNG Import Project.** For the City of Long Beach we reviewed the Draft EIS/EIR and commented on the completeness, accuracy, and technical adequacy of the document.
- **Cabrillo Port LNG Deepwater Port Project.** For the City of Oxnard Aspen provided expert EIS/EIR review services, prepared a report summarizing the review regarding deficiencies in the Draft EIR/EIS, and presented findings to the City Council.

### Section III Project Approach and Work Schedule

**Project Approach.** Table 2 lists the tasks identified in the RFP and Aspen's approach to successful completion of each. [Aspen believes NEPA compliance will be required. We recommend an optional task to address the coordination and additional review required for NEPA; please see Appendix C.]

**Table 2. Approach to Defined Project Tasks**

Task #	Task Title	Key Aspects of Aspen Approach
1	Project Familiarization and Consultation	<ul style="list-style-type: none"> <li>■ Obtain copies of all completed proponent technical reports at a kick-off meeting, so Aspen Team specialists can review and comment prior to receipt of Admin. Draft EIR</li> <li>■ Arrange for efficient participation in site visit, combined with team kick-off meeting where all key specialists meet proponent team members and learn status of all reports and studies</li> <li>■ Develop project schedule based on proponent estimates for submittal of draft NOP and Administrative Draft EIR</li> <li>■ Develop communication protocol for all Aspen, District, and proponent team phone calls and emails</li> <li>■ Define expectations for Administrative Record maintenance</li> <li>■ [See below Optional Task 10: Evaluate need for NEPA compliance; Notice of Intent (NOI) filing in Federal Register can take months, depending on lead agency.]</li> </ul>
2	Peer Review/ Distribution of Notice of Preparation – Scoping Meetings, Coordination of Responses	<ul style="list-style-type: none"> <li>■ Ensure development of complete NOP mailing list</li> <li>■ Define list of permits required and responsible agencies. Especially important are California Coastal Commission, Water Quality Control Boards, Monterey County, State Lands Commission, Monterey Bay National Marine Sanctuary, NMFS, and CDFW.</li> <li>■ Prepare draft list of NOP recipients (those to be sent via Certified Mail and those via US Mail) for District review. Budget assumes 30 copies by Certified Mail and 100 by US Mail.</li> <li>■ Aspen does not normally prepare separate "responses" to scoping comments, but ensures that all comments are addressed in the Admin. Draft EIR.</li> </ul>

**Table 2. Approach to Defined Project Tasks**

Task #	Task Title	Key Aspects of Aspen Approach
3	Peer Review of Administrative Draft EIR (ADEIR)	<ul style="list-style-type: none"> <li>▪ Request early submittal of Project Description and proposed Alternatives to Aspen Team so we can evaluate completeness of description and adequacy of range of alternatives in accordance with CEQA requirements. An incomplete description will not support impact analysis in all required disciplines, so early review is critical.</li> <li>▪ RFP notes that NEPA compliance would be assessed at this point, but this is too late because NEPA scoping must be initiated with a Federal Register filing. (See Task 1). NEPA compliance also will affect the document outline; this decision must be made before the ADEIR is prepared. The Federal lead agency/cooperating agencies must be identified.</li> <li>▪ Aspen reviewers ensure that scoping comments are addressed in the ADEIR</li> <li>▪ Aspen anticipates providing tracked changes and comments embedded in MS Word files to convey comments to the District for review and to the proponent. If required, Aspen will prepare a memo explaining major comments or critical omissions.</li> <li>▪ Aspen will meet with SMB/proponent to discuss comments as needed, and will review a revised ADEIR to ensure that all comments are addressed adequately.</li> </ul>
4	Assist in Preparation and Distribution of Approved Draft EIR	<ul style="list-style-type: none"> <li>▪ Aspen will support the District and SMB/proponent in distribution of the DEIR.</li> <li>▪ Aspen will review or provide a suggested mailing list for the DEIR, and will offer suggestions for distribution format (e.g., Print Executive Summary and include CD of complete DEIR document, rather than publishing hard copies of entire document).</li> <li>▪ The Notice of Availability issued with the DEIR should include the times and dates of the Hearings (Task 5), so the decisions on location, time, and date must be made prior to publishing the DEIR.</li> <li>▪ Aspen will ensure that the DEIR Notice of Availability is posted with the County Clerk.</li> </ul>
5	Attend Hearings on Draft EIR	<ul style="list-style-type: none"> <li>▪ Aspen will advise the District on format options for hearings or workshops on the Draft EIR</li> <li>▪ Aspen will make available 5 key specialists to discuss DEIR findings with the public at one informal workshop, if held.</li> <li>▪ If oral comments are accepted at the hearing, Aspen recommends that the proponent or District provide for a court reporter so comments can be captured and adequately responded to in the Final EIR (FEIR). Aspen can prepare a summary of major comments, but each individual comment should be responded to.</li> </ul>
6	Peer Review of Responses to Comments and Preparation of Admin Final Draft	<ul style="list-style-type: none"> <li>▪ Aspen will review all draft responses to comments as prepared by SMB/proponent and will provide comments in tracked changes for consideration by the District and SMB.</li> <li>▪ Aspen will also review changes to the text of the Draft EIR (to be published as the Final EIR) that result from comments on the DEIR, to ensure the document remains technically accurate and that cross-references from responses to comments are made properly.</li> </ul>
7	Peer Review and Assistance with Preparation of the Final EIR	<ul style="list-style-type: none"> <li>▪ Aspen will review the entire FEIR and ensure that it complies with CEQA requirements and includes appropriate responses to all substantive comments.</li> <li>▪ Aspen will ensure that the FEIR is distributed by SMB/proponent in accordance with CEQA requirements, and that the distribution list is updated based on commenters on the DEIR.</li> </ul>
8	Attend Hearings on the Final EIR	<ul style="list-style-type: none"> <li>▪ Aspen's Project Manager and 2 key staff members will attend the Board hearings held to certify CEQA adequacy of the FEIR, and will answer questions of the Board as required.</li> <li>▪ Aspen will ensure that the hearing to certify the FEIR is not held prior to the CEQA-required 10-day notice period for responsible or permitting agencies.</li> <li>▪ Aspen will be available to answer board member questions during or prior to the hearing.</li> </ul>
9	Prepare First Draft for District staff of Board Resolutions and Findings Exhibits	<ul style="list-style-type: none"> <li>▪ Based on direction provided by the District, Aspen will prepare findings and resolutions, as required, for the Board to certify the FEIR as adequate under CEQA and to approve the project or an alternative.</li> <li>▪ Such findings would normally include the Exhibits defined under Task 9 of the RFP.</li> <li>▪ Aspen will draft a Staff Report and recommendation to the Board regarding certification.</li> </ul>
10	<i>Optional Task:</i> NEPA Compliance	<ul style="list-style-type: none"> <li>▪ Aspen proposes an optional task for NEPA compliance, and a regional NEPA specialist would be added to the Aspen Team in the event that a joint document is required.</li> </ul>

## Schedule

The schedule for the work defined in the RFP will depend on the quality and timing of documents prepared by the project proponent. Table 3 presents a preliminary schedule that would be possible with a very responsive proponent providing appropriate input in response to Aspen comments. The need for District involvement is indicated in the table. The schedule assumes that the contract would be issued in April 2015, and that work would commence in May 2015.

**Table 3. Preliminary Schedule**

Task #	Task Title	Timeframe	District Involvement Required
0	Selection and Contract Approval	April 2015	<ul style="list-style-type: none"> <li>• Prepare and issue contract; Board approval</li> </ul>
1	Project Familiarization and Consultation	May 2015	<ul style="list-style-type: none"> <li>• Provide background materials</li> <li>• Introduce proponent team members to Aspen team</li> <li>• Develop/confirm communication protocol</li> <li>• Establish project website linked to District web page and post application materials and technical studies for public</li> </ul>
2	Peer Review/ Distribution of Notice of Preparation – Scoping Meetings, Coordination of Responses	June–August 2015 Issue NOP: June 15 End Scoping: July 15 Scoping Report: Aug 15	<ul style="list-style-type: none"> <li>• Review and approve Aspen comments on NOP</li> <li>• Sign NOP prior to Aspen submittal to State Clearinghouse</li> <li>• Review Aspen-developed agency mailing list</li> <li>• Participate in agency and public scoping meetings</li> <li>• Review of Aspen scoping meeting notes and Scoping Report</li> </ul>
3	Peer Review of Administrative Draft EIR	August–October 2015	<ul style="list-style-type: none"> <li>• Provide Aspen team with all Admin. Draft files and all technical reports</li> <li>• Review Aspen-suggested revisions to EIR</li> <li>• Participate in conference calls to discuss or resolve conflicting comments</li> </ul>
4	Assist in Preparation and Distribution of Approved Draft EIR	November 2015 (comment period ending January 2, 2016)	<ul style="list-style-type: none"> <li>• Participate in decisionmaking about mailing list, and types of documents being provided to each party</li> <li>• Provide access to District website for posting of Draft EIR and supporting technical reports</li> </ul>
5	Attend Hearings on Draft EIR	Early December 2015	<ul style="list-style-type: none"> <li>• Introduce project to public; introduce Aspen Team</li> <li>• Provide direction on consultant roles versus proponent roles</li> </ul>
6	Peer Review of Responses to Comments and Preparation of Admin. Final Draft	Proponent work assumed to occur in January and February 2016 Aspen Review: February and March 2016	<ul style="list-style-type: none"> <li>• Review of Aspen-suggested revisions to EIR</li> <li>• Participate in conference calls between Aspen technical staff and proponent team staff to discuss or resolve conflicting comments</li> </ul>
7	Peer Review and Assistance with Preparation of the Final EIR	March –April 2016	<ul style="list-style-type: none"> <li>• Review of Aspen suggested revisions to EIR</li> <li>• Participate in conference calls between Aspen technical staff and proponent team staff to discuss or resolve conflicting comments</li> </ul>
8	Attend Hearings on the Final EIR	May 2016	<ul style="list-style-type: none"> <li>• Provide direction on Aspen roles and guidance regarding Board preference in approach to hearings</li> </ul>
9	Prepare First Draft for District staff of Board Resolutions and Findings Exhibits	June 2016	<ul style="list-style-type: none"> <li>• Provide model Findings document</li> <li>• Review Aspen draft staff report and provide comments</li> </ul>

## Section IV Cost of Service — Table provided on page 10

Development a cost estimate for the requested document review and District support is challenging, because the cost could vary dramatically based on a number of factors that are unknown to us at this time. The following factors will be the major drivers in the range of cost to support the District: (a) the quality of the proponent-prepared Administrative Draft documents; (b) the type of alternatives and level of detail included in the alternatives analysis; and (c) the number and length of proponent-prepared technical reports that support the EIR. Aspen has developed a cost estimate, presented on page 10 of this proposal, based on certain assumptions about these and other factors. The cost estimate includes all required data defined in the RFP. We look forward to the opportunity to discuss these assumptions with the District, and we would be happy to modify them if the District believes this would be appropriate.

## Section V Subcontractors

The qualifications of individual subcontractor personnel are summarized in Table 1 (Section II) and presented in detail in their resumes (See Appendix A). Table 4 presents the three proposed subcontractors to Aspen.

**Table 4. Aspen Team Subcontractors**

Individual / Firm Name	Qualifications	Expertise and Services to be Provided	Percent of Scope
<b>Dr. Gregor Cailliet</b> Independent consultant	See Table 1 and Appendix A	<b>Marine Biology:</b> Review of technical reports and EIR section on marine biological impacts	9%
<b>Paul Hermann</b> GHD Engineering	See Table 1 and Appendix A	<b>Desalination Design and Engineering:</b> Review of Project Description; review of relevant technical reports	5%
<b>Michael Clayton</b> Michael Clayton & Associates	See Table 1 and Appendix A	<b>Visual Resources:</b> Review of visual photosimulations; visual resources technical report; EIR section	4%

## Section VI Insurance

Aspen maintains the insurance coverage required in the RFP and will submit the needed documents prior to award.

## Section VII Additional Information

Appendix A presents the resumes of key staff members. Appendix B describes additional projects demonstrating our qualifications. Appendix C provides information on a recommended Optional NEPA Task, which we believe will be required for this project.

## Section VIII Contract Terms

Aspen is willing to accept all sample contract terms set forth in Attachment B to the RFP.

**Moss Landing Harbor District - EIR Review, CEQA Processing Services - Cost Estimate**

Key Personnel/Category	Project Role	Hourly Rate	TASK 1		TASK 2		TASK 3		TASK 4		TASK 5		TASK 6		TASK 7		TASK 8		TASK 9		Totals	
			Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt
Susan Lee	PM; Alternatives	\$230.00	16	\$3,680	24	\$5,520	4	\$920	20	\$4,600	20	\$4,600	20	\$4,600	30	\$6,900	24	\$5,520	8	\$1,840	162	\$37,260
Brewster Birdsall	AQ, PD, Noise, GHG	\$170.00	16	\$2,720	34	\$5,780	—	—	—	—	—	—	16	\$2,720	4	\$680	—	—	—	—	70	\$11,900
Sandra Alarcon-Lopez	Pub Inv; Land Use	\$165.00	6	\$990	20	\$3,300	—	—	8	\$1,320	6	\$990	4	\$660	4	\$660	—	—	—	—	44	\$7,260
Negar Vahidi	Social Sciences	\$165.00	16	\$2,640	28	\$4,620	—	—	—	—	—	—	16	\$2,640	8	\$1,320	—	—	—	—	68	\$11,220
Chris Huntley	Bio Terrestrial	\$155.00	4	\$620	6	\$930	—	—	—	—	—	—	4	\$620	4	\$620	—	—	—	—	18	\$2,790
Heather Blair	Bio Terrestrial	\$145.00	14	\$2,030	20	\$2,900	—	—	—	—	—	—	16	\$2,320	6	\$870	—	—	—	—	56	\$8,120
Emily Capello	DPM; Alts; support	\$125.00	20	\$2,500	30	\$3,750	8	\$1,000	24	\$3,000	16	\$2,000	20	\$2,400	20	\$2,500	—	—	50	\$6,250	184	\$23,000
Michael McGowan	Marine Bio	\$120.00	16	\$1,920	20	\$2,400	—	—	8	\$960	20	\$2,400	20	\$2,400	20	\$2,400	12	\$1,440	—	—	96	\$11,520
Scott Debauche	Traffic, Soc Sci.	\$102.00	8	\$816	20	\$2,040	—	—	—	—	—	—	6	\$612	6	\$612	—	—	—	—	40	\$4,080
Aubrey Miescher	Geo. Water Rsrcls	\$100.00	16	\$1,600	40	\$4,000	—	—	—	—	—	—	12	\$1,200	10	\$1,000	—	—	—	—	78	\$7,800
Enviro Science Staff	Technical support	\$95.00	4	\$380	30	\$2,850	—	—	—	—	—	—	6	\$570	16	\$1,520	—	—	—	—	56	\$5,320
Maral Koshkarian	Invoicing	\$65.00	2	\$130	2	\$130	2	\$130	2	\$130	2	\$130	4	\$260	4	\$260	2	\$130	—	—	16	\$1,040
Freeman/Chitea	Admin support	\$65.00	4	\$260	4	\$260	—	—	—	—	—	—	2	\$130	4	\$260	2	\$130	—	—	16	\$1,040
Mark Tangard	Doc production	\$105.00	8	\$840	6	\$630	8	\$840	—	—	—	—	2	\$210	6	\$630	—	—	—	—	36	\$3,780
<b>SUBTOTAL Aspen</b>			<b>142</b>	<b>\$20,286</b>	<b>40</b>	<b>\$6,520</b>	<b>284</b>	<b>\$39,110</b>	<b>22</b>	<b>\$2,890</b>	<b>62</b>	<b>\$10,010</b>	<b>144</b>	<b>\$21,142</b>	<b>142</b>	<b>\$20,232</b>	<b>40</b>	<b>\$7,220</b>	<b>64</b>	<b>\$630</b>	<b>940</b>	<b>\$136,130</b>

Hourly rates include benefits, overhead, and fee.

Direct Project Cost Item	Unit Cost	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt	Hours	Amt		
Sub: Hermann/GHD	Desal design, alts	\$220.00	24	\$5,280	30	\$6,600	—	—	—	—	—	—	6	\$1,320	2	\$440	—	—	—	—	—	—	—	62	\$13,200
Sub: Cailliet	Marine biology	\$125.00	16	\$2,000	30	\$3,750	—	—	6	\$750	—	—	24	\$3,000	16	\$2,000	8	\$1,000	—	—	—	—	—	100	\$8,750
Sub: Clayton/MCA	Visual resources	\$133.00	12	\$1,596	20	\$2,660	—	—	—	—	—	—	12	\$1,596	6	\$798	—	—	—	—	—	—	—	50	\$5,852
Rental Car (per day w/gas)		\$100.00	5	\$500	2	\$200	—	—	2	\$200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$1,400
Airfare (at \$500/roundtrip)				\$2,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$3,000
Meals				\$400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$600
Miscellaneous				\$200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$600
<b>Subtotal Subs + ODC Cost</b>				<b>\$11,976</b>	—	<b>\$200</b>	—	<b>\$13,310</b>	—	<b>\$1,400</b>	—	<b>\$6,116</b>	—	<b>\$6,116</b>	—	<b>\$100</b>	—	<b>\$300</b>	—	<b>\$300</b>	—	<b>\$300</b>	—	<b>\$33,402</b>	
Aspen Fee 10% on Subs and Direct Costs				\$1,198	—	\$20	—	\$1,331	—	\$140	—	\$140	—	\$612	—	\$10	—	\$30	—	\$30	—	\$30	—	\$3,340	
<b>Total Cost, Non-Aspen Labor</b>				<b>\$13,174</b>	—	<b>\$220</b>	—	<b>\$14,641</b>	—	<b>\$1,540</b>	—	<b>\$1,540</b>	—	<b>\$6,728</b>	—	<b>\$110</b>	—	<b>\$330</b>	—	<b>\$330</b>	—	<b>\$330</b>	—	<b>\$36,742</b>	
<b>TOTAL HOURS &amp; COST BY TASK</b>			<b>194</b>	<b>\$33,460</b>	<b>40</b>	<b>\$6,740</b>	<b>364</b>	<b>\$53,751</b>	<b>22</b>	<b>\$2,890</b>	<b>68</b>	<b>\$11,550</b>	<b>186</b>	<b>\$27,870</b>	<b>166</b>	<b>\$20,342</b>	<b>48</b>	<b>\$7,550</b>	<b>64</b>	<b>\$630</b>	<b>1,152</b>	<b>\$172,872</b>			

Note: Cost assumptions for each task have been developed and can be provided upon request.



**Appendix A Resumes**

This appendix is provided in response to the RFP statement on page 7:

*Resumes or other written material describing the consultant's technical staff qualifications and descriptions of similar work completed by each should be attached at the end of the proposal.*

Resumes are presented after this page, in the order listed in Table A-1 below.

**Table A-1. Resumes of Key Aspen Team Personnel – listed alphabetically after Project Manager)**

Name	Project Role	Firm
Susan Lee	Project Manager	Aspen Environmental Group
Sandra Alarcón-Lopez	Land Use, Recreation, Public Involvement	Aspen Environmental Group
Elizabeth Bagwell	Cultural and Paleontological Resources	Aspen Environmental Group
Brewster Birdsall	Air Quality, Noise, Greenhouse Gas	Aspen Environmental Group
Heather Blair	Terrestrial Biology	Aspen Environmental Group
Emily Capello	Alternatives, Management Support	Aspen Environmental Group
Gregor Cailliet	Marine Biology (intake)	Independent Consultant
Michael Clayton	Visual Resources	Michael Clayton Associates
Scott Debauche	Traffic and Transportation	Aspen Environmental Group
Paul Hermann	Desalination Engineering and Design	GHD
Chris Huntley	Terrestrial Biology	Aspen Environmental Group
Michael McGowan	Marine Biology	Aspen Environmental Group
Aubrey Mescher	Hydrology, Water Resources, Geology	Aspen Environmental Group
Negar Vahidi	Population & Housing, Public Services	Aspen Environmental Group



SUSAN V. LEE

Vice President, San Francisco Operations

## Academic Background

MS, Applied Earth Science, Stanford University, 1984

BA, Geology, Oberlin College, 1977

## Professional Experience

Ms. Lee has over 30 years of technical and managerial experience in environmental assessment, and she currently manages Aspen's San Francisco Office. Her expertise is in management of environmental assessment for infrastructure and energy projects (renewable energy projects, electric transmission lines, pipelines, and gas-fired power plants) under both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Ms. Lee has managed several of Aspen's public agency "on-call" contracts, and she has also managed preparation of several major controversial transmission line and pipeline siting EIR/EISs (including the Sunrise Powerlink, Path 15, Jefferson-Martin, Tri-Valley, and Devers-Palo Verde No. 2). In addition, she has managed preparation of EIRs for large solar photovoltaic projects, and contributed to Energy Commission Staff Assessments for seven utility-scale solar thermal projects since 2007.

## Aspen Environmental Group.....1993 to present

Ms. Lee has contributed to both technical and project management aspects of Aspen's environmental projects, including the following:

- **Huntington Beach Desalination Project.** Ms. Lee is serving as a member of an Independent Scientific and Technical Advisory Panel to the California Coastal Commission and Poseidon Water to evaluate the feasibility of alternative seawater intake options for the proposed Poseidon Huntington Beach desalination project. The Panel is considering the proposed open ocean intake, an offshore seafloor gallery, and possibly a surf zone gallery, and will write a report defining basic economic, engineering, and environmental considerations for each option.
- **California Energy Commission.** Ms. Lee has supported Energy Commission staff since the fall of 2000. To date, she has prepared alternatives analyses for 17 generation or transmission projects throughout the State, and she has also contributed to several special project reports. She has participated in numerous public workshops and hearings around the state, and completed Expert Witness Training. Her major efforts for the Energy Commission include the following:
  - Ms. Lee managed preparation of the CEC's first comprehensive dry cooling analysis for a coastal power plant using once-through cooling, the **Morro Bay Power Plant Modernization Project**. She managed a team of authors who developed a preliminary cooling design and provided impact analysis. Ms. Lee also managed preparation of **Power Plant Cooling Options Reports** for the Potrero Unit 7 Project, SMUD Cosumnes, and El Segundo power plants. These analyses include conceptual design of dry cooling systems, hybrid cooling systems, and water supply options including use of reclaimed water in both once through and hybrid cooling systems.
  - **Solar thermal generation projects** on public lands: Ms. Lee managed the **Alternatives and Cumulative** impact analyses for six large projects and coordinated NEPA issues with BLM and CEQA issues with the Energy Commission. The alternatives analyses for the Ivanpah, Calico, Imperial Valley, and Palen Projects ultimately defined the approved projects, so this section of the Staff Assessments became critically important during the Evidentiary Hearings. Projects included:

- (1) Ivanpah Solar Electric Generating System Project
- (2) Calico Solar Project
- (3) Imperial Valley Solar Project

- (4) Blythe Solar Power Project
- (5) Palen Solar Power Projects
- (6) Genesis Solar Energy Project
- (7) Rio Mesa Solar Generation Facility

- **Alternatives for Gas-Fired Generation Facilities:** Ms. Lee has prepared staff assessment Alternatives Analyses (consistent with CEQA and the CEC's procedures) for the CEC's staff reports considering proposed new or re-powered natural gas power plants at South Bay (San Diego), Blythe (BEP II), Morro Bay, El Segundo, Avenal, San Joaquin Valley, Potrero Unit 7 (San Francisco), Tracy, East Altamont, Henrietta, and the San Francisco Electric Reliability Project. She also prepared the alternatives analysis for the CEC's Blythe Transmission Modifications Project. In addition to preparing staff assessment sections documenting comparative impacts of alternatives, Ms. Lee made presentations at PSA Workshops and testified at Evidentiary Hearings.
- **Desert Renewable Energy Conservation Plan (DRECP):** Ms. Lee is managing the CEQA/NEPA consulting group that supports California's Renewable Energy Action Team agencies in the development of the DRECP and EIR/EIS. She is advising the REAT agencies on CEQA and NEPA compliance issues and directing a large subcontractor team. She also worked with the Transmission Technical Group, coordinating with utility engineers and agency staff to develop a transmission impacts plan that would support renewable project development in the desert. Ms. Lee participated in 11 public workshops on the Draft DRECP and EIR/EIS in October and November 2014.
- **US Department of Interior Minerals Management Service (MMS) Environmental Information Document.** Ms. Lee served as Deputy Project Manager for preparation of a comprehensive summary of environmental effects of potential new southern California's offshore oil and gas exploration and development, including a cumulative impact assessment. The Department of Interior's MMS will use the EID to support Coastal Consistency Determinations for the remaining undeveloped leases offshore Santa Barbara, Ventura, and San Luis Obispo Counties.
- **San Luis Obispo County Renewable Energy Planning Grant Support.** Ms. Lee is the Principal-in-Charge for a 2013-2014 effort supporting the County in its development of a planning framework for streamlining renewable energy projects. Aspen prepared an Opportunities and Constraints Study and contributed to a Programmatic EIR.
- **Inyo County Renewable Energy Planning Grant Support.** Ms. Lee is the Principal-in-Charge for a 2013-2014 effort supporting the County in its development of a planning framework for streamlining solar and wind renewable energy projects. Aspen prepared an Opportunities and Constraints Study and contributed to a Programmatic EIR.
- **Western Governors' Association Transmission Permitting Processes.** Ms. Lee led Aspen's 2012 effort to provide guidance to the WGA and western state officials on the permitting processes for large interstate transmission lines. The team developed recommendations for permit efficiencies and improved state-federal coordination, in coordination with the federal "Rapid Response Team for Transmission" process.
- **Solar Photovoltaic Project Impact Analyses.** In addition to the solar project work described for the California Energy Commission, Ms. Lee has managed CEQA and NEPA analyses for several other major renewable energy projects in California:
  - **California Valley Solar Ranch EIR.** Under contract to San Luis Obispo County, Ms. Lee managed preparation of an EIR to evaluate development of a 250 MW solar photovoltaic power facility on nearly 4,000 acres in the Carrizo Plain. Major issues of concern included a range of listed biological resources, location of a large industrial facility in a scenic and undeveloped area, and loss of agricultural resources. The project was approved by the Board of Supervisors in 2011 and



is currently under construction, with Aspen monitoring construction activities for compliance with County conditions.

- **Panoche Valley Solar Farm EIR.** Under contract to San Benito County, Ms. Lee managed preparation of an EIR to evaluate development of a 420 MW solar photovoltaic power facility on nearly 5,000 acres in the Panoche Valley, east of Hollister. The Final EIR evaluated an alternative that was ultimately approved by the County, presenting a 399 MW project on 3,202 acres, reduced from the original proposal in order to minimize impacts to biological resources on the site. Aspen's team supported the County through hearings at the Planning Commission and the Board of Supervisors after the EIR was completed in 2010. The EIR survived a legal challenge to its CEQA adequacy, and was awarded as *Outstanding Environmental Analysis Document* by the Association of Environmental Professionals in 2010.
- **Panoche Valley Solar Project Supplemental EIR.** The 2010 approved Panoche Valley solar project was modified in 2014, requiring a Supplemental EIR. Ms. Lee is managing preparation of the new document, which will consider the revised solar project and upgrades to PG&E's transmission system.
- **First Solar Desert Sunlight EIS.** On behalf of the CPUC, Ms. Lee managed an effort to review the EIS prepared by BLM for its adequacy for use by the CPUC as a CEQA-equivalent document. Under Ms. Lee's direction, the Aspen team provided technical review of the Administrative Draft EIS and Final EIS, and participated in team meetings with BLM, First Solar, and other consultants.
- **enXco Desert Harvest Solar Project EIS.** Ms. Lee is the principal-in-charge of Aspen's EIS, being prepared for the Bureau of Land Management for this Riverside County project. The proposed solar project is 150 MW and requires analysis of desert tortoise, wildlife movement corridors, impacts to nearby Joshua Tree National Park, and cultural/paleontological resources concerns. Aspen is also coordinating with Riverside County for use of the EIS by the County in its process to permit gen-tie lines.
- **Solano County Solar Project.** Ms. Lee managed the provision of environmental support to a solar photovoltaic developer in Solano County for a 14 MW project that is proposed to interconnect with PG&E's distribution grid. The County planned to prepare an EIR, and Aspen was providing environmental documents and consulting services to the developer, but the project was halted by the developer.
- **CPUC CEQA and NEPA Analysis of Infrastructure Projects.** Ms. Lee is Aspen's primary point of contact for our ongoing support to the CPUC. She has managed the following projects or programs:
  - **West of Devers Upgrades EIR/EIS.** Under contract to the CPUC and also under the direction of the BLM, Ms. Lee is managing preparation of a joint CEQA/NEPA document evaluating Southern California Edison Company's proposed upgrades to its 220 kV transmission system between the Devers Substation and the San Bernardino and Vista Substations. Scoping was completed in July and October 2014, and the Draft EIR/EIS is being prepared.
  - **SDG&E Sunrise Powerlink Transmission Project EIR/EIS.** Under a \$19 million contract to the CPUC, and under a Memorandum of Understanding with the Bureau of Land Management (BLM), Ms. Lee managed preparation of an EIR/EIS for a highly controversial 150-mile transmission line from Imperial County to coastal San Diego County. The 500 kV line was proposed to pass through Anza-Borrego Desert State Park, and a 230 kV line would continue through rural San Diego County with both overhead and underground segments. Nearly 100 alternatives were considered, covering San Diego, Imperial, and Riverside Counties and including transmission, generation, and non-wires alternatives, and 27 alternatives were analyzed in the EIR/EIS. The 7,000-page Draft EIR/EIS was published in January 2008, a Recirculated Draft EIR/EIS in August 2008, and the 11,000-page Final EIR/EIS was published in October 2008. The Final EIR/EIS was



awarded the *Outstanding Environmental Analysis Document* by the Association of Environmental Professionals in 2008.

- **SCE Colorado River Substation Expansion Supplemental EIR.** Under contract to the CPUC, Ms. Lee managed preparation of a 2011 Supplemental EIR, building on the Devers-Palo Verde No. 2 EIR/EIS that was completed in 2006.
- **SCE Devers-Palo Verde No. 2 Transmission Line Project EIR/EIS.** Under contract to the CPUC, Ms. Lee managed preparation of an EIR/EIS to evaluate the impacts of a constructing a 230-mile 500 kV transmission line between the Palo Verde generating hub in Arizona and SCE's Devers Substation. The project also included 50 miles of transmission upgrades through more developed areas of southern California (Riverside and San Bernardino Counties). Ms. Lee managed the work of 11 subcontractors and coordinating with the US Bureau of Land Management to ensure that the EIR/EIS met both NEPA and CEQA requirements. The Draft EIR/EIS was published in May 2006, and the Final EIR/EIS in November 2006. Construction of the transmission line west of Blythe only is under construction, and Aspen is managing the CPUC and BLM's mitigation monitoring process. The line was energized in 2013.
- **Jefferson-Martin 230 kV Transmission Line Project.** Ms. Lee managed preparation of an EIR for PG&E's proposed 27-mile transmission line through scenic San Mateo County in the Highway 280 corridor, urban Colma and Daly City, and across San Bruno Mountain for the California Public Utilities Commission (CPUC). This controversial and high profile project was considered to be an essential component of San Francisco's energy supply, and involved coordination with numerous local and regional jurisdictions.
- **PG&E Region On-Call Environmental Services Contract.** Ms. Lee served as Aspen's Program Manager for this multi-year contract with the CPUC (1999-2005) to provide CEQA analysis and mitigation monitoring services for projects in northern California.
- **PG&E Los Banos-Gates ("Path 15") 500 kV Transmission Project.** Ms. Lee managed preparation of a Supplemental EIR for the California Public Utilities Commission (CPUC) to evaluate potential impacts of an 84-mile transmission line in the San Joaquin Valley. This line is considered critical to enhancing electric reliability in the State, and will relieve transmission congestion between southern and northern California. Aspen's team included 8 subcontractors. The Draft SEIR was released in October 2001 and the Final SEIR was published in February 2002. The project was ultimately not approved by the CPUC because it was constructed under approval by the Western Area Power Administration.
- **PG&E Northeast San Jose Transmission Reinforcement Project:** Ms. Lee served as the Project Manager for this CPUC contract to evaluate PG&E's proposed transmission improvements in Santa Clara and Alameda Counties.
- **PG&E Hydrodivestiture Project.** The 11-volume Draft EIR prepared for the CPUC to consider PG&E's proposed divestiture of its hydroelectric assets was prepared in Aspen's San Francisco office. Ms. Lee assisted in project and contract management, technical review, and document production.
- **Alturas Transmission Line EIR/S.** For this project evaluating a 345 kV transmission line in northeastern California and Nevada, Ms. Lee served as Issue Area Coordinator, providing management support and technical oversight of geology and hydrology issue areas. She also drafted project description, provided technical review, and managed subcontractor labor for this 165-mile proposed linear project.
- **Pacific Pipeline Project EIS/Subsequent EIR.** This 2,500-page document (completed in 1996) evaluated a proposed crude oil pipeline from Kern County to refineries in Los Angeles and El Segundo. Ms. Lee performed the duties of Deputy Project Manager and Issue Area Coordinator



for Earth Sciences and Cultural Resources, including coordination with Pacific Pipeline System, Inc. (PPSI, the project proponent), assistance in managing of a team of technical subcontractors, and document preparation and production coordination.

- **Pacific Pipeline Mitigation Monitoring, Compliance, and Reporting Program.** Ms. Lee served as Deputy Program Manager for the pre-construction phase of this monitoring and compliance project for construction of a 132-mile crude oil pipeline in southern California, under contract to the California Public Utilities Commission and the Angeles National Forest.
- **Kinder Morgan Carson-Norwalk Pipeline EIR and Mitigation Monitoring, Compliance, and Reporting Program (MMCRP).** As Project Manager, Ms. Lee managed the CEQA evaluation of a proposed 13-mile petroleum products pipeline in urban Los Angeles for the CPUC. The project included review of Kinder Morgan's Proponent's Environmental Assessment (PEA), preparation of an Initial Study, and a Draft and Final EIR.
- **Deputy Program Manager and Delivery Order Manager, US Army Corps of Engineers General Environmental Services Contracts.** For Aspen's on-call environmental services contracts with the Los Angeles District, Army Corps of Engineers, Ms. Lee has managed several projects requiring NEPA compliance in southern California and Arizona. She has managed preparation of Environmental Assessments for federal agencies, local flood control and recreation districts and military facilities. Projects have included a mitigation measure implementation plan for the US Army's Fort Irwin National Training Center and a variety of environmental assessments related to flood control projects and biological resources in southern California.
- **Kinder Morgan Concord-Sacramento Pipeline.** Ms. Lee managed preparation of an EIR for the California State Lands Commission evaluating a proposed 70-mile petroleum products pipeline through Contra Costa, Solano, and Yolo Counties. Major issues related to pipeline safety and the protection of Sacramento-San Joaquin Delta waterways and surrounding biological resources. Ms. Lee managed Aspen's in-house technical and management staff, as well as 7 subcontractor firms. The Final EIR was published in September 2003 and certified by the CSLC in November 2003.
- **Sonoma-Marín Area Rail Transit (SMART) CEQA and NEPA Support.** Under contract to the SMART authority, Aspen has been providing continuing environmental support and permitting services since late 2006. We prepared a Supplemental EIR to evaluate modified station sites, and we are supporting SMART in evaluation of additional project changes as the project starts construction. Ms. Lee is also overseeing the mitigation monitoring support currently being provided to SMART during construction.

**Previous Employment..... 1977-1993**

Ms. Lee worked for seven years with the US Minerals Management Service (MMS), Pacific OCS Region and for three years at the US Geological Survey in Reston, Virginia. As a geologist and team leader in the MMS Field Operations office from 1979 to 1987 (during the Region's most active period of oil and gas exploration and development), she reviewed numerous offshore oil and gas exploration and development plans and coordinated with the NEPA compliance team.

**Presentations at Conferences**

- Coachella Valley Renewable Energy Round Table, *Transmission Project Status* (February 2013)
- Western Governors' Association, *Getting Rights-of-Way Right* (January 2013)
- American Planning Association, *Solar Energy Facilities Permit Streamlining*, Panel Member (October 2012)



- American Planning Association, National Conference, *Overview of Utility Scale Solar Projects in California* (March 2012). Panel on "The Two Sides of Going Green – Ethical and Environmental Dilemmas in Sustainability Planning."
- Association of Environmental Professionals (AEP), Channel Counties Chapter: *Environmental Impacts of Large-Scale Solar Energy Projects* (November 2011)
- Electric Utility Consultants Inc. (EUCI): *Environmental Challenges in Siting Renewable Energy Projects* (October 2011). At conference entitled "California RPS: Meeting the Mandate"
- American Planning Association (California State Conference): *Overview of Utility Scale Solar Projects in California* (September 2011). Panel on "The Two Sides of Going Green – Ethical and Environmental Dilemmas in Sustainability Planning"
- Energy, Utility & Environment Conference (EUEC): *Environmental Lessons Learned from California's First Utility Scale Solar Projects* (February 2011)
- Continuing Legal Education: *Environmental Permitting for Utility Scale Solar Projects* (August & September 2010)
- Coachella Valley Economic Partnership, Renewable Energy Roundtable: *Transmission Status and Constraints in Riverside County* (February 2010)
- Association of Environmental Professionals, Channel Counties Chapter: *Challenges to Meeting Renewable Energy Requirements*, June 2009

### **Certificates/Awards**

- Association of Environmental Professionals – First Place Award for Outstanding Environmental Analysis Document (2010): Panoche Valley Solar Farm EIR (Project Manager)
- Association of Environmental Professionals – First Place Award for Outstanding Environmental Analysis Document (2008): Sunrise Powerlink EIR/EIS (Project Manager)
- Association of Environmental Professionals – First Place Award for Outstanding Environmental Analysis Document (2004): Jefferson-Martin 230 kV Transmission Line EIR (Project Manager)
- California Energy Commission's Outstanding Performance Award for 2001

### **Training**

- California Energy Commission Expert Witness Training



### Academic Background

MA, Architecture and Urban Planning, University of California, Los Angeles, 1982  
BA, Speech and Hearing Sciences, University of California, Santa Barbara, 1980

### Professional Experience

Ms. Alarcón-Lopez has more than 30 years of experience managing environmental projects and programs, including experience conducting environmental impact analysis pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). She has effectively managed small and large projects ranging from environmental studies to major public involvement programs to environmental restoration programs. She prepared, adopted, and implemented general plans and elements for the City of Whittier, County of San Bernardino, and County of Santa Barbara. Ms. Alarcón-Lopez has significant experience as a project manager for public and private sector projects and in managing and carrying out public participation activities. She has effectively completed technical evaluations for major transmission line projects proposed in California and Arizona for the California Public Utilities Commission and has managed the preparation of energy-related reports for the California Energy Commission.

#### Aspen Environmental Group.....1999-present

At Aspen Environmental Group, Ms. Alarcón-Lopez is a project manager responsible for working with in-house and contract personnel to complete environmental analyses on federal, state, and local government projects. Key projects include:

- **Moss Landing Power Plant: Elkhorn Slough Environmental Enhancement and Mitigation Program Plan, California Energy Commission (CEC), Project Manager (2000-2001).** Ms. Alarcón-Lopez facilitated a series of meetings of the Elkhorn Slough Advisory Team. The advisory team was responsible for selecting projects that could be funded through the mitigation fees imposed on the adjacent Moss Landing Power Plant. The team was composed of State agency representatives and local technical experts. The meetings resulted in a plan that identified project priorities, project stewardship, a process for selection and ranking of projects, and timelines. At the request of the Foundation, Ms. Alarcón-Lopez assisted the Elkhorn Slough Foundation in preparing the report that documented the results of the Team meetings and established the project selection and ranking process. This plan was adopted in November 2001 by the Regional Water Quality Control Board and the CEC without any revisions.
- **Technical Writer for Presiding Member's Proposed Decision, CEC (2010-2011).** Provided support to the CEC by preparing draft decision documents on multiple issue areas and for five renewable energy (solar thermal and solar/gas hybrid) and power plant projects.
- **A Preliminary Environmental Profile of California's Imported Electricity, CEC, Principal Author (2005).** Ms. Alarcón-Lopez was the principal author of *A Preliminary Environmental Profile of California's Imported Electricity*, June 2005. This report was prepared in support of the 2005 Environmental Performance and 2005 Integrated Energy Policy Report.
- **Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port Project EIR/EIS Document Review, City of Oxnard, Project Manager (2004 and 2006).** Managed the technical and procedural review of the Cabrillo Port LNG Deepwater Port Project EIR/EIS. This review included the 2004 Draft EIR/EIS and a second review in April 2006 of the revised draft. The scope of work involved reviewing all issue areas addressed in the draft documents and preparing comments regarding the adequacy of the docu-



ment for the City of Oxnard. Aspen's senior technical staff provided input to this review. All comments for each review were consolidated into a review/comment white paper. The City used the review/comments as part of their formal comments submitted on the Draft EIR/EIS and Revised Draft EIR.

- **Environmental Impact Reports (EIR), County of San Luis Obispo, Project Manager (2009-present).** Ms. Alarcón-Lopez has worked on two controversial EIRs for projects in the County of San Luis Obispo. She has also prepared CEQA Findings of Fact to support the County decision on the Topaz Solar Project. Projects are summarized below:
  - **Avila Point Project, Project Manager for Planning and Environmental Impact Report, County of San Luis Obispo, Project Manager (2014 to present).** Completing environmental review of a remediation and redevelopment project at Avila Beach on the Coast of San Luis Obispo County. The EIR will address site remediation of soil contamination from historic oil facilities, land use amendments and other entitlements, and the future development of the project site (i.e. recreational and resort land use or open space). This project is highly controversial and will require extensive coordination with resource agencies.
  - **Topaz Solar Farm Project, Environmental Impact Report and Condition Compliance Review, County of San Luis Obispo, Project Manager (2009-2012).** Project manager for the preparation of an Environmental Impact Report (EIR) for a 550-MW photovoltaic (PV) solar power plant in the Carrizo Plain, an unincorporated area of eastern San Luis Obispo County. This project required significant coordination with wildlife agencies, other responsible agencies, and County departments to complete the environmental analysis for the project. Ms. Alarcón-Lopez supported the County in preparing staff reports and responding to written comments received during the public hearings as well as comments presented orally during the hearings. Additionally, in close coordination with the County, Ms. Alarcón-Lopez managed the initial Condition Compliance review for the project.
- **Baldwin Hills Community Standards District (CSD), City of Culver City, Project Manager (2008-present).** Project manager for the review of a County of Los Angeles environmental document and preparation of an oil and gas drilling ordinance for the City of Culver City in Los Angeles County. Ms. Alarcón-Lopez managed the preparation of technical comments on the Baldwin Hills Community Standards District EIR prepared by the County of Los Angeles for the Inglewood Oil Field. Working with a technical team of in-house and subcontractor staff, Ms. Alarcón-Lopez prepared a detailed evaluation of the County EIR on behalf of the City.
- **Environmental Impact Reports/Environmental Impact Statements (EIR/EIS), California Public Utilities Commission (CPUC), Project Manager, Public Involvement Manager and Other Technical Support (2005-2009).** Ms. Alarcón-Lopez worked on several electrical transmission projects for the CPUC providing public involvement support and as principal author of EIR/EIS land use and agricultural analyses, public participation plans, scoping reports, and policy screening reports. She prepared CEQA Findings of Fact on specific projects to support proposed decisions. Select projects are summarized below:
  - **Valley South Subtransmission Project (Valley South) EIR, CPUC, Project Manager (2013-present).** Ms. Alarcón-Lopez is responsible for managing the work of in-house and subcontractor staff to complete the environmental document for this project. The project is proposed by Southern California Edison and includes construction of a new 115-kV subtransmission line between the Valley substation and ending at the intersection of Leon and Benton Roads in southern Riverside County.



- **West of Devers Upgrade Project (WOD) EIR/EIS, CPUC, Public Involvement Manager and Other Technical Support (2014-present).** Ms. Alarcón-Lopez is responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the WOD EIR/EIS. This project, proposed by Southern California Edison, includes replacing 48 miles of existing 220-kV transmission lines with higher capacity 220-kV lines. The project would cross the Counties of San Bernardino and Riverside as well as 11 cities, the **Morongo Band of Mission Indians land**, and land managed by the **US Bureau of Land Management**.
- **Coolwater-Lugo Transmission Project (CLTP) EIR/EIS, CPUC, Public Involvement Manager and Other Technical Support (2014-present).** Ms. Alarcón-Lopez is responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the CLTP EIR/EIS. This project, proposed by Southern California Edison, includes construction of a new high voltage transmission line that would extend approximately 64 miles. The project would cross public and private land in the County of San Bernardino as well as land managed by the **US Bureau of Land Management**.
- **Tehachapi Renewable Transmission Project (TRTP) EIR/EIS, CPUC, Public Involvement Manager and Other Technical Support (2007-2009).** Ms. Alarcón-Lopez was responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the TRTP EIR/EIS. This project, proposed by Southern California Edison, included the construction and operation of over 200 miles of new and upgraded 500- and 220-kV transmission line that would cross Kern, Los Angeles, and San Bernardino Counties as well as 22 cities and the Angeles National Forest. In addition, Ms. Alarcón-Lopez prepared a Policy Consistency and Plan Amendments report that evaluated the Project's consistency with 44 local, regional, state, and federal agency land use and resource management plans. This policy report was prepared to address NEPA requirements for consideration of a project's potential to conflict with land use and resource management plans.
- **Sunrise Powerlink Project EIR/EIS, CPUC, Public Involvement Manager and Other Technical Support (2006-2008).** Ms. Alarcón-Lopez was responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the Sunrise Powerlink EIR/EIS. This project, proposed by San Diego Gas & Electric Company, included the construction and operation of a highly controversial 150-mile 500-kV and 230-kV transmission line from Imperial County near El Centro to the City of San Diego. She managed the preparation of an 800-page scoping report that outlined all verbal and written comments submitted on the project during the public scoping process, and documented all notices and advertisements. In addition, Ms. Alarcón-Lopez assisted with the preparation of the response to comments for the Final EIR/EIS where she addressed environmental justice and land use public comments. She also prepared the CEQA Findings of Fact to support the project decision.
- **Antelope Pardee 500-kV Transmission Project EIR/EIS, CPUC. Land Use Analyst and Public Involvement Manager (2005-2006).** Ms. Alarcón-Lopez prepared the land use impact analysis for the evaluation of the 26-mile transmission project proposed by Southern California Edison in Los Angeles County. The land use analysis was prepared as part of the EIR/EIS for the project and covered local jurisdictions and federal land under the jurisdiction of the **USDA Forest Service**.
- **Devers-Palo Verde 500-kV Transmission Project EIR/EIS, CPUC, Land Use Analyst and Public Involvement Manager (2005-2006).** Ms. Alarcón-Lopez prepared the land use impact analysis for the evaluation of this 230-mile transmission project proposed by Southern California Edison in Southern California and western Arizona. The land use analysis was prepared as part of the EIR/EIS for the project and covered local jurisdictions and federal land under the jurisdiction of



the US Bureau of Land Management. She also reviewed and managed the preparation of the wilderness and recreation and agricultural sections of the report. Ms. Alarcón-Lopez prepared the Policy Screening Report that evaluated the project's consistency with over 33 land use or resource management plans. She also prepared the CEQA Findings of Fact to support the project decision.

- **EIRs and Technical Studies, Los Angeles Department of Water and Power (LADWP), Project Manager (2004-2009).** Project Manager responsible for preparation of EIRs and other technical studies, as identified below.
  - **Lower Reach River Supply Conduit Project EIR, LADWP, Project Manager (2004-2006).** Project Manager for preparation of an EIR to support LADWP's Lower Reach River Supply Conduit Pipeline project. The project involved the replacement of an existing pipeline with a new pipeline in a new alignment. The project involved the construction of 48-, 60-, 66-, 72-, 84-, and 96-inch diameter welded steel underground pipeline.
  - **River Supply Conduit Improvement Upper Reach EIR, LADWP, Project Manager (2006-2008).** Project Manager for preparation of an EIR to support LADWP's River Supply Conduit Improvement project. This project involved the construction of approximately 6 miles of 78-inch-diameter welded steel (water) pipeline and construction of appurtenant structures (e.g., maintenance holes, flow meter, valves, and/or vaults) within the jurisdiction of the Cities of Los Angeles and Burbank.
- **Detailed Project Reports, Environmental Assessments, and Special Studies, US Army Corps of Engineers (USACE), Los Angeles District, Project Manager (1999-2003).** Ms. Alarcón-Lopez has managed delivery orders for projects in California and Arizona. Delivery orders have included:
  - **Environmental Assessment, Biological Assessment, and Biological Mitigation Plan for Proposed Border Patrol San Diego Sector Support Facilities at Brown Field, USACE, Project Manager (1999 through 2000).** Project manager for this USACE and US Immigration and Naturalization Service (INS) project. For the Biological Assessment, Ms. Alarcón-Lopez managed the conduct of a field biological survey to confirm plant and animal species on the project and alternative sites. Ms. Alarcón-Lopez also managed the preparation of a Revised Environmental Assessment to identify and evaluate potential environmental impacts that would result from the construction and operation of the San Diego Sector Support Facilities for the US Border Patrol.
  - **Detailed Project Report (Ecosystem Restoration Report) and Environmental Assessment of Old San Jose Creek, Santa Barbara County, USACE, Project Manager (2000-2003).** Project Manager for the preparation of the Baseline Conditions Report, Detailed Project Report and Environmental Assessment. This project included vegetation mapping and soil sampling to assess the suitability of soil for restoration of the creek, and an historical evaluation of how the creek has changed over time through the use of aerial photography. In addition, Ms. Alarcón-Lopez prepared a Coastal Consistency Determination to address the Federal Coastal Zone Management Act of 1972, which was included as an appendix to the Detailed Project Report.
- **Visalia Landfill Facility EIR, County of Tulare, Project Manager (2000-2001).** Project Manager for the preparation of an Environmental Impact Report for the proposed expansion of the Visalia Landfill Facility in Tulare County. The EIR covered the replacement of an existing unlined waste management unit (WMU) with the construction and operation of a new lined WMU that met all State and federal regulations.



**DR. ELIZABETH A. BAGWELL, RPA**  
Cultural Resources Group Manager

### Academic Background

PhD, Anthropology (Archaeology), University of New Mexico, 2006  
MA, Anthropology (Archaeology), UC Berkeley, 1995  
Certificate in Archaeological Technology, Cabrillo College, 1994  
BA, Anthropology and Creative Writing, UC Santa Cruz, 1991

### Professional Experience

Dr. Bagwell is Aspen's senior cultural resources specialist. She has been conducting field work, researching, analyzing, and writing about archaeology and anthropology since 1991. Dr. Bagwell is directly responsible for preparing cultural resources project budgets and schedules, as well as providing quality control measures to ensure that projects are completed on time and within budget. She provides quality review for all cultural resources project reports to ensure the adequacy of the reports and the appropriateness of eligibility recommendations, and provides recommendations for the avoidance or treatment of cultural resources. She has experience preparing environmental documents pursuant to applicable federal, state and local regulations in California, Arizona, Nevada, New Mexico, and internationally in Mexico. These documents emphasize compliance with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), Native American Graves Protection and Repatriation Act (NAGPRA), and California Environmental Quality Act (CEQA). Dr. Bagwell is a Registered Professional Archaeologist who meets the Secretary of the Interior's qualification criteria as an archaeologist. The following is a list of Dr. Bagwell's key experience related to coastal and infrastructure projects.

### Aspen Environmental Group.....2009-present

#### Port of Long Beach

- **Eagle Rock Aggregate Terminal Project, Initial Study (2011).** Under contract with the Port of Long Beach, Dr. Bagwell served as technical staff conducting analyses of impacts to cultural resources and paleontology resulting from the construction and operation of a sand, gravel and granite construction aggregate receiving, storage and distribution terminal at a privately held parcel within the Port of Long Beach. Important issues for this Initial Study include direct impacts to a shipwreck and the possibility of buried prehistoric and paleontological resources.

**California Energy Commission.** Aspen has a multi-year contract to provide support to the Energy Facility Planning and Licensing Programs. Under this contract Dr. Bagwell has participated in the following projects:

- **Redondo Beach Energy Project, Architectural History Technical Report (2013-present).** Dr. Bagwell is the work authorization manager and technical reviewer of the analysis which evaluated the Redondo Beach Generating Station (RBGS) Administration, Unit 1 and SEA Lab buildings for eligibility for listing on California Register of Historical Resources (CRHR).
- **Alamitos Energy Center Project, Cultural Resources Staff Assessment (2014-present).** Dr. Bagwell is the work authorization manager and technical reviewer of the Architectural History portion of the Cultural Resources Staff Assessment.
- **Rio Mesa Solar Electric Generating Facility, Cultural Resources Staff Assessment (2012-2013).** Dr. Bagwell lead a team of technical staff analyzing the impacts to cultural resources from the 5,750 acre 750 MW solar concentration thermal plant located on the Palo Verde Mesa near Blythe, California. Important cultural issues include direct impacts to prehistoric Native American and historic World War II military maneuver sites. This was a large, complex project which is being



coordinated with other solar projects, with BLM as the federal lead agency, and with local Native American tribal representatives. This project was cancelled in 2013, after completion of the draft CEQA document.

- **Genesis Solar Energy Project, Cultural Resources Staff Assessment (2009-2010).** Dr. Bagwell served as the lead technical staff for the analysis of impacts to cultural resources from the 1,800-acre 250 MW power plant in an undeveloped area of the Mojave Desert near Dry Ford Lake. Her review included an extensive data driven cumulative analysis for the Blythe region. Important cultural issues include direct impacts to prehistoric Native American and historic World War II military maneuver sites and potential indirect impacts to a traditional cultural property. Dr. Bagwell testified as an expert witness in cultural resources during Evidentiary Hearings before the Commission.
- **Genesis Solar Energy Project, Cultural Resources Compliance (2010-2014).** Dr. Bagwell served as the lead technical reviewer for cultural resources during the compliance process. Duties included the review of all licensees' submittals and actions related to compliance with cultural resources conditions of certification and providing recommendations to staff regarding acceptability. The GSEP is a large, complex project for which cultural resources compliance review has been coordinated with other solar projects, with BLM as the federal lead agency, and with local Native American tribal representatives.
- **Hydrogen Energy California Power Plant, Cultural Resources Staff Assessment (2010-present).** Dr. Bagwell serves as technical staff for the analysis of impacts to prehistoric cultural resources from the 890-acre 250 MW integrated gasification combined cycle power generating facility in Kern County seven miles west of Bakersfield. The project proposes to gasify a 75 percent coal and 25 percent petroleum coke fuel blend to produce synthesis gas (syngas). Syngas will be purified to produce a hydrogen-rich fuel, which will be used to generate low-carbon baseload electricity in a Combined Cycle Power Block, low-carbon nitrogen-based products in an integrated Manufacturing Complex, and CO<sub>2</sub> for use in enhanced oil recovery (EOR). CO<sub>2</sub> from HECA will be transported by pipeline for sequestration (storage) in the adjacent Elk Hills Oil Field (EHOF). Important cultural resource issues include the potential for buried prehistoric resources within the facility footprint and along the extensive linear corridors. This project is the first of its kind in California, requiring close coordination with other agencies including the Department of Energy (DOE) and California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR).

#### California Public Utilities Commission

- **Devers-Palo Verde No. 2 Transmission Line Project, Colorado River Substation Expansion, Supplemental EIR (2010).** Dr. Bagwell served as technical staff conducting analyses of the impacts to cultural resources for a Supplemental EIR. The previously approved 45-acre 500 kV switchyard would be expanded into a full 1120 MVA 500/220 kV substation on approximately 90 acres of land. This expansion is designed to interconnect the BSPP and the GSEP to SCE's existing Devers-Palo Verde (DPV) 500 kV transmission line.
- **PG&E Cressey-Gallo 115 kV Transmission Project, EIR (2011 to 2012).** This project includes a new 14-mile transmission line and the expansion of two substations in Madera County near Livingston, California. It is intended to complete a transmission loop that will improve system reliability. Dr. Bagwell was responsible for the research and writing of the Cultural Resources and Paleontology sections of the document.

**Western Power Administration, Desert Southwest Region.** Aspen has a multi-year contract to provide NEPA and other environmental support services.



- **Transmission Line Historic Context (2013).** Under contract with Western Power Administration (Desert Southwest Region), Dr. Bagwell was the task order manager and co-author of a 200-page historical evaluation study (historic context) of DSW facilities including power systems, transmission lines, substations, and administrative buildings. This study encompassed approximately 3300 miles of transmission lines and 95 substations located in Arizona, California, Nevada, and New Mexico. This document will aid Western in identifying the integrity and significance of these resources for inclusion in the National Register of Historic Places.
- **GIS Resource Database Development for the Desert Southwest Region (2011).** Dr. Bagwell designed a standardized GIS database for all DSW cultural resources projects. Variants for Arizona, California, and Nevada were created in order to be consistent with an existing Sierra Nevada Region database as well as the requirements of each State Historic Preservation Officer. GPS data dictionaries based on this database are currently used in field recording for all DSW projects.
- **Gila to North Gila Transmission Line Rebuild and Upgrade Project, Environmental Assessment (2013).** Rebuild and upgrade of a 4.8-mile-long existing Gila-North Gila 69-kV transmission line and the existing Gila-Knob 161kV transmission line segment between the Gila and North Gila Substations and expansion of right-of-way to grant Arizona Power Service Company (APS) the right to cross Western's Gila Substation with its North Gila to TS8 230kV Transmission Line Project. Dr. Bagwell manages and reviews the work of technical staff conducting analyses of the impacts to cultural resources for this document.

**Western Power Administration, Sierra Nevada Region (2012-present).** Aspen has a multi-year contract to provide NEPA and other environmental support services for all Western actions within its 101,000,000 square mile service area in northern and central California as well as eastern Nevada. Under this contract Dr. Bagwell participated in the following projects:

- **Carr-Keswick 230-kV Transmission Line Project (2012).** Vegetation management along this transmission line near Redding, California. Dr. Bagwell was the technical reviewer for this document.
- **Shasta-Flanagan and Shasta-Cottonwood #1 and #2 230-kV Transmission Line Project (2012).** Vegetation management along this transmission line near Redding, California. Dr. Bagwell was the technical reviewer for this document.
- **Tracy-Livermore 230-kV Transmission Line Optical Ground Wire Project (2012).** Fiber optic cable replacement along 12.8 miles of this line near Livermore, California. Dr. Bagwell was the technical reviewer for this document.
- **San Luis Transmission Line Project (2013-present).** This project involves the construction of a new transmission line between the Tracy power substation in Tracy, CA and the San Luis Reservoir power substation in Santa Nella, CA. The new line will interconnect several of the key Bureau of Reclamation San Luis Unit water facilities of the Central Valley Project (CVP) with Western's CVP transmission system. Dr. Bagwell is the cultural resources task order manager and the co-author of the cultural resources section of the EIS/EIR.

#### **San Luis Obispo County**

- **California Valley Solar Ranch, Compliance (2011 to present).** The CVSR project is a 250 MW solar photovoltaic power plant on the Carrizo Plain in rural San Luis Obispo County. The solar arrays for the project will cover nearly 2,000 acres. Dr. Bagwell serves as a technical reviewer for cultural resources and paleontology during the compliance process. Duties include the review of licensees' submittals and actions related to compliance with cultural resources and paleontological conditions of approval and providing recommendations to the County regarding acceptability.



## Professional Affiliations and Training

- Register of Professional Archaeologists #16564
- Qualified Cultural Resources Project Manager – Arizona State Historic Preservation Office (Arizona State Museum), 2008-2009
- Qualified Cultural Resources Project Manager – New Mexico State Historic Preservation Office, 2008-2009

## Memberships

- Society for American Archaeology
- Society for California Archaeology
- Arizona Archaeological Council
- Arizona Archaeological and Historical Society
- New Mexico Archaeological Council

## Honors and Awards

- 2014 National Association of Environmental Professionals, National Environmental Excellence Award in the category of NEPA Excellence for Aspen's *Environmental Assessment – Burning Man 2012-2016 Special Recreation Permit*.
- 2006 University of New Mexico Tom L. Popejoy Prize for most outstanding UNM dissertation, *Domestic Architectural Production in Northwest Mexico*
- 2002 National Science Foundation grant BCS-0210436: Expanding Dendroarchaeology into Northern Mexico
- 2001 National Science Foundation Dissertation Improvement Grant BCS-0121730

## Selected Publications and Reports

- Bagwell, Elizabeth A., 2008, *Archaeological Data Recovery for the Dinosaur to Hunt 12 kV/69 kV Electric Line, Pinal County, Arizona*. Technical Report No. 08-04. Desert Archaeology, Inc., Tucson, Arizona.
- Bagwell, Elizabeth A., 2008, *Cultural Resources Survey of 160 Acres North of the Abel Substation Site, Southeast of Queen Creek, Pinal County, Arizona*. Project Report No. 08-114. Desert Archaeology, Inc., Tucson, Arizona.
- Bagwell, Elizabeth A., 2006, *Domestic Architectural Production in Northwest Mexico*. Ph.D. Dissertation, Department of Anthropology, University of New Mexico.
- Bagwell, Elizabeth A., 2004, *Architectural Patterns Along the Rio Taraises, Northern Sierra Madre Occidental, Sonora*. *Kiva* 70(1):7-30.
- Bagwell, Elizabeth A., 2003, *The Production of Architectural Artifacts: An Analysis of Cliff-Dwellings in the Sierra Madre Occidental of Northwest Sonora, Mexico. 2001 Field Season*. A report prepared for the Council of Archaeology of the National Institute of Anthropology and History (Informe al Consejo de Arqueología, Instituto Nacional de Antropología e Historia), Mexico City, Mexico.
- Henderson, T. Kathleen and Elizabeth A. Bagwell, 2007, *Archaeological Treatment Plan for the Phoenix Sky Harbor International Airport Stage 1 Automated Train Project, Maricopa County, Arizona*. Prepared for the City of Phoenix, PGM 2007-46. Desert Archaeology, Inc., Tucson.
- Ruscavage-Barz, Samantha and Elizabeth A. Bagwell, 2006, *Gathering Spaces and Bounded Places: The Religious Significance of Plaza-Oriented Communities in the Northern Rio Grande, New Mexico*. In *Religion in the Prehispanic Southwest*, pp. 81-102, edited by C. S. VanPool, T. L. VanPool, and D. Phillips. Altamira Press, Lanham, Maryland.



## Academic Background

MS, Civil Engineering, Colorado State University, 1993  
BS with High Honors, Mechanical Engineering, Lehigh University, 1991

## Professional Experience

Mr. Birdsall is an engineer and environmental scientist who specializes in air quality and greenhouse gas (GHG) analyses for energy infrastructure and land development projects. He has 19 years of consulting experience focusing on technical oversight, climate change, air resources, and air quality and noise-impact modeling, and assessment under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and the Clean Air Act. He provides senior-level analysis for resource planning decisions related to energy facilities siting, energy supply alternatives, including power procurement and transmission planning, and offsetting impacts. His expertise also includes the interrelationships of conventional and renewable energy supply and delivery as they affect emissions. He occasionally serves as project manager for environmental documents addressing unique or complex energy and planning issues.

## Aspen Environmental Group.....2001-present

A selection of Mr. Birdsall's key project experience at Aspen includes the following:

**California State Lands Commission, Monterey Accelerated Research System Cabled Observatory (2004-2005).** Provided technical analysis of air quality and noise effects of installing new underwater equipment in Monterey Bay. Provided marine biologists with analysis of underwater sounds in the Monterey Bay National Marine Sanctuary.

**San Onofre Nuclear Generating Station and Diablo Canyon Power Plant, Steam Generator Replacement Projects (2004-2005).** Deputy Project Manager for two comprehensive Environmental Impact Reports for the California Public Utilities Commission to fulfill CEQA requirements for major investments in the Diablo Canyon and SONGS nuclear power plants, with analyses of potential shutdown, replacement facilities, and extension of life.

**Siting Cases for CEC – Review of Applications to Construct Power Plants.** Mr. Birdsall assists the California Energy Commission (CEC) as a technical specialist by reviewing and providing testimony on Applications for Certification (AFC) for new power plants throughout California, including natural gas-fired combined cycle, peaking, solar, and geothermal facilities. As a contractor for the Engineering Office of the Siting, Transmission, and Environmental Protection Division, he has provided precedent-setting testimony for the CEC on the implementation of the California Global Warming Solutions Act of 2006 (AB 32) in the electricity sector. These assessments cover the potential effects of new power plants on overall electricity system operation, achieving California goals in reducing greenhouse gas emissions, avoiding deterioration of air resources, and developing plans to offset emissions.

- **Redondo Beach Energy Project (2012-present).** Provided air quality and GHG assessment support for a proposed 496 MW replacement power plant using fast-starting combined cycle technology.
- **Marsh Landing Generating Station (2008-2010).** Lead technical staff for air quality and greenhouse gas assessment for new 760 MW fast-starting power plant in Contra Costa County.
- **Humboldt Bay Repowering Project (2006-2008).** Lead technical staff for air quality assessment for new 163 MW power plant with 10 dual-fuel diesel/natural gas-fired engine generators in Eureka.



- **Russell City Energy Center (2001-2002).** Lead technical staff for noise assessment of new 600 MW combined cycle power plant adjacent to shoreline recreational areas in Hayward.
- **Los Esteros Critical Energy Facility (2001-2002).** Lead technical staff for impacts of noise and visible plumes from new 180 MW simple cycle power plant adjacent to recreational areas in San Jose.
- Technical support, including air quality and GHG assessment, for 17 additional Applications for Certification for power plants throughout California.

**Technical Studies for CEC.** Mr. Birdsall is also an author or contributor on special studies of energy issues.

- **Transmission Options in Southern California (2013-2014).** Prepared an environmental feasibility study for electric transmission options and potential corridor designations in Southern California in response to closure of San Onofre Nuclear Generating Station (SONGS). Documented potential overland transmission line corridors and offshore submarine high voltage direct current (HVDC) cable corridors connecting the Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E) electrical transmission systems.
- **California Credit Policies: Lowering the Effective Cost of Capital for Generation Projects (2006).** Prepared workshop report exploring policy options for transforming power procurement and credit policies to encourage power plant development in California and manage the risk of project failure.
- **WESTCARB Environmental Documentation and PIER Global Climate Change Research (2006).** Supporting technical staff for impact assessment of greenhouse gas sequestration test cases.
- **Relative Cost Differences Between Anhydrous and Aqueous Ammonia Systems for Power Plants (2004).** Supervising editor for cost comparison on air pollution control systems minimizing use of hazardous materials.

**For the California Public Utilities Commission:**

- **Miguel-Mission 230 kV #2 Transmission Line (2003-2004).** Conducted the air quality and noise review for a system that would reduce transmission constraints between San Diego County and generators within the US and Mexico. Supervised the engineers studying impacts to traffic and transportation, the transmission system design, and public health.
- **Jefferson-Martin 230 kV Transmission Line (2003-2004).** Prepared air quality and noise studies and provided oversight of health effects analyses for construction and operation of a 27-mile transmission line through urban and rural San Mateo County. The project passes through the Cities of Burlingame, Millbrae, San Bruno, South San Francisco, Brisbane, Colma, and Daly City to serve the projected electric demand in San Francisco.

**San Francisco Bay Water Transit Authority, Alameda/Oakland Ferry Service Expansion (2006).** Deputy Project Manager for environmental analysis of adding transits to existing routes on San Francisco Bay.

**South San Joaquin Irrigation District, Plan to Provide Retail Electric Service (2005-2006, 2010-present).** Project manager for full environmental analyses for new provider of electric distribution service. Topics of assessment include how GHG emissions and energy conservation programs could be affected by change in system ownership, assessment of concurrent Municipal Services Review and Sphere of Influence, and analysis of Community Choice Aggregation (CCA) and as an alternative to allowing a change in retail electric service provider in southern San Joaquin County.

**San Luis Obispo County Renewable Energy Streamlining Program and EIR (2013).** Analysis of electric transmission and distribution systems and interconnection processes for a county-wide Opportunities and Constraints Technical Study to determine Renewable Energy Development Areas for siting of small-



scale renewable energy. The analysis would be used for updating or establishing renewable energy policies, a Renewable Energy Combining Designation for the County General Plan Open Space Element, and a Renewable Energy Ordinance in a process funded by the CEC.

**Burning Man 2012-2016 Environmental Assessment, BLM (2011-2012).** Developed technical memoranda on community noise, air quality, and a greenhouse gas emissions inventory for the annual Burning Man Event for the five-year review conducted by the BLM Winnemucca Field Office and Black Rock City LLC.

**Presidio Trust, Presidio of San Francisco (2002-2011).** Analyzed climate change, air quality, and noise impacts within the Golden Gate National Recreation Area for various demolition, rehabilitation, and infill construction, including the Main Post, Contemporary Art Museum, Public Health Service Hospital District, and Letterman Digital Arts Center. Provided technical support and peer review of tunnel and highway noise and vibration for the South Access to the Golden Gate Bridge, Doyle Drive Reconstruction through the Presidio of San Francisco. Developed mitigation to protect natural sounds consistent with National Park Service policy.

**Santa Barbara County, Energy Division, Lompoc Wind Energy Project (2008-2009).** Peer-review of noise analysis and control plan for new 97 MW wind energy facility in rural Santa Barbara County.

**Santa Barbara County, Energy Division, PXP Tranquillon Ridge Development Project (2006-2009).** Air quality, noise, and energy use assessment for extended reach drilling into the Tranquillon Ridge Field in State waters including oil emulsion and gas processing at the Lompoc Oil and Gas Plant.

**City of Richmond, Department of Planning and Building, Review of Environmental Documents (2006-2009).** Peer-review services and technical support to city planners on refinery upgrades and replacement projects, primarily for air quality, health risks, energy use, and mitigation of greenhouse gases and climate change. Identified strategies to inventory refinery emissions and mitigating actions to offset project-related emissions, with a goal of no net increase.

**City of Long Beach, Department of Planning and Building, Review of LNG Import Facility (2005-2006).** Coordinated a critical review and provided technical support for review of the environmental impact assessments related to a proposed liquefied natural gas import facility within the Port of Long Beach.

**California State Lands Commission, Concord-Sacramento Pipeline (2002-2003).** Provided technical analysis of air quality and noise effects of constructing a new 20-inch, 70-mile petroleum products pipeline, including upgrades to storage tank facilities in Concord and distribution systems in West Sacramento.

### **Noise Impact Assessment Expertise**

- Federal Highway Administration Traffic Noise Model
- California Department of Transportation Traffic Noise Model (SOUND32)
- FTA Transit Noise Assessment and Mitigation Methodology

### **Air Quality Modeling Expertise**

AERMOD; CAL3QHCR; CALINE4; ISC; CTDM; CalEEMod; EMFAC; TANKS; Landfill Gas Emissions Model

### **Additional Training and Courses**

- Panelist, Offsets for Environmental Mitigation, Navigating the American Carbon World 2014
- Climate Change, A New Age for Land Use Planning, U.C. Davis Extension
- Fundamentals of Noise and Vibration for the California Energy Commission
- Expert Witness Training, California Energy Commission
- Co-Instructor, Air Permitting Issues for Municipal Solid Waste Landfills, Trinity Consultants



- Fundamentals of New Source Review Workshop, Air and Waste Management Association
- Title V and Compliance Assurance Monitoring Workshops, Air and Waste Management Association
- NATO Advanced Studies Institute, Wind Climates in Cities
- Graduate-level Coursework: Solar Energy Conversion, Wind Engineering, Reciprocating and Centrifugal Engines, Computational Fluid Dynamics, Scalar Transport

### **Professional Affiliations and Awards**

- Professional Engineer (Mechanical, California #32565)
- Qualified Environmental Professional, Institute of Professional Environmental Practice (#03030005)
- 2001 Outstanding Performance Award presented by the California Energy Commission
- Air and Waste Management Association since 1994
- Tau Beta Pi, National Engineering Honor Society

### **Publications**

- Smith, P. J., J. B. Birdsall, and P. E. Delamater. "A Discussion of Air Permitting Issues for Landfill Gas-To-Energy Projects." 88th Annual Meeting and Exhibition of the Air and Waste Management Association, San Antonio, Texas, 1995.
- Meroney, R. N., D. E. Neff, and J. B. Birdsall. "Wind-Tunnel Simulation of Infiltration Across Permeable Building Envelopes: Energy and Air Pollution Exchange Rates." 7th International Symposium on Measurement and Modeling of Environmental Flows. International Mechanical Engineering Congress and Exposition, San Francisco, California, 1995.
- Birdsall, J. B. and R. N. Meroney. "Model Scale and Numerical Evaluation of Tracer Gas Distribution Due to Wind-Forced Natural Ventilation." 9th International Conference on Wind Engineering, New Delhi, India, 1995.
- Birdsall, J. B. Physical and Numerical Simulation of Wind-Forced Natural Ventilation, MS Thesis, Colorado State University, Fort Collins, Colorado, 1993.



## Academic Background

MS, Conservation Biology, Sacramento State University, 2012  
BS, Ecology, San Diego State University, 2004

## Professional Experience

Heather Blair is an Environmental Scientist experienced in the managerial and technical aspects of environmental review of energy infrastructure projects. Her particular expertise is terrestrial biological resources throughout California. This expertise is backed by experience in a range of natural resource investigations and environmental impact analysis including botanical and wildlife research, inventory, and survey techniques; technical writing; and data analysis. She has experience preparing and managing the preparation of environmental documents pursuant to applicable federal, state and local environmental regulations, including but not limited to the California Environmental Quality Act, National Environmental Policy Act, and the California and federal Endangered Species Acts.

## Aspen Environmental Group.....2004-present

Selected project experience at Aspen includes the following:

- **California Energy Commission.** Aspen has a multi-year contract to provide support to the Energy Facility Planning and Licensing Programs. Under this contract Ms. Blair has participated in the following projects:
  - **Biological Resources Assessment for the Huntington Beach Energy Project.** Ms. Blair is the lead technical staff for the analysis of impacts to biological resources from this 939 MW natural gas-fired power plant in coastal Orange County that will replace the existing Huntington Beach Generating Station. Important biological issues for this project include indirect impacts to nearby wetlands and preserves, including noise and vibration impacts to listed birds (e.g., clapper rail).
  - **Biological Resources Assessment for the Carlsbad Energy Center.** Ms. Blair was the lead technical staff for the analysis of impacts to biological resources from the 540 MW CECP. Important biological issues include potential impacts to Agua Hedionda Lagoon and consistency with the Carlsbad Habitat Management Plan. Ms. Blair testified as an expert witness in biological resources during Evidentiary Hearings before the Commission.
  - **Biological Resources Assessment for the Marsh Landing Generating Station.** Ms. Blair served as the lead technical staff for the analysis of impacts to biological resources from the 930 MW MLGS. Important biological issues include indirect impacts to State and federally listed plants and insect species in the Antioch Dunes National Wildlife Refuge from nitrogen deposition. Ms. Blair presented her findings before the Commission.
  - **Biological Resources Assessment for the Alamitos Energy Center.** Ms. Blair is the co-lead technical staff for the analysis of impacts to biological resources from this 1,963 MW natural gas-fired power plant in coastal Los Angeles County. Important biological issues for this project include indirect impacts to nearby wetlands and preserves, including noise and vibration impacts to listed birds (e.g., California least tern).
  - **Biological Resources Assessment for the Blythe Solar Power Project PV Amendment.** Ms. Blair prepared the cumulative impact analysis for biological resources for this amendment to convert the approved solar thermal project to photovoltaic technology.



- **Biological Resources Assessment for the Rio Mesa Solar Electric Generating Facility.** Ms. Blair was the co-lead technical staff for the analysis of impacts to biological resources from this 250 MW solar thermal power plant in the Mojave Desert. Important biological issues for this project include impacts to migratory birds, desert tortoise, and jurisdictional washes. Coordination is required with BLM as a portion of the generator-tie line would cross portions of the California Desert District. This project was ultimately cancelled by BrightSource.
- **Biological Resources Assessment for Pio Pico Energy Center Power Plant Licensing Case.** Ms. Blair was the co-lead technical staff for the analysis of impacts to biological resources from this 300 MW solar thermal power plant in eastern San Diego County. Important biological issues for this project include impacts to critical habitat for federally listed Quino checkerspot butterfly, Otay tarplant, and California gnatcatcher from nitrogen deposition as well as consistency with the San Diego County Multi-Species Conservation Plan.
- **Biological Resources Assessment for the Abengoa Mojave Solar Project.** Ms. Blair was the lead technical staff for the analysis of impacts to biological resources from the 250 MW solar thermal power plant in the Mojave Desert. Important biological issues for this fast-track American Reinvestment and Recovery Act (ARRA) funded project included impacts to Harper Dry Lake from potentially decreased water availability, desert tortoise, and Mojave ground squirrel. Ms. Blair testified as an expert witness in biological resources during Evidentiary Hearings before the Commission.
- **Biological Resources Assessment for the San Joaquin Solar 1&2 Hybrid Project.** Ms. Blair was the lead technical staff for the analysis of impacts to biological resources from the 107 MW solar thermal/biomass hybrid power plant. Important biological issues include potential impacts to San Joaquin kit fox habitat and movement corridor connectivity. This project was cancelled prior to issuance of a Decision.
- **Biological Resources Assessment for the Genesis Solar Energy Project.** Ms. Blair was the assistant technical staff for the analysis of impacts to biological resources from this 250 MW solar thermal power plant in an undeveloped area of the Sonoran Desert. Important biological issues for this fast-track ARRA project include direct and indirect (downstream) impacts to ephemeral drainages from site development and indirect impacts to sand dune dependent vegetation and wildlife communities from disruption of Aeolian processes.
- **Biological Resources Assessment for the CPV Sentinel Project.** Ms. Blair was the lead technical staff for the analysis of impacts to biological resources from the 850 MW CPV Sentinel project. Important biological issues include potential impacts from groundwater drawdown to the mesquite hummock plant community and the special-status species it supports.
- **Biological Resources Assessment for the CPV Vaca Station Project.** Ms. Blair is currently serving as the lead technical staff for the analysis of impacts to biological resources from the 660 MW CPVVS. Important biological issues include potential impacts to giant garter snake from reduced flows in Old Alamo Creek and loss of Swainson's hawk foraging habitat.
- **Biological Resources Assessment for the Willow Pass Generating Station.** Ms. Blair is currently serving as the lead technical staff for the analysis of impacts to biological resources from the 550 MW WPGS. Important biological issues include direct impacts to California red-legged frog and indirect impacts to State and federally listed plants and insect species in the Antioch Dunes National Wildlife Refuge from nitrogen deposition.
- **Biological Resources Assessment for the Oakley Generating Station.** Ms. Blair co-prepared the analysis of impacts to biological resources from the 624 MW OGS. Important biological issues



include indirect impacts to State and federally listed plants and insect species in the Antioch Dunes National Wildlife Refuge from nitrogen deposition.

- **Biological Resources Assessments for the Panoche and Starwood Energy Centers.** Ms. Blair served as the lead technical staff for the analysis of impacts to biological resources from the 400 MW Panoche Energy Center and 120 MW Starwood Project. These projects required coordination with USFWS and CDFG regarding impacts to the State and federally listed San Joaquin kit fox.
- **Downstream Transmission Upgrades.** Ms. Blair prepared the impact assessment of various issue areas (e.g., biological, geological, and water resources) for reasonably foreseeable upgrades required to interconnect the Palen Solar Power Plant, Blythe Solar Energy Project, Genesis Solar Energy Project, Abengoa Mojave Solar Project, and Los Esteros Critical Energy Facility Phase 2 to the electrical grid.
- **California Valley Solar Ranch EIR, San Luis Obispo County.** Ms. Blair managed the pre-construction mitigation compliance for this 250 MW photovoltaic (PV) solar power plant in the unincorporated portion of eastern San Luis Obispo County. She worked closely with the applicant and the County to track compliance with mitigation measures from the EIR, including acquisition of permits and conducting needs surveys and reporting, under a very tight timeframe.
- **Tule Wind EIS, Third Party NEPA Review.** Under contract to the BLM, Ms. Blair is assisting the BLM in reviewing the biological resources section of the Draft and Final EIS/EIR for the proposed Tule Wind Project (EIS) to meet BLM and NEPA requirements. The joint document evaluates the proposed Tule Wind Project and the proposed East County Substation Project (ECO), along with other related parts of both projects.
- **Nuclear Power Plant Assessment (Assembly Bill 1632).** Ms. Blair managed the preparation of and was a contributing author for a major Appendix to the Nuclear Power Plan Assessment Report for the Energy Commission. This report evaluated nuclear power issues in the state in response to recent legislation (AB 1632), including environmental issues associated with alternatives (including renewable) to the state's two nuclear facilities.
- **Diablo Canyon Power Plant Steam Generator Replacement Project.** Ms. Blair supported the management team in preparing the project description, alternatives and supporting sections of the Draft and Final EIR.
- **Vermont Yankee Nuclear Power Plant Report, Vermont Department of Public Service.** Ms. Blair evaluated biological resource impacts of the continued operation of the Vermont Yankee Nuclear Power Station in Vernon, Vermont. The report assessed the environmental impacts to land, water and air resources (including climate change), soil and seismicity, on-site and off-site storage and disposal of high-level and low-level nuclear waste.
- **Northern California CO<sub>2</sub> Storage Pilot, Confidential Client, CEQA and NEPA compliance (2008).** Contributed to the preparation of Department of Energy NEPA environmental questionnaire to comply with Category Exclusion requirements and preparation of the Initial Statement under CEQA for the proposed CO<sub>2</sub> sequestration pilot test site in Montezuma Hills. Ms. Blair conducted focused nesting surveys of the State-threatened Swainson's hawk (*Buteo swainsonii*).
- **Desert Renewable Energy Conservation Plan EIR/EIS.** Ms. Blair is preparing the analysis of biological and water resources impacts resulting from transmission line build-out outside of the Plan Area, extending north into the San Joaquin Valley, east into the Los Angeles Area and south into San Diego and Imperial counties. She is also integrating BLM's conservation management actions across all issue areas for inclusion in the EIR/EIS.



- **Alta East Wind Project EIS/EIR, Kern County and BLM.** Ms. Blair prepared portions of the project description as well as the geology and minerals section for this proposed 318 MW wind project, which includes development of up to 120 wind turbine generators ranging from 1.5 MW to 3 MW in capacity and construction of a 230 kV generation-tie transmission line within the Tehachapi Wind Resource Area.
- **Arizona Utilities CO<sub>2</sub> Storage Pilot, CEC and University of California, NEPA compliance (2007).** Contributed to the preparation of Department of Energy NEPA environmental questionnaire to comply with Category Exclusion requirements for the proposed CO<sub>2</sub> sequestration pilot test site near Joseph City, Arizona. Ms. Blair conducted focused surveys of the federally endangered Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*).
- **Environmental Screening Tool for Out-of-State Renewables, KEMA and CEC, Staff (2009).** Assessed the potential for California laws, ordinance, regulations and standards to be impacted by out-of-state renewable facilities seeking RPS certification. Ms. Blair prepared the assessment of impacts associated with geothermal projects.
- **Review of the Trans Alta Blue Trail Wind Project for RPS Certification.** Assessed whether the Trans Alta Wind Project's application for Renewable Energy Credits met the Energy Commission's data adequacy requirements and would be consistent with applicable federal, California, and local laws, ordinances, regulations, and standards. The Blue Trail Wind Project is located in Alberta, Canada.
- **Analysis of Oil and Gas Well Stimulation Treatments in California (Senate Bill 4 EIR).** Under contract to the Department of Conservation, Division of Oil, Gas and Geothermal Resources, Ms. Blair is the Deputy Project Manager for preparation of an EIR as mandated by Senate Bill 4. The Programmatic EIR for this extremely controversial project will examine existing and future well stimulation treatments throughout the state and is being prepared on a highly accelerated schedule.
- **Least Tern Monitoring for the Montezuma Slough Tidal Wetlands Restoration Project.** Under contract to EcoBridges Environmental, Ms. Blair monitored the nesting success of three nesting colonies of the federally and State endangered California least tern. This effort involved counting and mapping the nest sites and tern chicks once a week for two years.
- **Endangered Species Monitoring for the Lomita Canal Vegetation Clearing Project.** Monitored the federally threatened California Red-legged frog and the State and federally endangered San Francisco giant garter snake during vegetation clearing activities along the Lomita Canal at the San Francisco International Airport. Involved identification of these species, relocation of California red-legged frogs, and re-direction of work in the event a San Francisco giant garter snake was spotted.



## Academic Background

M.P.A., Environmental Science and Policy, Columbia University, 2007  
B.A., English Literature and History, Tufts University, 2000

## Professional Experience

Ms. Capello is an environmental scientist with management and technical experience preparing Environmental Impact Reports and Statements in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Her project experience includes both linear and site-specific projects such as transmission lines, power plants, and infrastructure development and improvement projects. She prepares policy documents and research analysis and coordinates with specialty subcontractors, and she manages and provides management support in client interaction, public involvement, and overall document coordination and production. She has prepared the alternatives analysis for several renewable energy power plant siting cases and controversial transmission line projects that ultimately incorporated alternatives developed during the screening process.

### Aspen Environmental Group.....2007-present

- **California Energy Commission (CEC) (2007-present).** Under Aspen's CEC contract, Ms. Capello is an author and technical specialist in the environmental review of power plant applications. She researches and writes planning and siting reports, such as alternative analyses, in compliance with CEQA and NEPA. Each alternative site evaluation involves identifying potential locations that would meet most of the objectives stated by the applicant, but that could have less impact on the environment. Analyses have included the following proposed power plants and reports:
  - **Quail Brush Generation Project (2008-2010).** Co-authored the alternatives analysis in compliance with CEQA for this 100 MW peaking power plant located in San Diego, California. Alternatives including using distributed renewable energy to offset the peaking need.
  - **Rio Mesa Solar Electric Generating Facility (2011-2012).** Ms. Capello co-authored the alternative analysis section for the Rio Mesa Project, a 500 MW solar power tower project proposed near Blythe, California. The power plant would have been sited on private land and the generation interconnection line would have crossed public land to reach the Colorado River Substation. Ms. Capello participated in public workshops hosted by the CEC regarding the project. The Rio Mesa Project was terminated by the applicant in July of 2013.
  - **Ivanpah Solar Electric Generating System Project (ISEGS) (2008-2010).** Ms. Capello researched and contributed to the ISEGS Cumulative Scenario and cumulative analysis approach as well as the Alternatives section for the Staff Assessment/Environmental Impact Statement for this 400 MW solar power tower power plant located in the California desert near Primm, Nevada. She provided review of the proposed decision and additional CEQA requirements. The lead agency for this power plant under CEQA is the CEC, the power plant would be sited on federal land and the lead agency under NEPA is the United States Bureau of Land Management (BLM). Approximately 20 alternatives were considered in the Preliminary Staff Assessment, including alternative sites, renewable technologies, and the No Project Alternative.
  - **Blythe Solar Power Project (2009-2010).** Researched and designed the cumulative scenario and alternatives to the 1,000 MW solar trough power plant located near Blythe, California. Assisted in compiling and organizing the cumulative projects located on thousands of acres on BLM land



including researching the total renewable projects proposed in California on private and public lands and the likelihood of their being constructed.

- **Calico Solar Project (2008-2010).** Researched and contributed to the cumulative scenario and alternatives analysis in compliance with both CEQA and NEPA for Stirling engine solar thermal 850 MW projects, near Barstow, California. Ms. Capello participated in designing what became the approved project that avoided sensitive biological resources.
- **Imperial Valley Solar (2008-2010).** Researched and contributed to the cumulative scenario and alternatives analysis in compliance with both CEQA and NEPA for Stirling engine solar thermal 750 MW projects, near Imperial Valley, California. Ms. Capello participated in designing what became the approved project that avoided desert washes. Ms. Capello offered testimony regarding the analysis of a downstream effect, the upgrade required to the Seeley Water Treatment Plant for the Imperial Valley Project. Assists in the coordination on the level and scope of the alternatives analysis between the CEC (CEQA lead agency) and the BLM (NEPA lead agency), for this joint Staff Assessment/Environmental Impact Statement.
- **Genesis Solar Energy Project (2009-2010).** Researched and designed the cumulative scenario and alternatives to the 250 MW solar trough power plant located near Blythe, California. Assisted in compiling and organizing the cumulative projects located on thousands of acres on BLM land including researching the total renewable projects proposed in California on private and public lands and the likelihood of their being constructed. Assisted in designing a dry-cooling alternative that ultimately became the preferred alternative.
- **Palen Solar Power Project (2009-2010).** Researched and designed the cumulative scenario and alternatives to the 500 MW solar trough power plant located near Desert Center, California. Assisted in designing what ultimately became the preferred alternative for the Palen Solar Power Project which the goal of avoiding sensitive biological resources and the sand dune transport system.
- **Palmdale Hybrid Power Plant Project (2008-2010).** Researched and contributed to the alternatives analysis in compliance with CEQA for this 617 MW power plant located in Palmdale, California which includes an approximately 35-mile transmission interconnection. Assisted in designing the underground transmission alternative.
- **BC Hydro Study (2011-present).** Researched and wrote sections of the BC Hydro Study required by Senate Bill 2 (Simitian) regarding a comparison of the British Columbia environmental review process of run-of-river hydro projects and the environmental review of hydro-electricity projects in California. Interviewed relevant British Columbia agency representatives and other interested stakeholders. Reviewed relevant documents regarding environmental effects of run-of-river hydro projects.
- **Comparative Analysis of CEC/CPUC Documents/Process (2011-present).** Researched and wrote the Process Comparison Chapter and a review of each agency's CEQA analysis for alternatives of the white paper. Differences and similarities of the review process are highlighted. Researched each agency's permitting milestones for example projects. The results of the white paper will be presented at a workshop in early 2012.
- **Energy Aware Facility Siting Guide (2009-2010).** Authored chapters regarding laws and regulations shaping generation and transmission and expected new energy infrastructure development, focusing on renewable energy development. The expected audience is local county and city officials.



- **Environmental Screening Tool for Out-of-State Renewables (2009).** Identified the laws, ordinance, regulations and standards within California that could be impacted by out-of-state (OOS) renewable facilities seeking RPS certification. Ms. Capello researched and compared environmental regulations in California, Oregon, Nevada and Arizona. She prepared assessments of impacts associated with solar thermal, solar PV, wind, biomass, geothermal and small hydro.
- **SDG&E Sunrise Powerlink Transmission Line Project EIR/EIS, CPUC and BLM (2007-present).** Ms. Capello managed the environmental analysis for one of the project's connected actions and one of the project's indirect effects located in Baja California, handling data collection in an international context. She also contributed to the project's general analysis and assisted in writing responses to the more than 649 comments on the Draft EIR/EIS and Recirculated Draft EIR/Supplemental Draft EIS. Following the publication of the Final EIR/EIS in October 2008, Ms. Capello assisted with decision support, contributed to the CPUC CEQA Findings of Fact for the project and contributed to the Mitigation Monitoring, Compliance, and Reporting Plan including designing a system to consolidate and organize the over 200 applicant proposed measures and mitigation measures into one checklist. She prepared of a memorandum to interested parties documenting the post-approval modifications to the project and the compliance of the modifications with both CEQA and NEPA requirements. The highly controversial proposed project is a 150 mile 500 kV and 230 kV transmission line from Imperial County near El Centro to the City of San Diego.
- **Desert Harvest Solar Project EIS (CEQA-equivalent document), Bureau of Land Management and Riverside County (2011-present).** Ms. Capello authored the scoping report for the enXco Desert Harvest Solar Project located on 1,200 acres of BLM-administered land in the Chuckwalla Valley of Riverside County. Ms. Capello authored the alternatives sections including alternative solar lay-outs and alternative gen-tie alignments as well as alternatives considered but eliminated from detailed consideration. The document is being prepared to a CEQA-equivalent standard, and CDFG and Riverside County intend to use the document in their own permitting processes.
- **Devers-Palo Verde No. 2 Transmission Line Project EIR/EIS Addendum, CPUC and BLM (2008-present).** Researcher and writer for the Addendum to the Final EIR for the Devers-Palo Verde No. 2 Transmission Line Project including research regarding the renewable projects located in the region between Blythe and Desert Center, California. Ms. Capello assisted in the preparation of a memorandum to interested parties documenting the post-approval modifications to the project and the compliance of the modifications with both CEQA and NEPA requirements and has written Determination of NEPA adequacy for proposed modifications to the project.
- **Alta East Wind Project, Kern County (2011-present).** Ms. Capello authored the cumulative scenario section as well as the Growth Inducting Impacts, Irreversible & Irrecoverable Impacts, Unavoidable Adverse Impacts of the 300 MW wind power project located within the Tehachapi Wind Resources Area. She authored the Comparison of Alternatives Section and reviewed multiple technical sections as part of the management team.
- **Alta-Oak Creek Mojave Project Supplement, Kern County (2011).** Ms. Capello authored responses to comments for the Final Supplemental EIR for a fast-tracked expansion of the Alta-Oak Creek Mojave Project, the largest operational wind farm in the United States. The Supplemental EIR covers an expansion of the project onto 8,000 acres of private land within the Tehachapi Wind Resource area of Kern County. The Final Supplemental EIR was completed within weeks of the close of the comment period for this fast-track project.
- **SunPower California Valley Solar Ranch EIR, San Luis Obispo County (2009-present).** Ms. Capello authored the alternatives section and cumulative scenario for the 250 MW solar photovoltaic project located in the Carrizo Plains in San Luis Obispo County. She acted as Deputy Project Manager



during the final stages of preparation of the Draft EIR. Ms. Capello assisted managing a team of nearly 15 engineering and environmental authors throughout the environmental review process. Served as the primary back-up for the project manager and was the point of contact for the County in the project manager's absence. Ms. Capello managed plan review for the monitoring of project construction between August 2011 and December 2013, including drafting two CEQA Addenda to respond to need for additional water during construction.

- **Arizona Utilities CO2 Storage Pilot, CEC and University of California (2007-2008).** Contributed to the preparation of Department of Energy NEPA environmental questionnaire to comply with Category Exclusion requirements for the proposed CO2 sequestration pilot test site near Joseph City, Arizona.
- **Northern California CO2 Storage Pilot, Confidential Client (2008-present).** Contributed to the preparation of Department of Energy NEPA environmental questionnaire to comply with Category Exclusion requirements and preparation of the Initial Statement under CEQA for the proposed CO2 sequestration pilot test site in Montezuma Hills, California.
- **Sonoma-Marin Area Rail Transit, SMART (2009-present).** Updated and wrote the cumulative scenario for the SMART passenger rail project NEPA environmental review based on a compilation of projects gathered from local planning agency representatives. The SMART project is located along an approximately 70-mile existing rail corridor extending from Cloverdale in Sonoma County, California, to a ferry terminal located in Larkspur, Marin County, California.
- **Inyo County Renewable Energy General Plan Amendment and Program EIR.** Project Manager for Aspen's contract with Helix. Aspen is working collaboratively with the County by preparing an Opportunities and Constraints Technical Study to determine Renewable Energy Development Areas (REDAs) suitable for siting of renewable energy in the County. The OCTS is intended to inform the County in developing its renewable energy policy updates for its General Plan Amendment. This process has been funded by the CEC Renewable Energy Planning Grant Program. Inyo County was one of five counties awarded a grant. Inyo County is focusing on utility-scale energy for export.
- **San Luis Obispo County Renewable Energy Streamlining Program and EIR.** Deputy Project Manager for Aspen (under contract to PMC). Aspen is working collaboratively with PMC and the County by preparing an OCTS to determine REDAs suitable for siting of small-scale renewable energy in the County. The OCTS is intended to inform the County in developing its renewable energy policy updates, its Renewable Energy Combining Designation for its Open Space Element, and development and adoption of its Renewable Energy Ordinance. This process has been funded by the CEC Renewable Energy Planning Grant Program. SLO County was one of five counties awarded a grant.
- **San Bernardino County Renewable Energy General Plan Element and Program EIR.** Deputy Project Manager for Aspen (under contract to PMC). Aspen is working collaboratively with PMC and the County by providing technical expertise regarding renewable energy and transmission for work pertaining to the General Plan Element. Aspen will provide renewable energy best case studies, use GIS to identify sensitive natural communities, species, and resources that must be protected in conjunction with geographical areas providing the environmental resources (sun, wind, geological formation, etc.) necessary for renewable energy electrical generation, and will provide support for the Program EIR. This process has been funded by the CEC Renewable Energy Planning Grant Program. SLO County was one of five counties awarded a grant.

## Gregor Michel Cailliet

Moss Landing Marine Laboratories  
8272 Moss Landing Road, Moss Landing, California 95039  
(831) 771-4432; FAX (831) 632-4403;  
Email [CAILLIET@MLML.CALSTATE.EDU](mailto:CAILLIET@MLML.CALSTATE.EDU)

### Education

Ph.D., Biology, University of California, Santa Barbara, 1972  
B.A., Biology, University of California, Santa Barbara, 1966

### Positions

- Professor Emeritus, MLML and CSU Fresno, 2009 to present.
- Professor, Moss Landing Marine Laboratories and California State University, Fresno, 1972-2009.
- Program Director, Pacific Shark Research Center, October, 2001-present.
- Consultant, Regional Water Quality Control Board, California Energy Commission, Santa Cruz and Soquel Water Districts, and Aspen Environmental Group, Power Plant and Desalination Plant Entrainment (316b studies), 1997 to present.

### Major Professional & Research Interests

- Ichthyology, population ecology, estuarine ecology, deep-sea ecology, and fishery biology.
- Ecology and life history of marine fishes: age, growth, reproduction, demography, dispersal & feeding habits of marine deep-sea and chondrichthyan fishes.

### Courses Taught and Graduate Students Advised at MLML

- Courses: Ichthyology, Marine Ecology, Population Biology, Marine Fisheries, various Graduate Seminars
- Graduate Students: In total, 122 have finished their M.S. degrees, and I have been on approximately 200 additional M.S. and 12 Ph.D. committees.

### General Once-Through Cooling Impact Study Qualification Summary

Experienced for 20 years working as a consultant on Technical Work Groups for both the Regional Water Quality Control Board in San Luis Obispo and the California Energy Commission (via Aspen Environmental Group), on the Diablo Canyon, Moss Landing, Morro Bay, Huntington Beach, and El Segundo Power Plants and their 316(b) studies, reports, and evaluations. Work covered everything from designing the sampling strategy to reviewing the final report and assessing the level of impact, mainly on fish and crab species entrained.

### Summary of Recent Relevant Publications

#### Most relevant publication:

- Steinbeck, J., J. Hedgepeth, P. Raimondi, G. Cailliet, and D. Mayer. 2007. Assessing Power Plant Cooling Water Intake System Entrainment Impacts. Consultant Report, California Energy Commission, CEC-700-2007-010: 105 pages plus A-1-11.

#### Recent, representative, and relevant publications (most recent listed first):

- Ainsley, S.M., D.A. Ebert, L.J. Natanson, and G.M. Cailliet. 2014. A comparison of age and growth of the Bering Skate, *Bathyraja interrupta* (Gill and Townsend, 1897), from two Alaskan large marine ecosystems. Fisheries Research 154: 17-25.

- Burgess, G. H., B. D. Bruce, **G. M. Cailliet**, K. J. Goldman, R. D. Grubbs, C. G. Lowe, M. Aaron MacNeil, H. F. Mollet, K. C. Weng, and J.B. O'Sullivan. 2015. A re-evaluation of the size of the White Shark () population off California, USA PLOS OMNE ([www.plosone.org](http://www.plosone.org)) 9 (6): 1-11.
- **Cailliet, G.M.** and D.A. Ebert. 2014 The Biodiversity and Life Histories of Chondrichthyan Fishes, Chapter 1, pages 1-27, *In: Immunobiology of the Shark*, S.L. Smith, R.B. Sim, and .F. Flajnik, Editors, Taylor & Francis Press, ISBN-13L 9781466585743 & ISBN-10L 1466595744, 288 pages.
- Cotton, C.F., A.H. Andrews, **G.M. Cailliet**, R. Dean Grubbs, S.B. Irvine, and J.A. Musick. 2013. Assessment of radiometric dating for age validation of deep-water dogfish (Order: Squaliformes) finspines. Fisheries Research. <http://dx.doi.org/10.1016/j.fishres.2013.10.014>, 7 pages.
- Ainsley, S.M., D.A. Ebert, L.J. Natanson, and **G.M. Cailliet**. 2014. A comparison of age and growth of the Bering Skate, *Bathyrāja interrupta* (Gill and Townsend, 1897), from two Alaskan large marine ecosystems. Fisheries Research 154: 17-25.
- James, K.C., D.A. Ebert, L.J. Natanson, and **G.M. Cailliet**. 2014. Age and growth characteristics of the Starry Skate, *ERaja stellulata*, with a description of life history and habitat trends of the central California, U.S.A., skate assemblage. Environ. Biol. Fish. 97: 435-448.
- Perez-Brazen, C.R., D.A. & **G.M. Cailliet**. 2014. Reproduction of the sandpaper skate, *Bathyrāja kincaidii* (Garman, 1908) in the eastern North Pacific. Environ. Biol. Fish DOI 10.1007/s10641-014-0220-4, 6 pages.
- Andrews, A.H., R.T. Leaf, L. Rogers-Bennett, M. Neuman, H. Hawk, and **G.M. Cailliet**. 2013. Bomb radiocarbon dating of the endangered white abalone (*Haloitís sorenseni*): investigations of age, growth and lifespan. Marine and Freshwater Research, <http://dx.doi.org/10.1071/MF13007>, 11 pages.
- Barnett, L.A.K., M. V. Winton, S.M. Ainsley, **G.M. Cailliet**, & D.A. Ebert. 2013. Comparative demography of skates: Life-history correlates of productivity and implications for management. PLOS ONE, 8 (5): 1-13 ([www.plosone.org](http://www.plosone.org); e65000)
- Cotton, C.F., A.H. Andrews, **G.M. Cailliet**, R. Dean Grubbs, S.B. Irvine, and J.A. Musick. 2013. Assessment of radiometric dating for age validation of deep-water dogfish (Order: Squaliformes) finspines. Fisheries Research. <http://dx.doi.org/10.1016/j.fishres.2013.10.014>, 7 pages.
- Winton, M.V., L.J. Natanson, J. Kneebone, **G.M. Cailliet** and D.A. Ebert. 2013. Life history of *Bathyrāja trachura* from the eastern Bering Sea, with evidence of latitudinal variation in a deep-sea skate species. J. Marine Biological Assoc. of the United Kingdom, doi: 10.1017/S0025315413001525, 12 pages.
- Andrews, A.H., J.R. Ashford, C. Brooks, K. Krusic-Golub, G. Duhamel, M. Belchier, C.C. Lundstrom, and **G.M. Cailliet**. 2012. Lead-radium dating provides a framework for coordinating age estimation of Patagonian toothfish (*Dissostichus eliqinoides*) between fishing areas. Marine and Fishwater Research 62: 7811-789.
- Ashford, J., M. Dlnniman, C. Brooks, A.H. Andrews, E. Hofmann, **G.Cailliet**, C. Jones, & N. Rmanna. 2012. Does large-scale ocean circulation structure life history connectivity in Antarctic tooth (*Dissostichus mawsoni*)? Can. J. Fish. Aquat. Sci. 69: 1-17 (doi:10.1139/12012-111)
- Barnett, L.A.K., Ebert, D.A., & **Cailliet, G.M.** 2012. Evidence of stability in a chondrichthyan population: case study of the spotted ratfish, *Hydrolagus colliei* (Chondrichthyes: Chimaeridae). Journal of Fish Biology, 80: 1765-1788.
- Boyle, M.D., Ebert, D.A., & **Cailliet, G.M.** 2012. Stable isotope analysis of a deep-sea benthic fish assemblage: evidence of an isotopically enriched benthic food web. Journal of Fish Biology, 80: 1485-1507.

- Brown, S.C., Bizzarro, J.J., **Cailliet, G.M.**, & Ebert, D.A. 2012. Breaking with tradition: redefining measures for diet description with a case study of the Aleutian Skate (*Bathyrāja aleutica* Gilbert, 1896). *Environmental Biology Fishes*, 95: 3-20.
- Devine, J.A., L. Watling, **G. Cailliet**, J. Drazen, P. Duran Múñez, A.M. Orlov, and J. Bezaury. 2012. Evaluation of potential sustainability of deep-sea fisheries for grenadiers (Macrouridae). ISSN 0032-9452 *Journal of Ichthyology* 12 (10): 709-721.
- Goldman, K.J., **G. M. Cailliet**, A. H. Andrews, and L. J. Natanson. 2012. Assessing the Age and Growth of Chondrichthyan Fishes. Chapter 14, pages 423-452 *In: Carrier, J., J.A. Musick, and M. R. Heithaus (Editors), Biology of Sharks and Their Relatives, Second Edition. CRC Press LLC, Boca Raton, Florida.*
- Lundsten, L. S.B. Johnson, **G.M. Cailliet**, A.P. DeVogelaere, \* D.A. Clague. 2012. Morphological, molecular, and *in situ* behavioral observations of the rare deep-sea anglerfish *Chaunacops coloratus* (Garman, 1899), order Lophiiformes, in the eastern North Pacific. *Deep-Sea Research* 1, 68: 46-53.
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# Michael Clayton & Associates

*Visual Impact Assessment - Energy and Utility Planning - Environmental Impact Analysis*

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7645 SW Whitford Drive, Portland, OR 97223  
Tel: (503) 244-9454 Fax: (503) 244-9455 E-mail: mc.mca@comcast.net

Resume for

## Michael Clayton

VISUAL RESOURCES SPECIALIST

Michael Clayton has 30 years of experience in the fields of Visual Impact Assessment, Energy and Utility Planning, and Environmental Impact Analysis. Over the course of his experience, Mr. Clayton has conducted more than 200 visual impact assessments using a variety of visual assessment methodologies for application to infrastructure and energy and resource development projects on both federal and non-federal public lands and private lands. Michael has extensive experience with: 1) the U.S. Bureau of Land Management's (BLM's) Visual Resource Management (VRM) System including conducting Visual Resource Inventories and conducting Contrast Rating Analyses; 2) the U.S. Forest Service's (USFS's) Visual Management System; 3) the USFS's newer Scenery Management System; and 4) the California Energy Commission's (CEC's) Visual Resources Methodology, for which he provided development assistance. Michael developed and has implemented the Visual Sensitivity – Visual Change (VS-VC) methodology for use on non-BLM and non-USFS public lands and private lands. Mr. Clayton also provides expert witness testimony with regard to Visual Resources Analysis on behalf of the State of California.

Michael Clayton has conducted visual resource impact assessments in varied landscapes for a variety of project types such as combined cycle power plants, wastewater treatment plants, wind power projects, water conveyance and storage facilities, electric transmission lines and substations, oil and gas storage and transportation facilities, solar energy projects, hydroelectric projects, pipelines, roads, telecommunications projects, and commercial and residential development projects. Mr. Clayton has considerable experience conducting visual resources analyses and third-party reviews of projects throughout California including the California Coastal Zone, as listed below under Project Experience. Mr. Clayton has been recognized numerous times for the quality of his work and contributions to overall team performance, as follows.

In 2001, the CEC presented Michael Clayton with an ***Outstanding Performance Award*** for his preparation of 12 power plant project Visual Resources Staff Assessments as a consultant to the CEC, including two power plants in the coastal zone – the Morro Bay Power Plant Project and the Potrero Power Plant Project. In 2004, Mr. Clayton was presented with an ***Outstanding Environmental Analysis Award*** by the Association of Environmental Professionals (AEP) for the Visual Resources analysis he prepared for the Jefferson-Martin 230 kV Transmission Line Project EIR. In 2009, Michael was presented with a ***Merit Award*** by the AEP for the Visual Resources analysis he prepared for the Sunrise Powerlink 500 kV Transmission Line Project EIR/EIS. In 2010, Michael was presented with an ***Outstanding Environmental Analysis Award*** by the AEP for the Visual Resources analysis he prepared for the Panoche Valley Solar Farm EIR. In 2013, Michael Clayton received an ***Outstanding Environmental Analysis Award*** from the AEP for the Visual Resources analysis he prepared for the Ocotillo Wind Energy Facility EIR/EIS.

### VISUAL ANALYSIS PROJECT EXPERIENCE

For the following representative projects, Michael Clayton was the sole author and visual analyst. Each study included a combination of information review and verification, agency consultation, field reconnaissance and analysis, establishment of key viewpoints, data mapping, photography, data evaluation, and (in most cases)

## VISUAL ANALYSIS PROJECT EXPERIENCE (cont'd)

the preparation of visual simulations. His responsibilities also included the development of alternative routing options and structured locations as well as the development of effective mitigation measures. For some projects involving federal lands managed by the BLM, Mr. Clayton also prepared Visual Resource Inventories using the BLM's VRM System methodology. Some of the project examples are for third-party reviews that Michael conducted, of studies and documents prepared by others.

### Representative California Coastal Zone Project Experience

- **Morro Bay Power Plant Project Visual Analysis.** San Luis Obispo County, CA. Michael Clayton prepared a California Energy Commission (CEC) Visual Resources Staff Assessment for the Morro Bay Power Plant Project in San Luis Obispo County. The primary visual resources issues of concern included the potential for adverse visual changes resulting from construction and operation of the generation facilities. The approach used in this analysis involved a combination of field reconnaissance, photography, visual simulations, and data evaluation. The analysis included assessments of overall visual sensitivity and visual change as experienced from key viewpoints in the project vicinity including Morro Bay, Morro Bay State Park, beach views, offshore views, and nearby residential and roadway views. Additional simulations were prepared to evaluate a variety of dry and hybrid cooling options, all of which exhibited considerable industrial character.
- **Potrero Power Plant Visual Analysis.** San Francisco County, CA. Michael Clayton was retained by the California Energy Commission to prepare a CEC Staff Assessment Visual Analysis of the Potrero Power Plant Project. The project site is located along central San Francisco Bay in San Francisco. The primary visual issues associated with the project included the potential for adverse visual changes resulting from construction and operation of the generation facilities. Of particular concern was the potential impact on views from adjacent and nearby recreation trails, segments of the Bay Trail, and residential areas, as well as offshore Bay views. The approach used in this analysis involved a combination of field reconnaissance, photography, and data evaluation. The analysis included the determination of sensitive viewsheds through the identification of key viewpoints and an assessment of the degree to which sensitive views would be modified.
- **Hercules Wastewater Treatment Plant EIR Visual Assessment.** Contra Costa County, CA. An Environmental Impact Report was prepared for the removal of an existing wastewater treatment plant and construction of a new 3.4 mgd wastewater treatment plan and corporation yard for the City of Hercules on San Pablo Bay. The major concerns addressed in the EIR were potential visual impacts, the potential for liquefaction of bay mud, location in an area subject to flooding, increase in siltation or erosion at the effluent outfall in San Pablo Bay, impacts to water quality, and potential degradation of wetlands. Michael Clayton prepared an in-depth assessment of visual impacts on sensitive viewing locations, both onshore and offshore. Visual simulations were prepared for three key viewpoints to accompany a visual contrast analysis of the storage tanks, secondary effluent chlorine contact tank, effluent filter structures, sludge disposal facility, and other project components.
- **South Bay Power Plant Project Visual Analysis.** San Diego County, CA. Michael Clayton conducted a visual analysis of the South Bay Power Plant Replacement Project as a component of an In-Area All-Source Generation alternative to the Sunrise Powerlink Transmission Project. The visual analysis considered the visual impact of replacing the existing facility with lower-profile and partially enclosed structures as viewed from a number of sensitive viewing locations in Chula Vista and along the Silver Strand (SR 75), which is a state-designated scenic highway. The approach used in this analysis involved a combination of field reconnaissance, photography, visual simulations, and data evaluation. The analysis included assessments of overall visual sensitivity and visual change as experienced from key viewpoints in the project vicinity.

### **Representative California Coastal Zone Project Experience (cont'd)**

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- **Galilee Harbor Environmental Impact Report Visual Analysis.** City of Sausalito, CA. Michael Clayton prepared an Environmental Impact Report and Visual Analysis of the development of a marine service harbor on Richardson Bay (of San Francisco Bay). The site consisted of both dry and submerged lands on Richardson Bay. The project consisted of onshore and offshore facilities including a harbor center, marine service center, public assembly area, boatyard, and marine berths. The project was highly controversial and subject to the permit authority and jurisdiction of several local, state, and federal agencies such as the San Francisco Bay Conservation and Development Commission, State Lands Commission, and U.S. Army Corps of Engineers. The major concerns addressed in the EIR were visual resources impacts, the conversion of intertidal habitat to shallow subtidal habitat, dredging and dredged material disposal, water contamination from non-point runoff, and land use inconsistencies with the public trust doctrine and local plans.
- **Pacific Pipeline Project Visual Resources Impact Assessment.** Santa Barbara and Ventura Counties, CA. Michael Clayton prepared the Visual Resources section for an EIR/EIS for an oil pipeline project in Southern California. The visual analysis evaluated approximately 240 miles of alternative pipeline routes in Santa Barbara, Ventura, Los Angeles, and Kern Counties. The analysis evaluated modifications to the Gaviota coastal pumping and storage facilities, pipeline installation along Pacific Coast Highway, pipeline right of ways, land scarring, pump stations, pressure relief/reduction stations, scraper traps, and aboveground markers. Several photo-simulations were prepared as part of the visual analysis.

### **Representative Power Plant Project Experience**

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- **Blythe I Power Plant Project CEC Visual Resources Staff Assessment.** Blythe, CA.
- **Mountain View Power Plant Project CEC Visual Resources Staff Assessment.** San Bernardino County, CA.
- **Palomar Energy Project CEC Visual Resources Staff Assessment.** Escondido, CA.
- **Pastoria Power Plant Project Visual Analysis.** Kern County, CA.
- **East Altamont Energy Center CEC Visual Resources Staff Assessment.** Alameda County, CA.
- **Los Esteros Critical Energy Facility CEC Visual Resources Staff Assessment.** San Jose, CA.
- **SMUD Cosumnes Power Plant Project CEC Visual Resources Staff Assessment.** Sacramento County, CA

### **Representative Wind Energy Project Experience**

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- **Mesa Wind Energy Repower Project NEPA EA VRM Visual Analysis.** Riverside County, CA
- **Ocotillo Wind Energy Facility EIS/EIR VRM Visual Analysis.** Imperial County, CA.
- **La Rumorosa Wind Development Project Presidential Permit Visual Analysis.** U.S. and Mexico.
- **Third-Party VRM review of the Tule Wind Project EIS Visual Resources Section.** San Diego County, CA.

### **Representative Solar Project Experience**

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- **Desert Harvest Solar Project EIR/EIS Visual Resources Analysis.** Riverside County, CA.
- **Third-Party Visual Simulation Verification Study for the Palen Solar Electric Generating System (PSEGS) Power Tower SEIS.** Riverside County, CA.
- **Third-Party Review of the Desert Sunlight EIS Visual Resources Section, Including the Colorado River Substation.** Riverside County, CA.
- **Solar Millennium Palen Solar Power Project CEC Visual Resources Staff Assessment.** Riverside County, CA.

### Representative Solar Project Experience (cont'd)

- **Ridgecrest Solar Power Project CEC Visual Resources Staff Assessment.** Kern County, CA.
- **Panoche Valley Solar Farm Project EIR Visual Analysis.** San Benito County, CA.

### Representative Transmission Line Project Experience

- **Devers-Palo Verde 2 500 kV Transmission Line Project EIR/EIS Visual Analysis.** San Bernardino National Forest, Riverside and San Bernardino counties in CA; Arizona.
- **Devers-Valley 2 500 kV Transmission Line Project EIR/EIS Visual Analysis.** Riverside County, CA
- **El Casco Transmission Line Project EIR and Supplemental EIR Visual Analyses.** Riverside and San Bernardino Counties, CA.
- **SCE West of Devers Transmission Project EIS/EIR Visual Analysis.** Riverside and San Bernardino Counties.
- **Sunrise Powerlink 500 kV/230 kV Transmission Line Project EIS/EIR Visual Analysis.** Cleveland National Forest and Imperial and San Diego counties, CA.
- **Path 15 500 kV Transmission Line Project SEIR Visual Analysis.** Merced and Fresno counties, CA.
- **Jefferson-Martin 230 kV Transmission Line Project EIR Visual Analysis.** San Francisco and San Mateo counties, CA.
- **Northeast San Jose Electric Transmission Reinforcement Project EIR Visual Analysis.** Alameda and Santa Clara counties, CA.
- **Tri-Valley 230 kV 2002 Transmission Capacity Increase Project EIR Visual Analysis.** Alameda County, CA.
- **Alturas 345 kV Transmission Line Project EIR/EIS Visual Analysis.** Modoc and Lassen National Forests, Modoc and Lassen counties in CA; NV.

### Examples of Other Energy and Infrastructure Project Experience

- **Emidio Lateral Pipeline Project SEIR/SEIS Visual Analysis.** Mojave, Los Angeles County, CA.
- **Marinship Water Storage Tank Relocation Project Visual Impact Assessment.** Sausalito, CA.
- **Combined Array for Research in Millimeter-Wave Astronomy (CARMA) Project EIS/EIR Scenery Management System Visual Analysis.** Inyo National Forest and White Mountains, Inyo County, CA.
- **Level 3 Communications Project Statewide Initial Study Visual Resources Analysis.** California Statewide.
- **Yellowstone Pipeline Project EIS Visual Resources Specialist Report.** Lolo and Coeur D'Alene National Forests, Montana and Idaho.
- **Indian Springs Telecom MND Visual Analysis.** Shasta County, CA.
- **North Umpqua Hydroelectric Project Aesthetics Management Plan Implementation Studies.** Umpqua National Forest, Oregon.

### **EDUCATION**

M.A., Asia Pacific Environmental Affairs, University of San Francisco

M.S., Environmental Management, University of San Francisco

B.A., Biology, University of California at Los Angeles



## Academic Background

BS, Urban Planning and Design, University of Minnesota, 1995

Board Certified Environmental Planner (CEP) #12040973

U.S. Council of Engineering & Scientific Specialty Boards/ABCEP

## Professional Experience

Mr. Debauche is an environmental planner with 17 years of experience specializing in the completion of CEQA and NEPA documentation for a variety of large-scale infrastructure and energy development projects. His areas of technical expertise include the evaluation of Transportation/Traffic and Noise. The following outlines a sampling of his recent and relevant project experience with respect to conducting CEQA analysis for coastal and large infrastructure projects, as well as other CEQA and NEPA technical analyses for traffic and transportation.

### Aspen Environmental Group.....2001-present

- **Monterey Bay Aquarium Research Institute MARS Underwater Cable Observatory, San Francisco County.** Prepared the Socioeconomics/Environmental Justice analysis for the installation and operation of the Monterey Accelerated Research System (MARS) Cabled Observatory within the Pacific Ocean that provides a continuous monitoring presence in the Monterey Bay National Marine Sanctuary (MBNMS) as well as serving as the test bed for a state-of-the-art regional ocean observatory. Traversing National oceanic and Atmospheric Administration (NOAA) jurisdictional coastal resources, the project required extensive Environmental Justice analysis evaluating the potential for any direct or indirect disproportionate impacts to fisheries workers.
- **Carlsbad Energy Center Project, San Diego County, CA.** Prepared the Transportation/Traffic and Alternatives California Energy Commission CEQA-compliant Staff Assessments for the demolition and reconstruction of the existing Carlsbad Power Plant to a 558 MW gross combined-cycle generating facility. The project required a detailed analysis pertaining to potential aviation safety impacts to nearby Palomar Airport air traffic, cumulative impacts from the adjacent I-5 widening project, and thorough alternative siting evaluation based on extensive City of Carlsbad and intervener opposition during testimony.
- **Avila Point Project, San Luis Obispo County, CA.** Under contract to San Luis Obispo County, Mr. Debauche is evaluating the transportation and traffic impacts under CEQA for the remediation of an exhausted Chevron oil tank farm, rezoning the property from industrial to recreation, and construction of a resort to include a restaurant, spa, shops, cottages, hotel rooms and related facilities.
- **Port of Long Beach Eagle Rock Terminal Project EIS/EIR, Los Angeles County, CA.** Under contract to the Port of Long Beach (in cooperation with the Army Corpse of Engineers), prepared the Transportation/Traffic analyses for the proposed construction and operation of sand, gravel and granite aggregate receiving, storage and distribution terminal to be located at the Port of Long Beach.
- **Port of Long Beach Liquid Natural Gas (LNG) Import Project EIS/EIR, Los Angeles County, CA.** Under contract to the City of Long Beach, Mr. Debauche reviewed the Army Corps of Engineers prepared Transportation/Traffic and Noise analyses for the proposed construction and operation of this onshore LNG facility to be located at the Port of Long Beach.



- **Redondo Beach Energy Project, Los Angeles County, CA.** Mr. Debauche is currently preparing the California Energy Commission CEQA-compliant Staff Assessment evaluating Alternatives to the proposed project, which includes a proposed natural gas fired, combined-cycle, air-cooled electrical generating facility with a net generating capacity of 496 MW, which will replace, and be constructed on the site of the existing AES Redondo Beach Generating Station. The existing Redondo Beach Generating Station Units 1 through 8 and auxiliary boiler no. 17 will be demolished as part of the project. (Units 1, 2, 3, and 4 are currently retired. Units 5, 6, 7, and 8 are currently in use). As a controversial coastal project within a pristine California city, complex Alternatives analysis is being prepared.
- **Huntington Beach Energy Project, Orange County, CA.** Mr. Debauche is currently preparing the California Energy Commission CEQA-compliant Staff Assessment evaluating Alternatives to the proposed project, which includes a proposed natural gas fired, combined-cycle, air-cooled electrical generating facility with a net generating capacity of 939 MW, which will replace, and be constructed on the site of the existing AES Huntington Beach Generating Station. As a controversial coastal project within a pristine California city, complex Alternatives analysis is being prepared.
- **Coastal Plant Study, Coastal Counties of California.** Technical analyst on the California Energy Commission's Coastal Plant Study, which considered the re-tooling, or expansion of California's 25 coastal power plants. Issues of importance included environmental justice and impacts on local economies and housing markets.
- **Hydrogen Energy California Power Plant Project, Kern County, CA.** The newly proposed HECA project includes a 400-megawatt (MW) power plant that would produce hydrogen to fuel a combustion turbine. The gasification component of the plant would capture carbon dioxide, which would be transported and used for enhanced oil recovery (EOR) and sequestration in the adjacent Elk Hills Oil Field. The project would also capture and harness the remaining hydrogen to produce approximately 1 million tons of fertilizer for domestic use.
- **Santa Margarita Quarry Expansion Project, San Luis Obispo County, CA.** Expanding the existing surface mine (Santa Margarita Quarry) by adding an additional 41 acres to the existing entitled 85-acre mining footprint and buffer area. The project would result in the disturbance of approximately 126 acres on four parcels, totaling 369 acres in size. As proposed, the estimated duration of mining activities would be approximately 59 years with an additional 5 years to complete the proposed reclamation plan.
- **Littlerock Reservoir Sediment Removal Project, Los Angeles County, CA.** Construction of a grade control structure upstream of the reservoir impoundment and removal/transport of 1,000,000 cubic yards of sediment to exhausted mining pits within the City of Palmdale. The Reservoir is controlled by Palmdale Water District and located on USFS lands.
- **District Cooling Plant Project, Los Angeles County, CA.** For the LADWP, Mr. Debauche was the traffic analyst for this pipeline to provide a centralized system for producing chilled water for use by area users, which are generally large commercial, governmental, industrial and institutional buildings who generate their own chilled water utilizing individual chiller plants for space cooling and air-conditioning.
- **West of Devers Transmission Project, Riverside and San Bernardino Counties, CA.** Under contract to the CPUC, analyzing SCE's proposed project to remove and replace approximately 48 miles of existing 220 kV transmission lines with new double-circuit 220 kV transmission lines, between the existing Devers Substation (near Palm Springs), Vista Substation (in Grand Terrace), and San Bernardino Substation.



- **Alta East Wind Project, Kern County, CA.** The commercial production of up to 360 MW of electricity from up to 120 wind turbine generators, their ancillary facilities, and approximately 20 miles of supporting transmission line infrastructure located on both Kern County and BLM lands.
- **Taylor Yard Water Recycling Project, Los Angeles County, CA.** Prepared the noise analysis of this recycled water pipeline to provide recycled water produced by the Los Angeles–Glendale Water Reclamation Plant to the Taylor Yard distribution facility.
- **Mulholland Pumping Station and Lower Hollywood Reservoir Outlet Chlorination Station Project, Los Angeles County, CA.** For the LADWP, Mr. Debauche was the traffic analyst for the replacement of the existing historic pumping/chlorination station building as well as the existing water quality laboratory buildings with a new single structure pumping/chlorination station within the LADWP's Hollywood Reservoir Complex located in the Hollywood Hills.
- **California River Parkways Trailhead, Ventura County, CA.** Under Aspen's existing environmental services contract with the Ventura County Watershed Protection District (VCWPD), Mr. Debauche has conducted environmental planning and review under CEQA. This project included analyzing the transportation and access impacts of a new point of entry to the Ventura County-maintained Ojai Valley Trail (OVT) and the City of Ventura-maintained Ventura River Trail (VRT).
- **Sespe Creek Levee Improvement Project, Ventura County, CA.** For the VCWPD, this project provided improvements along the SC-2 Levee, a 1.1-mile section of the Sespe Creek flood control system.
- **Pyramid Lake Repairs and Improvements Project, Los Angeles County, CA.** For the California Department of Water Resources (DWR), Mr. Debauche analyzed the transportation and access impacts of repairs and improvements at various recreational sites at Pyramid Lake.
- **Piru Creek Stabilization and Restoration Project, Los Angeles County, CA.** Erosion damage repairs at a series of three locations downstream of Pyramid Dam and seismically retrofit the Pyramid Dam access bridge that crosses Piru Creek.
- **Los Angeles County Baldwin Hills Oil Field Community Standards District EIR Review and Ordinance Preparation, Culver City, CA.** Served as the City of Culver City Technical Specialist reviewing the Los Angeles County Baldwin Hills Oils Field Community Standards District EIR Noise analysis and policy mechanisms which guided the expansion and future operations of the existing Baldwin Hills oil field. Upon completion of environmental review, Mr. Debauche then prepared the Noise section of the newly enacted City of Culver City Community Standards District overlay zone restricting noise generation by the Baldwin Hills Oil Field on the residents of Culver City.
- **CleanTech Hazardous Waste Treatment Facility Permit, Irwindale, CA.** Mr. Debauche evaluated the collection and testing of used oil from offsite generators (gas stations, oil changers, auto repair shops, etc.), which is then filtered and treated by blending, gravity separation, and by adding a chemical reagent if necessary, to remove metals and enhance dehydration, to meet the recycled oil standards. The Project's proposed maximum monthly used oil throughput is 1,500,000 gallons, or approximately 5,625 tons per month.
- **Donnell Basin Flood Control Project, San Bernardino County, CA.** For the County of San Bernardino, Department of Public Works, this project included the construction and maintenance of a series of improvements to the existing Donnell Basin in order to increase its capacity and provide flood hazard protection to downstream areas. The project also includes improvements to the existing road crossing at Split Rock Avenue, east of the basin, in order to accommodate increased capacity of the basin.



- **Lake Gregory Dam Rehabilitation Project, San Bernardino County, CA.** Dam stabilization including the removal of existing rock on the downstream slope, removal of foundation material at the base of the dam, and construction of a new 25-foot average thickness earthen buttress extending beyond the current toe of the embankment, installation of a drainage system to pick up water moving through the liquefaction zone, and placement of new slope protection.
- **Thousand Palms Flood Control Project, Riverside County, CA.** Flood control project, which will create 20-miles of flood control structures and drainage systems protecting newly developed hillside residential development within the Coachella Valley Municipal Water District.
- **Rimforest Storm Drain Project, San Bernardino County, CA.** For the County of San Bernardino, Department of Public Works, this project included the construction and maintenance of an over 10-mile series of flood control facilities in the community of Rimforest, to address historic erosion and landslide problems that have led to significant property loss. The new facilities divert runoff from its current flow-path into new channels and pipeline into Little Bear Creek
- **Coolwater Lugo Transmission Project, Riverside and San Bernardino Counties, CA.** Under contract to the California Public Utilities Commission (CPUC), Mr. Debauche is analyzing noise impacts of Southern California Edison's (SCE) proposed 75-miles of new 500 kilovolt (kV) transmission line, construction of the new Desert View Substation southeast of Apple Valley, upgrades to the Coolwater Substation and Lugo Substation, and construction of approximately 35 miles of new telecommunications cable on new and existing poles.
- **Tehachapi Renewable Transmission Project (TRTP Segments 4 through 11), Kern, Los Angeles, and San Bernardino Counties, CA.** For the CPUC, noise analyst of SCE's 173-miles (of which 42-miles traversed US Forest Service lands) of new and upgraded 500 kV electric transmission lines and substations to deliver electricity generated from new wind energy projects in eastern Kern County.
- **River Supply Conduit (RSC) Upper Reach Project, Los Angeles County, CA.** Under contract to the Los Angeles Department of Water and Power (LADWP), Mr. Debauche was the noise analyst for this major potable water transmission pipeline from the Los Angeles Reservoir Complex and local ground water wells to reservoirs and distribution facilities located in the central areas within of the City of Los Angeles.
- **DC Electrode Project, Los Angeles County, CA.** Prepared the Noise, Air Quality, Geology and Soils, Population and Housing, and Utilities/Service Systems analyses for this new electrode distribution line from West Los Angeles to the Pacific Ocean stopping point in Malibu up the Pacific Coast Highway and extending into the Pacific Ocean.
- **Thousand Palms Flood Control Project, Riverside County, CA.** Flood control project, which will create 20-miles of flood control structures and drainage systems protecting newly developed hillside residential development within the Coachella Valley Municipal Water District.
- **Downs Substation Project, Kern County, CA.** For the CPUC, Mr. Debauche evaluated the noise impacts of SCE's upgrades to the existing SCE operated Downs Substation and 55-miles of 220 kV transmission line and fiber optic line upgrades.



## Paul Hermann

### Qualifications:

Bachelor of Engineering – Civil, Queensland University of Technology, Australia

### Position at GHD:

Principal Engineer, Irvine, CA



Mr. Hermann is a lead water / wastewater / desalination engineer in GHD's Irvine Water Division. He has extensive design experience in water and wastewater infrastructure, including large conveyance pipelines, pumping stations and treatment facilities.

During his time in southern California, he has been the lead for GHD on both the Carlsbad Desalination Project, in addition to leading the team on the Site Evaluations Study for the proposed Camp Pendleton Desalination Project.

Paul now integrates GHD's global desalination experience with efforts in the United States.

### Relevance to Project

- ▶ Project Management
- ▶ Pipeline Hydraulics and Detailed Design of Water / Wastewater & Desalination Systems
- ▶ Treatment Plant Hydraulics
- ▶ Contract Documentation and Administration

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### Representative Achievements – Desalination and Advanced Water

- ▶ **Poseidon Resources, Desalination Plant, Carlsbad, California.** Currently performing the owner's engineer role for the project, which comprises the engineering, procurement, and construction (EPC) of both the 50 million gallons per day (MGD) seawater reverse osmosis desalination facility, in addition to approximately 10 miles of new 54-inch steel conveyance pipeline. He is the primary contact for the owner's team with respect to technical services and has and continues to provide general oversight and independent assessment of various aspects of the project. Some of the tasks completed to date include project and site coordination activities, scope book and specification reviews, drawing and design reviews, materials / durability / asset life reviews, consultation with local authorities and utilities, construction inspections and design verifications, commissioning adherence, and providing general project management and technical assistance to the client. Works also include the coordination and development of compliance documentation with the California Department of Public Health, and Pilot Plant development, compliance and oversight.
- ▶ **San Diego County Water Authority, Camp Pendleton Desalination Plant – Additional Site Evaluations Study, Marine Corps Base Camp Pendleton, California.** Performed in the role of Project Manager for the Site Evaluations Study for two proposed sites. The studies include providing the conceptual designs, and alternatives, at each site. This includes process, site civil, building, electrical, access, etc; with each to be phased at 50, 100, and then to an ultimate capacity of 150 MGD at this proposed seawater reverse osmosis desalination facility. The development of a Pilot Plant Study



approach and plan was also part of this project, along with a detailed analysis of the Operation and Maintenance costs for all stages.

- ▶ **Private Client, Seawater Reverse Osmosis Desalination Plant in the Pacific Region.** Currently performing the role of Project Manager for GHD on this project. The private client has engaged GHD as part of the project team for the design and construction of a seawater reverse osmosis desalination facility with the plant to be developed in 2.5 MGD stages, to an ultimate capacity of 10 MGD.

GHD's current role includes key components of the desalination project, including the following:

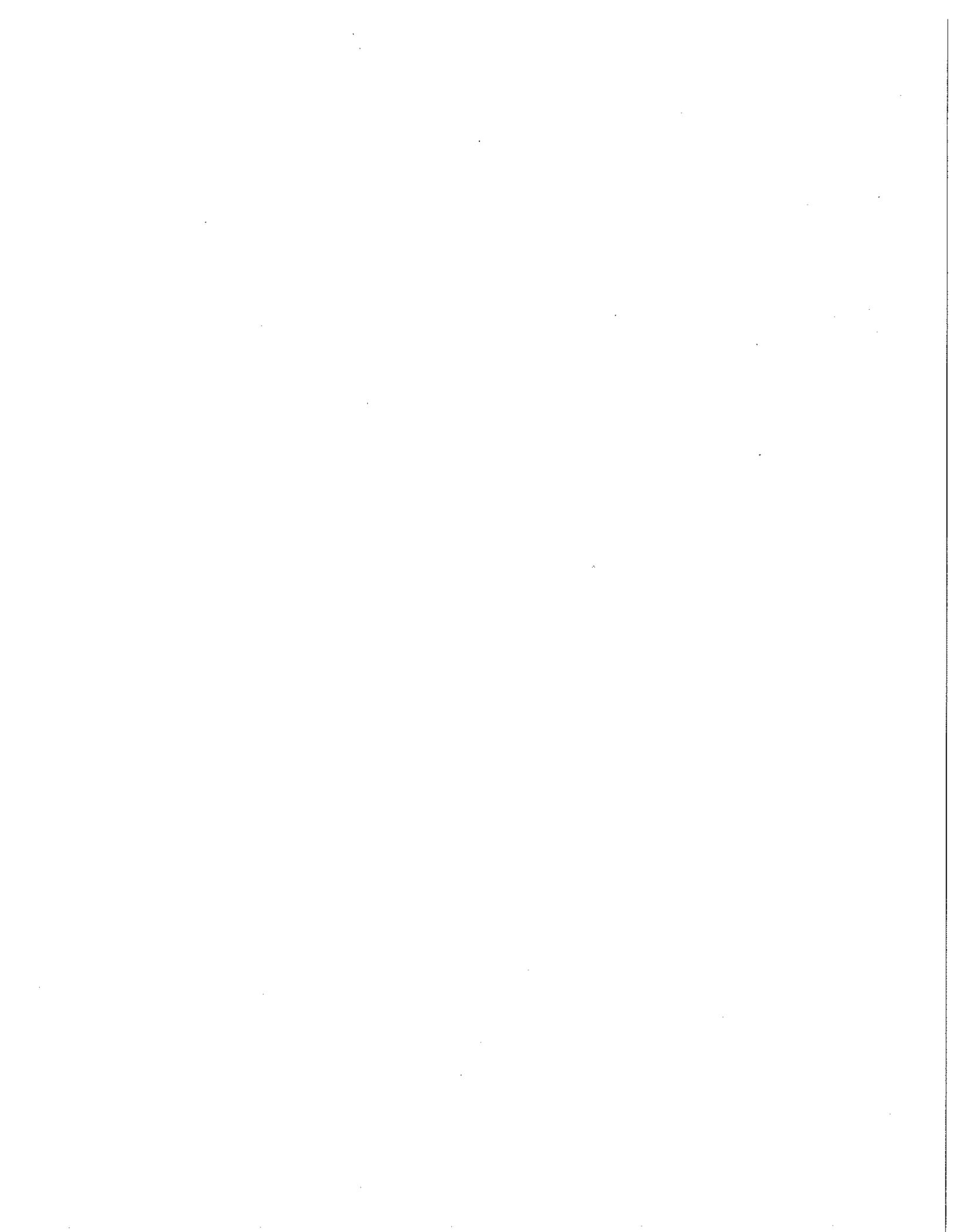
- Pilot Plant design and construction guidance, and analysis;
- Analysis of numerous contract vehicles, and the determination of the optimal option noting the key criteria of location, plant size, seasonal demand requirements and constraints, development / retail sale opportunities, etc.
- Design of the treatment process, including the coordination with the Department of Health, and chemical usage considerations.
- Cost benefit analysis of different processes, in terms of both upfront capital and ongoing long term operation & maintenance expenditure.
- Power supply requirements,

GHD is the Designer of Record for the seawater reverse osmosis treatment process.

- ▶ **Poseidon Resources, Desalination Plant, Huntington Beach, California.** Currently performing the owner's engineer role for the project, which comprises the engineering, procurement, and construction (EPC) for the 50 million gallons per day seawater reverse osmosis desalination facility. Part of the team which continues to provide technical services, as well as providing general oversight and independent assessment of various aspects of the project, including water quality sampling and associated analysis.
- ▶ **Private client, 100 MGD Seawater Reverse Osmosis Desalination Plant in Northern America.** Currently part of the team supporting our client with project planning, project strategy, and procurement advice, and with the concept development and concept design for a Seawater Reverse Osmosis Desalination Plant with an ultimate capacity of 100 MGD. This includes associated infrastructure including the intake and outfall, power supply, etc. The end intent is the production of a documentation package suitable for financing, signing and executing an Engineering, Procurement and Construction (EPC) Project.
- ▶ **Department of Infrastructure, Western Corridor Recycled Water Project, Queensland Government, Australia.** Performed the role of owner's engineer for both the Eastern Pipeline Alliance and Western Pipeline Alliance. The system, at a cost of ~AU\$2.4B, involved the construction of three advanced water treatment plants (AWTP) (Bundamba, Luggage Point, and Gibson Island), which provide purified recycled water to Swanbank and Tarong Power Stations whilst enabling excess to be discharged to Wivenhoe Dam. The combined conveyance system was approximately 125 miles of up to 60-inch diameter pipeline and 9 pumping stations with capacities ranging between 1.85 to 45 million gallons per day. The primary role was to ensure that the owner/client had involvement in the design process; ensuring compliance occurs with the scope of work and technical criteria and that best engineering and construction practice was implemented and maintained.



Another significant role was to ensure that the interfaces between all five Alliances occurred fluently as both of the pipeline Alliances had significant interfaces with all three AWTPs. Eastern Pipeline Alliance provide the pump stations and transfer pipe work between the AWTPs whilst Western Pipeline Alliance has interfaces with all five Alliances as it is responsible for the communications network in addition to providing pump stations and transfer pipe work.





**CHRIS S. HUNTLEY**

**Senior Associate/Biological Group Manager, Southern California**

### **Academic Background**

Graduate Studies, Biology, California State University Northridge.  
BA, Biology, University of California at Santa Cruz, 1992

### **Professional Experience**

Mr. Huntley has 16 years of experience with Aspen supporting and managing CEQA/NEPA projects including EIR/EIS, IS/MND, EA, BE/BA, and BA documents. In addition, Mr. Huntley has extensive experience conducting biological assessments, managing large-scale construction and restoration projects, and supporting agency clients with permitting tasks including compliance with California Department of Fish and Game (CDFG) 1600 and 2081 permits, US Fish and Wildlife Service (USFWS) Section 7 process, Regional Board 401 compliance, and US Army Corps (Corps) 404 permits. Mr. Huntley is a qualified diver and familiar with marine ecosystems which was the focus of his graduate work. In addition, he has completed a variety of projects in near and coastal areas including port facilities. With extensive experience in managing large-scale construction projects, Mr. Huntley has unique experience in resolving conflicts and ensuring compliance with environmental regulations. He works closely with resource agency personnel, contractors and affected jurisdictions to ensure that projects are constructed on time and in compliance with applicable laws, ordinances, regulations and standards.

### **Aspen Environmental Group.....1998-present**

- **Monterey Bay Accelerated Research System (MARS) Cabled Observatory EIR/EIS, California State Lands Commission/Monterey Bay National Marine Sanctuary, Deputy Project Manager.** The MARS project is an advanced cabled observatory in Monterey Bay that would provide a continuous monitoring presence in the MBNMS as well as serve as the test bed for a state-of-the-art regional ocean observatory, currently one component of the National Science Foundation (NSF) Ocean Observatories Initiative (OOI). Mr. Huntley acted as deputy project manager for this project. In addition, his duties involved review of technical data, development of the project description and alternatives, and coordination with state and federal agencies.
- **California Energy Commission (CEC) Coastal Power Plant Study, Deputy Project Manager/Biologist.** Mr. Huntley conducted biological surveys at 21 coastal power plants as part of the CEC's coastal power plant study. Site visits characterized habitat within the footprint of the power plant, landscaping, and identified potential environmental and permitting issues associated with potential expansion of the power plants.
- **California Energy Commission Emergency Siting Team, Power Plant Development, Compliance Project Manager.** For two years, Mr. Huntley's duties included management of technical staff for the completion of CEQA equivalent environmental permitting for over nine new emergency power plants, review of applicant submittals, drafting of Memoranda of Understanding with Chief Building Officials, conducting audits of building officials, and coordinating with affected agencies to resolve concerns with potential resource impacts. Other duties included maintaining contractor construction milestones, compliance monitoring and reporting, development of mitigation measures and conflict resolution for power plant compliance issues.
- **Newhall Ranch Project, California Department of Fish and Wildlife, Biological Coordinator and CDFG Reviewer.** Mr. Huntley provided biological expertise and assisted CDFW staff in reviewing and revising the EIR/EIS for the proposed 6,000-acre Newhall Development Plan EIR/EIS in Santa Clarita. Primary issues concern the land use conversion of several thousand acres of wild lands and agricultural areas located in and adjacent to the Santa Clara River. This region is known to support



numerous threatened and endangered species including least Bell's vireo, southwestern willow fly-catcher, California condor, arroyo toad, unarmored three-spine stickleback, and San Fernando Valley spineflower.

- **Palen Solar Electric Generating Station Project, California Energy Commission, Biologist.** Mr. Huntley prepared the biological resources analysis of the Staff Assessment for this solar energy project located east of Palm Desert. Key issues include potential impacts to desert tortoise, Mojave fringe-toed lizard, Nelson's bighorn sheep, burrowing owl, golden eagle, and large-scale modifications to existing drainages and interference with regional wildlife movement.
- **Calico Solar Project (formerly SES Solar One Project), California Energy Commission, Biologist.** Mr. Huntley prepared the biological resources analysis of the Staff Assessment/EIS for this solar energy project proposed by Calico Solar, LLC. Key issues include potential impacts to desert tortoise, Mojave fringe-toed lizard, Nelson's bighorn sheep, burrowing owl, golden eagle, and large-scale modifications to existing drainages and interference with regional wildlife movement.
- **Palmdale Hybrid Power Plant, California Energy Commission, Biologist.** Mr. Huntley prepared the biological resources analysis of the Staff Assessment for this power generation project proposed by the City of Palmdale. Key issues included potential impacts to Swainson's hawk, desert tortoise, Mojave ground squirrel, and golden eagle.
- **Rice Solar Energy Project, California Energy Commission, Biologist.** Mr. Huntley is contributing to the biological resources analysis of the Staff Assessment/EIS prepared for this solar energy project proposed by Rice Solar Energy, LLC (a wholly owned subsidiary of SolarReserve, LLC). Key issues include potential impacts to desert tortoise and golden eagle, and potential impacts to birds in general from the solar technology.
- **Topaz Solar Farm EIR, San Luis Obispo County, Issue Area Coordinator/Biologist.** Mr. Huntley acted as the issue area coordinator for natural resources on this solar energy project proposed by Topaz Solar Farms, LLC (wholly owned by First Solar, Inc.). Key issues include potential impacts to San Joaquin kit fox, jurisdictional drainages, vernal pools, rare plants, and nesting birds.
- **California Valley Solar Ranch EIR, San Luis Obispo County, Issue Area Coordinator/Biologist.** Mr. Huntley acted as the issue area coordinator for biological resources on this solar energy project. Key issues include potential impacts to San Joaquin kit fox, blunt-nosed leopard lizard, and giant kangaroo rat.
- **Panoche Valley Solar Farm EIR, County of San Benito, Biologist.** Mr. Huntley was technical support for this large-scale solar energy project. Key issues include potential impacts to California tiger salamander, blunt-nosed leopard lizard, San Joaquin antelope squirrel, giant kangaroo rat, San Joaquin kit fox, San Joaquin coachwhip, mountain plover, golden eagle, northern harrier, burrowing owl, loggerhead shrike, and American badger.
- **Devers-Palo Verde Transmission Line Project No. 2 EIR/EIS, California Public Utilities Commission/Bureau of Land Management, Issue Area Coordinator/Biologist.** Mr. Huntley acted as issue area coordinator for biological resources on this 230-mile 500-kV transmission line upgrade to be completed by Southern California Edison.
- **Tehachapi Renewable Transmission Project California Public Utilities Commission/US Forest Service, Issue Area Coordinator/Biologist.** Mr. Huntley was the issue area coordinator and principal author for biological resources on this 500-kV transmission line project proposed by Southern California Edison in support of wind energy projects. This transmission line is 173 miles in length and includes two separate segments that cross the Angeles National Forest. Some of the key issues on this project



include potential impacts to Mojave ground squirrel, desert tortoise, arroyo toads, California condors, spotted owl, and a host of forest sensitive plant and wildlife species.

- **Castaic Lake Biotic Assessment, Los Angeles Department of Water and Power, Project Manager/Biologist.** Mr. Huntley managed the preparation of an updated Biological Resource Assessment for the Castaic Power Plant at Castaic Creek. Mr. Huntley managed a team of experts and conducted focused surveys for arroyo toad and other sensitive plant and wildlife species to support LADWP management of the area.
- **Littlerock Dam and Reservoir Restoration Project EIR/EIS-BE/BA, Palmdale Water District/US Forest Service, Deputy Project Manager/Biologist.** Mr. Huntley is currently acting as deputy project manager and project biologist for the sediment removal activities associated with the Littlerock Dam and Reservoir in the Angeles National Forest. Mr. Huntley is working to develop project alternatives for sediment disposal while avoiding impacts to federally endangered arroyo toads. Mr. Huntley is managing the sensitive species surveys for this project and completing the biological resources section of the EIR/EIS, Management Indicator Species Report, and BE/BA.
- **INS Air Station, Otay Mesa Biological Assessment, US Army Corps of Engineers, Biologist.** Mr. Huntley conducted sensitive plant and animal surveys and prepared the biological assessment report for proposed and alternative station sites.

#### **OTHER BIOLOGICAL RESOURCES MANAGEMENT EXPERIENCE**

- **CEC Hydroelectric Power Plant Inventory Study, Deputy Project Manager/Natural Resources Analyst.**
- **Compliance and Mitigation Development, California Public Utilities Commission, State Lands Commission, California Department of Water Resources, Lead Biologist.**
- **Horsethief Creek Road Repairs Project, IS/MND and Biological Assessment, California Department of Water Resources, Biologist/Project Manager.**
- **Pacific Wind Energy Project EIR, Kern County, Biologist.**
- **Sunset Substation IS/MND and Biological Site Assessment, City of Banning, Biologist.**
- **Alta-Oak Creek Mojave Project EIR, Kern County, Biologist.**
- **Lower Colorado Flood Control Project EIR/EIS, US Army Corps of Engineers, Deputy Project Manager/Biologist.**
- **Fort Irwin Environmental Baseline Survey Reports US Army Corps of Engineers, Project Manager/Biologist.**
- **San Antonio Creek Erosion Repairs Project BA/EA, US Army Corps of Engineers, Biologist.**
- **Murrieta Creek Flood Control Project Phase II-IV Revegetation Plan and Sensitive Species Surveys, US Army Corps of Engineers, Project Manager/Biologist.**
- **Matillija Dam Ecosystem Restoration Project EIR/EIS, US Army Corps of Engineers, Biologist.**
- **Patriot Integrated Air Defense Exercise Project Environmental Assessment and Environmental Baseline Survey, Nellis Air Force Base, Nevada, Project Manager/Biologist.**
- **Joint Red Flag '05 Exercise Environmental Assessment, US Army Corps of Engineers/Bureau of Land Management, Nellis Air Force Base Nevada, Project Manager/Biologist.**



- March Air Reserve Base Cactus and Heacock Channels Environmental Assessment and Biological Technical Report and EA, US Army Corps of Engineers, Project Manager/Biologist.
- Antelope Transmission Project, Segments 2 & 3 EIR, California Public Utilities Commission/US Forest Service (2006-2011), Issue Area Coordinator/Biologist.
- Antelope-Pardee Transmission Project EIR/EIS-BE/BA, California Public Utilities Commission/US Forest Service, Issue Area Coordinator/Biologist.
- El Casco Sub-Transmission Project EIR, California Public Utilities Commission, Issue Area Coordinator/Biologist.
- Line 401 PG&E Redwood Expansion Project, CPUC, Lead Environmental Monitor.
- SCE Valley-Auld Power Line Project, CPUC, Environmental Monitor.
- Arundel Barranca Habitat Restoration Plan, Ventura County Flood Control District, Biologist.
- Dent Drain Permit Support, Ventura River, Ventura County Flood Control District, Biologist.
- Honda Barranca Permit Support, Ventura County Flood Control District, Biologist.
- Lake Skinner Filtration Plant, Metropolitan Water District, Biologist.
- Salton Sea Debris Removal Project, Los Angeles Department of Water and Power, Project Manager/Biologist.
- Vista Del Lago Visitor Center Slope and Waterline Repair Biological Evaluation/Biological Assessment, California Department of Water Resources, Project Manager/Biologist.
- Pyramid Dam Emergency Access Road IS/MND and Biological Evaluation/Biological Assessment, California Department of Water Resources, Project Manager/Biologist.
- Hollywood Reservoir Pump Station Upgrade IS/MND, Los Angeles Department of Water and Power Biologist.
- East Branch Extension Project Phase II, California Department of Water Resources, Project Manager/Biologist.

### **Selected Technical Experience/Training and Certifications**

- SWPPP trained 2006
- California Energy Commission Outstanding Performance Award, 2001
- Certified Caltrans Horizontal Directional Drilling Inspector 2001
- Desert Tortoise Handling Workshop, Ridgecrest California 2001
- CEC Expert Witness Training 2001 and 2013
- Railroad Right-of-Way Safety Training 2002
- Small boat handling, licensed and certified since 1993
- Research Scuba-diving certification and training since 1989



**MICHAEL F. MCGOWAN**  
Senior Associate

## Academic Background

Postdoctoral Associate, National Oceanographic and Atmospheric Administration/National Marine Fisheries Service

Ph.D., Marine Biology and Fisheries, Biological Oceanography, University of Miami, Rosenstiel School of Marine and Atmospheric Science

M.A., Marine Biology, San Francisco State University

B.A., Biology, San Francisco State University

## Professional Experience

Dr. McGowan has more than 20 years experience managing biological research, regulatory compliance, and environmental projects. He conceptualizes, implements, directs, and completes complex projects involving collaboration among diverse stakeholders. He is knowledgeable and experienced in preparing and reviewing biological proposals, budgets, schedules, permits, reports, and quality assurance documentation. Dr. McGowan prepares, reviews, and contributes to NEPA and CEQA documents as well as endangered species (ESA and CESA) permits and habitat assessments. He has a proven ability to work on behalf of clients in unison with staff, agency regulators, other technical experts, and consultant teams.

## Conducting and Documenting Biological Studies

- Author or coauthor of 24 peer-review articles and book chapters and more than 40 project technical reports.
- Conducted "the most comprehensive site-specific account of (San Francisco) Bay fishes ever completed," NOAA Independent Peer Review Panel comment on URS Corporation study for San Francisco Airport Runway Project EIR/EIS.
- Managed \$450,000 project (re-awarded three years) for baseline study of marine plankton, invertebrates, and water quality for an EIS.
- Managed \$808,000 monitoring field study of the effects of dredge spoil disposal on upper water column organisms and water properties at an offshore site in Central California (re-awarded four years) for US Army Corps and EPA.
- Directed field studies and QA/QC for non-native invasive plant species surveys and control.
- Surveyed fish, shrimp, and crabs associated with native oyster restoration projects.
- Collaborated with CDFW and university scientists to identify a non-native invasive mud shrimp with the potential to affect marine and estuarine resources along coastal California, Oregon, and Washington. Results presented at the 2012 San Francisco Bay Delta Science Conference.
- Recent technical publication. "Invasion of San Francisco Bay by *Upogebia major*: a newly recognized non-native species with potentially large ecosystem consequences", M. McGowan, J. Chapman, R. Breitenstein, A. Cohen, and K. Hieb. Published abstract and presentation for 7th Biennial Bay-Delta Science Conference, Sacramento, California. October 16-18, 2012.
- Report on impacts to marine life of coastal seawater entrainment and outfall of a power plant. Mann, R., and M. F. McGowan. 1995. Economic impact analysis of losses to marine resources associated with the San Onofre Nuclear Generating Station. Final Report to Southern California Edison, Company. BioSystems Analysis, Inc. August 14, 1995.



**Permitting and NEPA/CEQA and Endangered Species**

- Developed a handbook of examples of 40 different environmental permits including CERCLA, RCRA, Section 404 Wetlands, Sections 7 and 10 consultations, Clean Water Act, Clean Air Act, emerging dairy waste management, and water quality permits. Costs and anticipated changes.
- Prepared NEPA Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for NASA for property transfer from agency to city.
- Reviewed and commented on Critical Habitat Designation for green sturgeon *Acipenser medirostris* in San Francisco Bay and coastal California.
- Wrote Biological Resources and Hazardous Materials sections of EIRs for a utility linear development and also for the redevelopment of a former military base.
- Reviewed and commented on EIRs for development projects on behalf of affected community residents, including Environmental Justice communities.
- Have personally held permits including California Endangered Species take, CA Dept. of Fish and Game Collecting, National Marine Sanctuary Research, and SF Bay Conservation and Development permit.
- Managed wetlands delineation, predator removal, and radiological consulting contracts.
- Qualified (by exam) for CDFW Senior Environmental Scientist

**Project Management/Supervision/Technical Resource**

- Provided expert witness testimony and technical report for water quality impacts of storm water spills into San Francisco Bay watersheds.
- Reviewed and commented on EIRs and EISs for several projects including a coastal desalinization project in Santa Cruz, California, and large-scale solar facilities in Southern California and the Southwest U.S.
- Have directed work of up to 10 other biologists and field and lab techs at sea and in bay and coastal habitats.
- Expertise in many fields of biology: marine, freshwater, & terrestrial species and habitat ecology.
- Monitored construction impacts to California Tiger Salamander, Swainson's Hawk, California Red-legged Frog, Western Pond Turtle, listed species of fish and marine mammals.
- Reviewed proposals for Bay Delta Conservation Program and book chapter on biological monitoring.
- On time/scope/budget performance typically results in repeat business.

**Aspen Environmental Group.....2013-present**  
**Senior Associate**

Dr. McGowan provides technical support to project managers in marine biological resources and marine water quality by conducting research and collecting baseline conditions and other data; conducting impact analysis; contacting regulatory agencies, applicants, and our clients; documenting the result of the analysis and contributing to CEQA documents, e.g., Mitigated negative declaration for underwater electrical cable in San Francisco Bay.



**Maristics.....2002-present**

***Principal Environmental Scientist***

- Provide ecological and biological consulting services including technical and compliance review, litigation support for large scale energy and water project, design and conduct of surveys and monitoring, mitigation and restoration.
- Monitored marine mammals and water quality for a marine demolition and construction project in Puget Sound, Washington.
- Monitored impacts of pile driving to herring spawning in marinas in San Francisco Bay.
- Designed a fish rescue and salvage plan for a marine demolition project in the Sacramento River near Freeport, California.
- Wrote several biological assessments of impacts of marina dredging to CESA-listed longfin smelt in San Francisco Bay.
- Measured light penetration in eelgrass beds to monitor a dredging project in San Francisco Bay.
- Helped design endangered species mitigation and impact minimization measures for a state listed and federal candidate fish species. Conducted a monitoring study that allowed economically important work to proceed.
- Designed a study to monitor and mitigate for entrainment and other impacts of a proposed LNG terminal in coastal Mexico.

**ETIC Engineering.....2012**

***Senior Project Manager***

- Mentored staff biologists working on vegetation and wildlife surveys for a utility company's state-wide maintenance program.
- Developed biology department Statement of Qualifications (SOQ) and other marketing materials and prepared proposals.
- Initiated a biology department seminar series to foster team building and communication within the local office and by remote access to other company offices.

**University of San Francisco.....2010**

***Adjunct Professor of Environmental Management***

- Taught "Environmental Permitting and Compliance" to graduate students.
- Developed a manual of 40 different kinds of environmental permits, their regulatory basis, agency contacts, example case studies, and PowerPoint presentations for each permit.
- Provided a working knowledge of relevant environmental laws and regulations such as NEPA, CEQA, Clean Water Act, wetlands, ESA Section 7 consultations, California Department of Fish and Game streambed alteration agreements and endangered species monitoring and mitigation.

**Arc Ecology.....2007-2011**

***Senior Scientist***

- Reviewed and analyzed CERCLA technical documents about the cleanup of contaminants at the Hunters Point Shipyard Superfund site and communicate results to the affected local community.



Michael F. McGowan, page 2

- Reviewed for US Dept. of Transportation a NOAA study of contaminants (metals, PCB, lead paint, asbestos, petroleum) surrounding the reserve ships in Suisun Bay (Mothball Fleet).
- Participated with federal (EPA), state (DTSC), regional (Water Board), and local (SFDPH) staff to review technical and regulatory documents prepared by consultants for the Navy.
- Reviewed and commented on NEPA/CEQA and other documents for urban redevelopment of former military bases.
- Provided environmental expertise to a local community group under an EPA Technical Assistance Grant.

**San Francisco State University ..... 1994-2002**  
**Senior Research Scientist and Adjunct Professor of Biology**

- Conducted grant and contract biological studies. Mitigation monitoring, Ecological Restoration, Invasive non-native species surveys and control. Supervised other biologists and marine biology graduate students.
- Coauthored a report on the economic impacts of powerplant entrainment on California fish populations.
- Taught upper division and graduate courses in Limnology, Fish and Fisheries of the San Francisco Bay Region, and Biological Oceanography.

**NASA ..... 2001-2003**  
**Ecologist**

- Coordinated biological work on wetlands, USDA predator control contractors, and implementation of a programmatic EIS for infrastructure development.
- Prepared NEPA Environmental Assessment (EA) for transfer of former military base to civilian control.

**Other Experience**

**Private Company and State Agency, Sacramento and San Francisco – Environmental Scientist.** Addressed endangered fish passage and water supply issues at dams in California and Nevada; provided marine biology technical support for wetlands and artificial reef mitigation for coastal nuclear energy facility. Participated in research and data analysis for U.S. Geological Survey and National Marine Fisheries Service.

**California Coastal Commission – Marine Ecologist.** Reviewed entrainment and impingement impacts and mitigation for high volume seawater intake and outfall for the San Onofre Nuclear Generating Station.

**University of Miami, Rosenstiel School of Marine and Atmospheric Science – Research Assistant Professor.** Conducted applied research studies of environmental impacts (NEPA-EIS) of oil and gas development in the Gulf of Mexico, influence of oceanographic currents on recruitment of lobsters to the Florida Keys, and distribution and abundance of larval Atlantic bluefin tuna (endangered species). Chief scientist on oceanographic research cruises.

**California Department of Health – Graduate Student Assistant.** Surveys and trapping small mammals and their ectoparasites for bubonic plague surveillance in California.



## Academic Background

Master of Environmental Science and Management, University of California Santa Barbara, 2005  
Bachelor of Arts, Environmental Studies and Film Theory, Emory University, 2000

## Professional Experience

Ms. Mescher is an Associate Environmental Planner with a multidisciplinary background in the environmental sciences, who has been working with Aspen since 2005. Ms. Mescher specializes in the physical science issue area of water resources, including expertise relevant to groundwater, hydrogeology, water quality, and relevant laws and regulations, as well as the analysis of recreational resources and opportunities. Ms. Mescher has prepared technical analyses for numerous projects under CEQA and NEPA, including flood control, water infrastructure, and renewable energy projects throughout California. Some of Ms. Mescher's key experiences are summarized below.

### Aspen Environmental Group..... 2005-2006 and 2007-present

- **Embarcadero-Potrero Transmission Line MND, CPUC (2012-2013).** Ms. Mescher was the hydrology and water quality technical specialist for this PG&E transmission line project in San Francisco. The proposed Embarcadero-Potrero Transmission Line includes both on-shore and off-shore components, and Ms. Mescher provided analysis of hydrology and water quality effects associated with on-shore and off-shore activities, as well as drilling activities that would transition the project from terrestrial to marine environments.
- **Total Terminals International (TTI) Grain Export Terminal Installation Project, Los Angeles County (2011-2013).** Ms. Mescher served as Deputy Project Manager and Hydrology/Water Quality Specialist in the preparation of an IS/NOP and a Focused EIR for the TTI Grain Export Terminal Installation Project, located in the Port of Long Beach (POLB). Ms. Mescher also provided support in responses to comments, Findings of Fact, Statement of Overriding Considerations, Mitigation Monitoring and Reporting Program, and Environmental Controls documents for the POLB.
- **Port of Long Beach (POLB), Sulex Demolition Project MND (2009-2011).** Ms. Mescher prepared environmental analyses for the following issue areas: Aesthetics; Geology and Soils; Hydrology and Water Quality; Land Use and Planning; Public Services, Recreation; Traffic and Transportation; Utilities and Service Systems. She is also preparing the Application Summary Report for compliance with the California Coastal Act and the POLB Master Plan. The project includes the demolition of site improvements installed by Sulex, Inc. for sulfur pelletizing operations, which have been decommissioned for several years. The objective of the project is to fulfill the conditions of lease termination, returning the site to a state agreed upon by the POLB and Sulex, Inc.
- **Desert Sunlight Solar Farm Project EIS (2010).** An EIS for this proposed solar energy project was prepared by a consultant under contract to the Bureau of Land Management (BLM). To evaluate whether the EIS would satisfy requirements of CEQA, the California Public Utilities Commission (CPUC) contracted Aspen to provide critical review. Ms. Mescher evaluated the Water Resources and Recreation analyses, and provided suggested revision necessary for the document to meet CEQA adequacy.
- **Tehachapi Renewable Transmission Line Project (TRTP) EIS/EIR, CPUC and USDA Forest Service (2007-2012).** Ms. Mescher prepared analysis for the environmental issue area of Wilderness and Recreation, and provided extensive assistance in the preparation of the Hydrology and Water Quality analysis for a joint EIR/EIS for the California Public Utilities Commission (CPUC) and USDA



Forest Service. Ms. Mescher also assisted in development of the Project Description and alternatives to the proposed project, as well as a Specialist Report for Hydrology and Water Quality. Ms. Mescher provided technical expertise in the analysis of erosion and sedimentation effects for a Supplemental Draft EIS (SDEIS) that was prepared after the Station Fire, which burned 251 square miles of the Angeles National Forest in 2009. In addition, project changes affecting NFS lands, including new structure types, helicopter staging and support areas, wire setup site locations, alternate access roads, and changes in the project schedule were analyzed in the SDEIS.

- **SDG&E Sunrise Powerlink Transmission Project Water Availability Study (2010).** Under a \$14 million contract to the CPUC, and under a Memorandum of Understanding with the Bureau of Land Management (BLM), an EIR/EIS was prepared for a highly controversial 150-mile transmission line from Imperial County to coastal San Diego County. Following publication of the Final EIR/EIS in October 2008, the Applicant (SDG&E) prepared a Water Availability Study. Ms. Mescher provided technical review and feedback of this study, with particular attention to existing water supply and uses, and how the Project could affect water availability to other users in the project area.
- **Thousand Palms Flood Control Project EIR/EIS, Riverside County (2011-present).** Ms. Mescher is managing the preparation of a Subsequent EIR/EIS for this proposed flood control improvement project (formerly the Whitewater River Basin Flood Control Project). The project would include construction and maintenance of a series of levees and channels in the Thousand Palms area of Riverside County. This project was previously led by the U.S. Army Corps of Engineers (USACE) Planning Division, but was never constructed due to funding restrictions. The Coachella Valley Water District (CVWD), as the CEQA Lead Agency, is currently moving forward with project design and funding, with the USACE Regulatory Division functioning as the NEPA Lead Agency. The proposed flood control facilities are adjacent to the Coachella Valley Preserve, which is managed by a conglomeration of local and regulatory agencies per the direction of the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP). Ms. Mescher has developed a custom agency coordination program for this project, and is facilitating extensive agency coordination, both as relevant to potential project impacts on the Coachella Valley Preserve, as well as to the transition of NEPA Lead Agency from USACE Planning Division to USACE Regulatory Division.
- **Whitewater River Basin Flood Control Project Supplemental EA, Riverside County (2007-2011).** Ms. Mescher served as Project Manager and Hydrology/Water Quality Specialist in the preparation of a Supplemental Environmental Assessment (EA) for this proposed flood control project, described above. The SEA was tiered off of an EIS/EIR prepared for the project in 2000, and addressed changes in environmental baseline conditions since publication of the 2000 document as well as changes in project design that were necessary to accommodate development in the project area. The USACE Planning Division acted as NEPA Lead Agency with CVWD as CEQA Lead Agency. Due to federal funding restrictions, the Supplemental EA was never published and the project was not constructed.
- **Senate Bill 610 Water Supply Assessments (2010-present).** Ms. Mescher has provided analysis for and managed the preparation of multiple Water Supply Assessments (WSAs) under California Water Code (amended by SB 610 and SB 267), for a variety of large-scale and complex projects throughout California, including: Topaz Solar Farm and California Valley Solar Ranch in San Luis Obispo County, Solargen Panoche Valley Solar Farm in San Benito County, and Antelope Valley Solar Farm in Kern County. Ms. Mescher has also provided expert technical review of WSAs prepared other parties and suggested revisions to ensure California Water Code compliance for these WSAs, which included: Ocotillo Express Wind Energy Project in Imperial County, Morgan Hills Wind Energy Project in Kern County, Alta East Wind Project in Kern County, and Alta Wind Infill II Project in Kern County. In accordance with SB 610, each WSA assesses the physical availability of water under normal-year,



single-drought-year, and multiple-drought-year conditions over a projection of twenty years, to determine whether a project's water requirements would result in adverse environmental effects.

- **Ocotillo Express Wind Project, Imperial County, Technical Specialist (2010-present).** Ms. Mescher is assisting in the preparation of the EIR/EIS for the proposed wind energy project, located on approximately 15,000 acres of land with up to 193 wind turbines to produce up to 550 MW of energy. Ms. Mescher is serving as the Water Resources Technical Specialist for this project, which is located in an area where water supply availability is a major concern to both the public and the regulatory agencies. Ms. Mescher also prepared analyses of Soils and Mineral Resources issues.
- **Donnell Basin Environmental Documents & Regulatory Permits, San Bernardino County (2013-present).** Ms. Mescher is acting as the Deputy Project Manager for the preparation of CEQA environmental documents, technical reports, and regulatory permits for the development of Donnell Basin to its ultimate condition inflow and planned basin outflow capacities consistent with the Twenty-nine Palms Master Plan of Drainage.
- **Rimforest Storm Drain Project EIR, San Bernardino County (2012-present).** Ms. Mescher is the Deputy Project Manager and Hydrology Specialist for this EIR, prepared for a unique flood control improvement project which involves a series of upgrades to existing stormwater drainage facilities in order to re-direct stormwater flow throughout the mountain community of Rimforest, and mediate significant historic erosion and landslide issues in the area.
- **Sespe Creek Levee Improvements Project IS/EA, Ventura County (2011-present).** Ms. Mescher is the Deputy Project Manager and Hydrology/Water Quality Specialist in the preparation of an IS/EA for the modification of the Sespe Creek 2 (SC-2) portion of the Sespe Creek Levee system, located on Ventura County Watershed Protection District (VCWPD) lands adjacent to the City of Fillmore. As Deputy Project Manager, Ms. Mescher is responsible for coordinating project design details with the VCWPD, and providing support in various areas of project management. Ms. Mescher is also preparing several technical analyses, including Hydrology and Water Quality.
- **California River Parkways Trailhead Project IS/MND, Ventura County (2009-2010).** Ms. Mescher served as Deputy Project Manager and Technical Specialist for this IS/MND. Ms. Mescher provided project management support, and also prepared technical analyses for numerous environmental issue areas, including Hydrology/Water Quality, Groundwater, and Recreation among others. The IS/MND was approved by the Ventura County Board of Supervisors on July 13, 2010.
- **Downs Substation Expansion Project, Kern County (2010-2012).** Ms. Mescher served as the Deputy Project Manager and Water Resources Technical Specialist for the CEQA review of the Downs Substation Expansion Project proposed by Southern California Edison (SCE). SCE proposes to upgrade/expand the existing Downs 33/12-kV Substation to 115/12-kV to serve increased electrical demand, improve reliability and enhance operational flexibility within the Electrical Needs Area. Pre-filing activities began in October 2010 including completeness review and data requests.
- **Baldwin Hills Community Standards District (CSD), City of Culver City (2009).** Technical Specialist for the review of a County of Los Angeles environmental document and preparation of an oil and gas drilling ordinance for the City of Culver City in Los Angeles County. Ms. Mescher reviewed the technical comments on the Baldwin Hills Community Standards District EIR prepared by the County of Los Angeles for the Inglewood Oil Field, including evaluation of the County's proposed CSD (drilling ordinance), which the County revised based on public comments. The City used the review comments as part of their formal comments submitted on the County's EIR and CSD.
- **Desert Harvest Solar Project EIS, Bureau of Land Management and Riverside County (2011-present).** Ms. Mescher is serving as the Water Resources Technical Specialist in the preparation of



an EIS for the enXco Desert Harvest Solar Project, located on 1,200 acres of BLM-administered land in the Chuckwalla Valley of Riverside County. The project's proposed and alternative gen-tie alignments would require state and local permits, so the document is being prepared to a CEQA-equivalent standard.

- **Topaz Solar Farm EIR, San Luis Obispo County (2009-present).** Ms. Mescher prepared technical analyses for the environmental issue areas of Water Resources and Groundwater in support of an EIR prepared for a solar energy generation facility in on the Carrizo Plain in San Luis Obispo County. Ms. Mescher also prepared a Water Supply Assessment in compliance with Senate Bill 610 to assess the project's long-term impacts to local groundwater supply availability.
- **California Valley Solar Ranch Project EIR, San Luis Obispo County (2009-2011).** Ms. Mescher prepared the technical analysis for environmental issue area of Water Resources for this 250-MW solar photovoltaic power plant on the Carrizo Plain of eastern San Luis Obispo County. Ms. Mescher also prepared a Water Supply Assessment in compliance with Senate Bill 610 to assess the project's long-term impacts to local groundwater supply availability.
- **Solargen Panoche Valley Solar Farm Project EIR, San Benito County (2010).** Ms. Mescher prepared the Water Resources analysis for this controversial 420-MW photovoltaic power plant in a remote valley in southeastern San Benito County. In addition to the availability of groundwater resources, issues of primary concern for this project include the presence on the project site of a wide range of threatened and endangered species and cancellation of Williamson Act contracts, both of which are related to the issue area of Water Resources.
- **Colorado River Substation Supplemental EIR, CPUC (2010).** Ms. Mescher served as a Water Resources Technical Specialist for the Colorado River Substation Supplemental EIR, and prepared the water resources analysis for the SEIR, including assessment of potential impacts associated with the allocation of Colorado River water.
- **Burning Man 2012-2016 Environmental Assessment, BLM (2011-2012).** On behalf of the BLM Winnemucca Field Office, Aspen prepared an EA for the annual Burning Man Event. Black Rock City LLC applied to BLM for a five-year Special Recreation Permit for an up to 70,000-person arts festival to be held in the Black Rock National Conservation Area near Gerlach, NV. Ms. Mescher served as the Hydrology and Water Resources Specialist for this project.
- **Downs Substation Expansion Project, CPUC (2010-present).** Ms. Mescher is serving as the Water Resources Technical Specialist for the CEQA review of the Downs Substation Expansion Project proposed by Southern California Edison (SCE). SCE proposes to upgrade/expand the existing Downs 33/12-kV Substation to 115/12-kV to serve increased electrical demand, improve reliability and enhance operational flexibility within the Electrical Needs Area. Pre-filing activities began in October 2010 including completeness review and data requests.
- **Santa Maria River Levee Repair Project EA, Santa Barbara County (2008-2009).** This project included a series of upgrades to the Santa Maria River Levee system so that the US Army Corps of Engineers could certify the levee as being able to contain the 100-year flood, in compliance with the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program. Ms. Mescher prepared the Water Resources and Earth Resources analyses for this project, as well as the required 404(b)(1) documentation.

### Professional Affiliations

- 2014 Water Leaders Class (Water Education Foundation)
- 2005 – present, California Association of Environmental Professionals, Channel Counties Chapter



**NEGAR VAHIDI**

**Senior Associate/Social Sciences Group Manager**

**Academic Background**

Master of Public Administration, University of Southern California, 1993  
BA (with Highest Honors), Political Science, University of California, Irvine, 1991

**Professional Experience**

Ms. Vahidi has over 18 years of experience managing and preparing a variety of federal, State, and local environmental, planning, and analytical documents for large-scale energy and water infrastructure and development projects. She currently serves as a Senior Project Manager and Aspen's Group Manager for land use, policy analysis, and socioeconomics issues. She brings the experience of being both a public and private sector planner, specializing in the integration and completion of NEPA and CEQA documentation, land use and public policy analyses, socioeconomics and environmental justice analyses, and public involvement programs. Her diversity and experience in management and technical analyses can be shown through a sample of her projects described below.

**Aspen Environmental Group..... 1992-1998 and 2001-present**

Ms. Vahidi has participated in CEQA and NEPA analyses of major utility development projects throughout the State, providing land use, agriculture, public policy, and socioeconomics expertise as well as managing Public Participation Programs. Highlights of key projects and responsibilities are described below.

- **MARS EIR/EIS, Monterey Bay, CA.** Ms. Vahidi served as the technical specialist in charge of preparing the Environmental Justice analysis for this EIR/EIS, which would evaluate the effects associated with the installation and operation of the proposed Monterey Accelerated Research System (MARS) Cabled Observatory Project (Project) proposed by Monterey Bay Aquarium Research Institute (MBARI) [NEPA Lead Agency]. The goal of the Project was to install and operate, in State and Federal waters, an advanced cabled observatory in Monterey Bay that would provide a continuous monitoring presence in the Monterey Bay National Marine Sanctuary (MBNMS) as well as serve as the test bed for a state-of-the-art regional ocean observatory, currently one component of the National Science Foundation (NSF) Ocean Observatories Initiative (OOI). The Project would provide real-time communication and continuous power to suites of scientific instruments enabling monitoring of biologically sensitive benthic sites and allowing scientific experiments to be performed. The environmental justice analysis evaluated the potential for any disproportionate project impacts to both land-based populations and fisheries workers. The CEQA Lead Agency was CSLC.

In response to California's power shortage, Aspen has assisted the California Energy Commission in evaluating the environmental and engineering aspects of new power plant applications throughout the State under five separate contracts. Ms. Vahidi has served as expert witness and Technical Senior for land use (since 2001), and a specialist for socioeconomics and environmental justice, and alternatives analyses and special studies. Exampmples of relevant projects are listed below.

- **Huntington Beach Energy Project (HBEP), Huntington Beach, CA.** Senior Technical Specialist and expert witness in charge of preparation of the Alternatives Staff Assessment for this proposed natural-gas fired, combined-cycle, air-cooled, 939-megawatt (MW) electrical generating facility that will replace the AES Huntington Beach Generating Station.
- **Carlsbad Energy Center Project, Carlsbad, CA.** Senior Technical Specialist and expert witness for the Land Use and Alternatives Staff Assessments for Carlsbad Energy Center, LLC's Application for Certification (AFC) to build the Carlsbad Energy Center Project (CECP), which will consist of a



558-MW gross combined-cycle generating facility configured using two units with one natural gas-fired combustion turbine and one steam turbine per or unit. Issues of concern include major incompatibilities with local LORS, and cumulative impacts from widening of I-5. Ms. Vahidi conducted the California Coast Act Consistency Determination in lieu of the California Coastal Commission (CCC), because the CCC opted to have the CEC conduct the consistency analysis with the Coastal Act.

- **Marsh Landing Generating Station, Contra Costa County, CA.** Senior Technical Specialist for the Land Use Staff Assessment for the Mirant Marsh Landing, LLC AFC for a 930-MW natural gas-fired power plant, which would be sited adjacent to the existing Contra Costa Power Plant in unincorporated Contra Costa County, near the City of Antioch. Issues of concern included impacts to nearby agricultural resources, compatibility with adjacent land uses, compliance with local LORS, and parcel legality to comply with the Subdivision Map Act.
- **Redondo Beach Energy Project (RBEP), Los Angeles, CA.** Senior Technical Specialist and expert witness in charge of preparation of the Alternatives Staff Assessment for this proposed natural-gas fired, combined-cycle, air-cooled electrical generating facility with a net generating capacity of 496 megawatt (MW), which will replace, and be constructed on the site of the AES Redondo Beach Generating Station.
- **Valero Cogeneration Project, Benicia, CA.** Prepared the Socioeconomics Staff Assessment for a proposed cogeneration facility at the Valero Refinery in Benicia. Issues addressed included impacts on public services and other project-related population impacts such as school impact fees.
- **Potrero Power Plant Project, San Francisco, CA.** Prepared the land use portion of the Alternatives Staff Assessment for this proposed nominal 540-MW natural gas-fired, combined-cycle power generating facility. Analysis included review of several alternative sites for development of the power plant and the comparative merits of those alternatives with the proposed site located on the San Francisco Bay.
- **Senior Technical Lead, Land Use Resources.** The CEC requested that the Aspen Team provide Technical Seniors for the Land Use Resources area in order to help coordinate and review Land Use Resource Assessments. As a Technical Senior, Negar Vahidi was responsible for the technical review of Land Use sections of Staff Assessments for various power plants.
- **Coastal Plant Study.** Ms. Vahidi served as the Social Sciences Task Manager for this special study being conducted as part of Aspen's contract with the California Energy Commission. The study included identification and evaluation of potential issues associated with the possible modernization, re-tooling, or expansion of California's 25 coastal power plants including: northern California power plants such as Humboldt, Potrero, Hunter's Point, Pittsburg, and Oakland; central coast power plants such as Contra Costa, Diablo Canyon Nuclear, Morro Bay, Moss Landing, Elwood, Mandalay, and Ormond Power Plants; and southern California power plants such as the Alamos, Long Beach, Los Angeles Harbor, Haynes, Redondo Beach, Scattergood, El Segundo, Huntington Beach, Encina, Silver Gate, South Bay, and San Onofre Nuclear. As Task Manager her responsibilities included, identification of potential political, social, community, and physical land use impacts that may arise from the potential increased output of energy from plants in highly sensitive coastal communities. The intent of the study is to identify red flag items for the Energy Commission in order to streamline future licensing processes. Her task as the Social Science Task Manager also included a thorough review of applicable Local Coastal Plans, and Coastal Commission regulations associated with Coastal Development Permits and Consistency Determinations.



Other relevant projects include:

- **Tule Wind EIS, Third Party NEPA Review, San Diego County, CA.** Under contract to the Bureau of Land Management (BLM), Ms. Vahidi is serving as Aspen's Project Manager and assisting the BLM in reviewing the Draft and Final EIS/EIR for the proposed Tule Wind Project (EIS) to meet BLM and NEPA requirements. The EIS/EIR is being prepared by a consultant under contract to the CPUC, also directed by BLM, together with San Diego County, Bureau of Indian Affairs, and California State Lands Commission. The joint document evaluates the proposed Tule Wind Project and the proposed East County Substation Project (ECO), along with other related parts of both projects. The BLM is the lead agency for NEPA compliance and the CPUC is the lead agency for CEQA compliance.
- **Topaz Solar Project EIR, County of San Luis Obispo, CA (Applicant: First Solar).** Aspen is managing preparation of an EIR for this 500-MW solar photovoltaic project in the Carrizo Plain area. A major issue of concern is the conversion of approximately 6,000 acres of open space (60 percent of which are under land preservation contracts) to an industrial use. Ms. Vahidi is the senior in charge of developing the methodology, approach, and thresholds of significance for analysis of impacts related to agricultural land conversion using the California Department of Conservation LESA Model. One major issue of concern related to agricultural resources is impacts to lands under Williamson Act contracts. She will be guiding the analysis.
- **California Valley Solar Ranch EIR (Applicant: SunPower), County of San Luis Obispo, CA.** Aspen is managing preparation of an EIR for this 250 MW solar photovoltaic project in the Carrizo Plain area. A major issue of concern is the conversion of approximately 4,000 acres of open space to an industrial use. Ms. Vahidi is the senior in charge of developing the methodology, approach, and thresholds of significance for analysis of impacts related to agricultural land conversion using the California Department of Conservation LESA Model. She will be guiding the analysis.
- **San Onofre Nuclear Generating Station (SONGS) Steam Generator Replacement Project, San Clemente, CA.** Ms. Vahidi served as the Technical Senior in charge of developing the methodology and guiding the analysis for the Land Use and Recreation Section of this EIR for the California Public Utilities Commission (CPUC). This project EIR addressed the environmental effects of SCE's proposed replacement of Steam Generator Units 2 & 3 at the SONGS Nuclear Power Plant located entirely within the boundaries of the US Marine Corps Base at Camp Pendleton. Issues of concern included potential conflicts resulting from the transport of the large units through sensitive recreation areas such as beaches, and the San Onofre State Park.
- **Diablo Canyon Power Plant (DCPP) Steam Generator Replacement Project, San Luis Obispo County, CA.** Ms. Vahidi served as the Technical Senior in charge of developing the methodology and guiding the analysis for the Land Use and Recreation Section of this EIR prepared for the CPUC. The EIR addressed impacts associated with the replacement of the eight original steam generators (OSGs) at DCPP Units 1 and 2 due to degradation from stress and corrosion cracking, and other maintenance difficulties. The Proposed Project would be located at the DCPP facility, which occupies 760 acres within PG&E's 12,000-acre owner-controlled land on the California coast in central San Luis Obispo County. Land use issues of concern include impacts to agricultural lands, recreational resources, and potential Coastal Act inconsistencies.
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- **Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port, Ventura County, CA.** Under contract to the City of Oxnard, Aspen was tasked to review the Draft EIS/EIR for this the proposed construction and operation of an offshore floating storage and regasification unit (FSRU) that would be moored in Federal waters offshore of Ventura County. As proposed, liquefied natural gas (LNG) from the Pacific



basin would be delivered by an LNG Carrier to and offloaded onto, the FSRU; re-gasified; and delivered onshore via two new 21.1-mile (33.8-kilometer), 24-inch (0.6-meter) diameter natural gas pipelines laid on the ocean floor. These pipelines would come onshore at Ormond Beach near Oxnard to connect through proposed new onshore pipelines to the existing Southern California Gas Company intrastate pipeline system to distribute natural gas throughout the Southern California region. Ms. Vahidi reviewed the document for technical adequacy and assisted the City in preparing written comments for the following sections of the EIS/EIR: Aesthetics, Land Use, Recreation, Socioeconomics, and Environmental Justice.

- **Long Beach LNG Import Project, Long Beach, CA.** Under contract to the City of Long Beach, Aspen was tasked to review the Draft EIS/EIR for the proposed construction and operation of this onshore LNG facility to be located at the Port of Long Beach. Ms. Vahidi reviewed the document for technical adequacy and assisted the City in preparing written comments for the following sections of the EIS/EIR: Aesthetics, Land Use, Recreation, Socioeconomics, Environmental Justice, and Port Master Plan Amendment.
- **Post-Suspension Activities of the Nine Federal Undeveloped Units and Lease OCS-P 0409, Offshore Southern California, CA.** Aspen assisted the US Department of the Interior, Minerals Management Service (MMS) to prepare an Environmental Information Document (EID) evaluating the potential environmental effects associated with six separate suspensions for undeveloped oil and gas leases Pacific Outer Continental Shelf (OCS) located offshore southern California. These undeveloped leases lie between 3 and 12 miles offshore Santa Barbara, Ventura and southern San Luis Obispo Counties and are grouped into nine units, with one individual lease that is not unitized. As the Senior Aspen social scientist, Ms. Vahidi guided the analysis of community characteristics and tourism resources, recreation, visual resources, social and economic environment, and military operations.
- **Shore Marine Terminal Lease Consideration Project EIR, Contra Costa County, CA.** Served as Aspen's Project Manager (under contract to Chambers Group, Inc.) in charge of conducting the preparation of the Land Use, Recreation, Air Quality, and Noise sections of this EIR evaluating Shore Terminal, LLC's application to the California State Lands Commission (CLSC) to exercise the first of two 10-year lease renewal options, with no change in current operations. Shore Terminals operations comprise the marine terminal and on-land storage facilities in an industrial part of the city of Martinez. The marine terminal is on public land leased from the CSLC with the upland storage facilities located on private land.
- **City of Hermosa Beach Urban Drillsite, Hermosa Beach, CA.** Served as project assistant for Aspen's contract to assist the City of Hermosa Beach with the review of the risk assessment for the Macpherson Oil Project.
- **US Army Corps of Engineers, Los Angeles District.** Ms. Vahidi is responsible for managing Delivery Orders and conducting the analyses of the social science issue areas for 16 projects throughout southern California and Arizona as part of two environmental services contracts. Delivery orders have included:
  - **Imperial Beach Shore Protection EIS/EIR, Imperial Beach, CA.** Responsible for preparing the affected environment and environmental consequences sections for the land use, recreation, aesthetics, and socioeconomics issue areas. This EIS will analyze the impacts of shore protection measures along a 4.7-mile stretch of beach in southwest San Diego County.
  - **Upper Newport Bay Environmental Restoration Project, Newport Beach, CA.** Prepared physical setting, socioeconomics, land and water uses, and cultural resources sections for the Baseline Conditions Report and the Environmental Planning Report.

## Appendix B Descriptions of Similar Work

This appendix is provided in response to the statement on RFP page 7, "Resumes or other written material describing the consultant's technical staff qualifications and descriptions of similar work completed by each should be attached at the end of the proposal."

1. Desalination Project Experience
2. Coastal Project Experience
3. Third Party Review of CEQA or NEPA Documents
4. CEQA Experience
5. NEPA Experience

Our capabilities and experience on projects similar in nature and complexity to the People's Moss Landing Desalination Plant Project are provided in the example projects below, presented in the following categories:

### *Aspen experience in the last five years includes more than:*

- ✓ 1000 task orders under on-call services contracts
- ✓ 80 CEQA/NEPA documents
- ✓ 435 environmental planning, analysis, and compliance documents
- ✓ 270 projects for State, regional, and local government agencies
- ✓ 66 projects for Federal lead agencies

### B.1 Desalination Project Experience

- **Carlsbad Energy Center Project and Huntington Beach Energy Project:** Planned replacement power plants in Carlsbad and Huntington Beach would result in demolition of the existing plants and elimination of the current use of once-through cooling. As part of Aspen's work supporting the CEC in its licensing of the replacement power plants, the team considered the effects of the adjacent Poseidon Water Carlsbad and Huntington Beach Desalination Projects in conjunction with the power plants.
- **Independent Scientific and Technical Review Panel, Huntington Beach Desalination Alternatives:** Susan Lee, Aspen's proposed Project Manager, currently serves as a panel member supporting the California Coastal Commission and Poseidon Water to investigate alternatives to open water intake for the proposed Huntington Beach Desalination Project.
- **GHD Projects.** GHD, our team's highly experienced desalination engineering consultant, has extensive experience with all aspects of desalination and other coastal projects. They have worked on desalination plants throughout the world, including in the U.S., Australia, Mexico, Africa, and the Middle East. Examples include:
  - **Poseidon Resources, Desalination Plant, Carlsbad, California.** Currently acting as owner's engineer for the project, which comprises the engineering, procurement, and construction (EPC) of the 50 million gallons per day (MGD) seawater reverse osmosis desalination facility, in addition to 10 miles of new 54-inch steel conveyance pipeline.
  - **Poseidon Resources, Desalination Plant, Huntington Beach, California.** Currently the owner's engineer role for the project, which comprises the engineering, procurement, and construction (EPC) for the 50 million gallons per day seawater reverse osmosis desalination facility.
  - **San Diego County Water Authority, Camp Pendleton Desalination Plant – Additional Site Evaluations Study, Marine Corps Base Camp Pendleton, California.** Performed as Project Manager for the Site Evaluations Study for two proposed sites. The studies included providing the conceptual designs and alternatives at each site.
  - **Confidential Client, Seawater Desalination Plant, Mexico.** Currently the Technical Adviser to the developer of a 25 -100 MGD desalination facility in Northern Baja Mexico.

- **Confidential Client, Seawater Intake, Mauritania, West Africa.** This project consisted of a Scoping Study and subsequent Prefeasibility Study for a shallow seawater intake system for a gold mining operation. The project evaluated both an offshore pipeline intake system and an open channel intake system with jetties, with a capacity of 29 MGD.
- **Humboldt Bay Municipal Water District, Turbidity Reduction Facility.** GHD provided civil and structural design and construction management and inspection services for of the Water District's Turbidity Reduction Facility (TRF) located on the Mad River in Arcata, CA. The TRF consists of six major structures combined with underground large bore piping, electrical and chemical lines, and access road reconstruction. This water treatment facility was named Project of the Year by both the California Water Environment Association and American Society of Civil Engineers.

## **B.2 Coastal Project Experience**

Many of our coastal projects have involved conditions similar to those associated with the Moss Landing desalination project, and included issues such as impacts of siting facilities in a coastal environment, and the use of intake and outfall structures.

- **Coastal Power Plant Study.** A multi-part study of California's coastal power plants was prepared by Aspen for use by Energy Commission staff in evaluating future applications to expand or modernize coastal plants. An Issues Report examined the environmental and permitting issues associated with coastal power plants, including issues that substantially delayed or otherwise complicated applications for expansion or modernization of coastal power plants. The study also included a detailed inventory of information on each of California's existing coastal plants, including information on plant facilities, engineering and design, operations, and environmental conditions. Potential issues associated with the possible modernization, re-tooling, or expansion of California's 25 coastal power plants including Moss Landing were identified and evaluated. The study identified potential political, social, community, and physical land use impacts that may arise from increasing the output from plants in highly sensitive coastal communities. The study also included a thorough review of applicable Local Coastal Plans, and Coastal Commission regulations associated with Coastal Development Permits and Consistency Determinations.
- **Transpacific Submarine Fiber-Optic Cable Systems Project EIR.** Aspen is preparing an EIR for the installation of four fiber-optic cable systems across the Pacific Ocean. The EIR focuses on effects within Hermosa Beach and nearby jurisdictions where the cables land, and the marine areas under California's jurisdiction. Effects within marine areas under federal jurisdiction also are discussed. The cable systems will connect the U.S. to various Pacific Rim locations, including Southeast Asia, China, Australia, and Japan. The alignments cross Santa Monica Bay and various offshore basins, ridges, and escarpments while avoiding known marine features such as the Santa Monica Canyon, explosives dumping areas, fisheries, contaminated sediments, and commercial vessel areas.
- **Monterey Accelerated Research System (MARS) Cabled Observatory.** Aspen completed a joint EIR/EIS for the California State Lands Commission and the Monterey Bay National Marine Sanctuary on a unique undersea scientific cabled observatory proposed by the Monterey Bay Aquarium Research Institute. The project consists of a science node located at the end of 31.7 miles of submarine cable extending from shore into Monterey Bay. Aspen also monitored the cable-laying operation and installation of the science node.
- **Moss Landing Power Plant, Elkhorn Slough Environmental Enhancement and Mitigation Program Plan.** On behalf of CEC, Aspen staff facilitated a series of meetings of the Elkhorn Slough Advisory Team, responsible for selecting projects that could be funded through the mitigation fees imposed on the adjacent Moss Landing Power Plant. The team was composed of State agency representatives and local technical experts.

- **Coastal Power Plant Cooling Options Reports:** For the CEC, Aspen staff managed preparation of several comprehensive dry cooling analyses for coastal power plant using once-through cooling. Plants included the Morro Bay Power Plant Modernization Project, where Aspen managed a team of authors who developed a preliminary cooling design and provided impact analysis. Additional Power Plant Cooling Options Reports were completed for three other power plants. These analyses include conceptual design of dry cooling systems, hybrid cooling systems, and water supply options including use of reclaimed water in both once through and hybrid cooling systems.
- **Port of Los Angeles Channel Deepening Project.** For the Port and the U.S. Army Corps of Engineers, Aspen prepared a joint SEIS/SEIR for the USACE to assess impacts of providing 3.0 million cubic yards of additional disposal capacity required to complete the Channel Deepening Project. The project would dispose of dredge material at locations within the Port and six miles offshore, construct a five-acre land area to facilitate safer and more efficient truck and equipment movement, and construct a 50-acre expansion of the Cabrillo Shallow Water Habitat. As part of this effort, Aspen has coordinated extensively with USACE Planning, USACE Regulatory, Port of Los Angeles, and multiple regulatory agencies (including CDFW, USFWS, Los Angeles RWQCB, USEPA, and NMFS).
- **Embarcadero-Potrero 230 kV Transmission Project.** For the CPUC, Aspen prepared CEQA documentation for a high-voltage transmission line in San Francisco Bay. The transmission line includes approximately 2.5 miles installed offshore using directional drilling and plowing in of the cable. Aspen currently is monitoring environmental mitigation compliance during construction.

### **B.3 Third Party Reviewer Experience**

Agencies trust Aspen to provide objective independent reviews and to guide their environmental evaluation process to a successful and defensible conclusion. In addition to preparing CEQA and NEPA documents — from Initial Studies to EIRs and EISs — Aspen has extensive experience reviewing CEQA and NEPA documents and supporting studies.

A basic duty under our agency contracts is to evaluate environmental and technical documents prepared and submitted by applicants and their technical teams. When an agency plans to rely on applicant-provided materials, an essential first step is to review the submittals for their adequacy, accuracy, completeness, and overall quality – and to validate their conclusions. When submittals are inadequate, incomplete, or missing altogether, we summarize for our client the problems encountered. This, in turn, allows the applicant to clearly understand what is needed to address deficiencies. We have provided this service for a wide range of facility types.

Examples of projects for which Aspen has provided critical third party review of plans, studies, and EIRs include:

- **SDG&E East County Substation, Tule Wind, and Energía Suarez Gen-Tie Projects.** BLM selected Aspen to serve as its third-party NEPA reviewer for the Administrative Draft and Final EIR/EISs. In this role, Aspen reviewed the documents for thoroughness, accuracy, and compliance with BLM's NEPA Handbook.
- **Desert Sunlight EIS.** For the CPUC, Aspen reviewed and provided detailed comments on the Desert Sunlight Solar Project EIS (prepared by the solar developer's consultant) to ensure CEQA equivalency for CPUC's needs under CEQA Guidelines Section 15221, which allow use of an adequate NEPA document by a state agency.
- **Newhall Ranch Resource Management and Development Plan & Spineflower Conservation Plan.** Aspen assisted CDFW in administering the EIR process for this project and provided expert technical review services for all environmental issue areas. Aspen helped the CDFW to guide the organization, content, and analysis for this major EIR/EIS, and then conducted a thorough, comprehensive, and critical review of EIR/EIS sections and supporting technical studies and surveys provided by the applicant.

- **Long Beach LNG Import Project.** For the City of Long Beach we reviewed the Draft EIS/EIR and commented on the completeness, accuracy, and technical adequacy of the document.
- **Cabrillo Port LNG Deepwater Port Project.** For the City of Oxnard we provided expert EIS/EIR review services, prepared a report summarizing the review regarding deficiencies in the Draft EIR/EIS, and presented findings to the City Council.
- **Graton Rancheria Casino and Resort.** We assisted Sonoma County (which was a cooperating agency) in its critical review of the Bureau of Indian Affairs' EIS, prepared written comments, and collected and rewrote comments from all county agencies affected.
- **Baldwin Hills Community Standards District and Preparation of a City Drilling Ordinance.** The firm assisted the City of Culver City in reviewing and commenting on the Draft EIR for the Baldwin Hills Community Standards District. We also prepared a presentation summarizing the review and presented findings regarding deficiencies to the City Council.

## **B.4 CEQA Experience**

Aspen has prepared numerous CEQA documents and designed and implemented subsequent mitigation monitoring for State and local agencies. We have provided clients all aspects of CEQA compliance, including performing completeness reviews of applicant prepared assessments and reports, preparing MNDs, EIRs (and joint EIR/EISs), conducting public meetings, preparing Responses to Comments, and drafting Findings.

### **Large, Complex, Controversial CEQA Projects**

Many of the assignments that Aspen has undertaken have been for large, complex, and/or controversial projects. The successful management of these assignments is an Aspen specialty; we assemble custom teams for each project to ensure that we can provide thorough and defensible analysis and aggressive public outreach. Examples of significant major CEQA projects are listed below.

- **California Public Utilities Commission, Illustrative major projects:**
  - El Casco System Project EIR (monitoring underway)
  - Embarcadero-Potrero 230 kV Transmission Project IS/MND (in progress)
  - Cressey-Gallo 115 kV Power Line IS/MND (CPUC decision pending)
  - Antelope Transmission Project, Segments 2 and 3 EIR
  - San Onofre Nuclear Generating Station (SONGS) Steam Generator Replacement Project EIR
  - Diablo Canyon Power Plant Steam Generator Replacement Project EIR
  - Jefferson-Martin 230 kV Transmission Project EIR
  - Kinder Morgan Carson-Norwalk EIR
  - Pacific Pipeline EIS/SEIR and EIR
  - PG&E Divestiture of Hydroelectric Facilities Draft EIR
  - PG&E Tri-Valley Capacity Increase Project EIR
  - Diablo Canyon Nuclear Steam Generator Replacement EIR
- **California Department of Conservation, Analysis of Oil and Gas Well Stimulation Treatments in California EIR.** Aspen prepared the Draft EIR published in January that provides the public with detailed information regarding potential environmental effects associated with oil and gas well stimulation treatments, including hydraulic fracturing, within the State. The EIR evaluates well stimulation treatments in 6 study regions at a programmatic level of analysis for 23 environmental disciplines. The comment period has closed and the Final EIR is to be published later this year.

- **Panoche Valley Solar Farm Project EIR.** Under contract to the San Benito County Department of Planning and Building Inspection Services, Aspen prepared an EIR for a fast-track utility-scale solar photovoltaic (PV) facility proposed for siting in the rural Panoche Valley, an unincorporated area of southeastern San Benito County. This controversial project was proposed in an area identified in the U.S. Fish and Wildlife Service's Recovery Plan for Upland Species of the San Joaquin Valley, and the project site includes high-quality habitat for a number of State and federally threatened and endangered species, including San Joaquin kit fox, giant kangaroo rat, California tiger salamander, and the fully protected blunt-nosed leopard lizard.
- **South San Joaquin Irrigation District, Plan to Provide Retail Electric Service.** This was a full environmental analysis for a new provider of electric distribution service in southern San Joaquin County. Topics of concern include how GHG emissions and energy conservation programs could be affected by a change in system ownership and an analysis of Community Choice Aggregation (CCA) as an alternative to allowing a change in retail electric service provider. The existing utility, PG&E, is actively disputing the proposal.
- **North Sky River Wind Project and Jawbone Wind Energy Projects.** Aspen prepared an EIR for the North Sky River Wind Energy Project and Jawbone Wind Energy Project. The proposed project consists of two applications, proposed by separate project proponents that were collectively addressed in one EIR. The EIR evaluated potential impacts of implementing a change in zone classification to incorporate the Wind Energy Combining District to the base district for approximately 1,292 acres of the approximately 13,535-acre project site.
- **Newhall Land Development Project.** The highly controversial Newhall Land Development Project has been the subject of much public and agency scrutiny. The CDFW and the Regulatory Branch of the USACE are the CEQA and NEPA Lead Agencies for environmental review of the project's permits. Aspen assisted the CDFW and USACE in the review and revision of the applicant's Habitat Conservation Plans and the administrative draft EIR/EIS, which analyzed both these Plans under CEQA and NEPA.

## **B.5 NEPA Experience**

Aspen has substantial NEPA-only experience in addition to our CEQA expertise. Much of our NEPA experience was gathered through our contracts with the **U.S. Army Corps of Engineers (Corps)** for the Los Angeles District (1996 to present). Aspen has been the prime contractor on the Corps contracts to provide environmental surveys and analytical and documentation services, including NEPA, Clean Air Act, and Endangered Species Act compliance services for various military and civil works projects throughout the District.

For the **Bureau of Land Management's Hollister Field Office (HFO)**, we are preparing the Hollister Oil and Gas Environmental Impact Statement and Resource Management Plan (EIS/RMP) Amendment, scheduled to be released in 2015. As well, Aspen is preparing an Environmental Assessment on behalf of the BLM for the repowering of the Mesa Wind facility near Palm Springs.

Our NEPA experience and capabilities also includes recent work for the **Western Area Power Administration (WAPA)**, for which we managed extensive environmental surveys for the North Area Right-of-Way Maintenance project and prepared the NEPA documentation for the Sacramento Area Voltage Support project.

Other examples NEPA-only projects includes Desert Harvest Solar Project EIS (BLM), Yellowstone Pipeline EIS (Lolo National Forest), and Los Angeles River Improvement Project, Supplemental EAs (USACE)

### **Joint NEPA/CEQA**

In addition to our knowledge and experience with stand-alone CEQA or NEPA documents and combined CEQA/NEPA documents, Aspen has experience in using one environmental document as the springboard for another. Pursuant to CEQA Section 15221, a California lead agency is allowed to use a NEPA document to support its decision-making. Aspen's Section 15221 experience includes preparing the Desert Harvest Solar Project EIS for the BLM, in which we ensured that the NEPA document would serve as a CEQA equivalent document that the county could use to satisfy its agency review requirements.

Often, Aspen prepares a single combined document to satisfy the requirements of both NEPA and CEQA. We have extensive experience in ensuring that these documents are fully compliant with both Acts and the administrative requirements of the lead agencies and address the subtle differences between the Acts. For example:

- Aspen is the prime contractor to the **California Energy Commission** and the **Bureau of Land Management** preparing an EIR/EIS for the Desert Renewable Energy Conservation Plan (DRECP). The DRECP, which focuses on 22 million acres of California's Mojave and Colorado Desert regions, identifies geographic areas where permitting of renewable energy development would be facilitated. It will also define areas for conservation and management of species that are protected through the Plan. Finally, it will provide for the formal amendment of BLM's California Desert Conservation Area Plan, modifying existing land use designations and establishing protective measures for future development. The EIR/EIS will support development of a Natural Community Conservation Planning (NCCP) by the **California Department of Fish and Wildlife**, and a General Conservation Plan (GCP) by the **U.S. Fish and Wildlife Service** under the federal Endangered Species Act.
- Aspen completed a joint EIR/EIS for the **California State Lands Commission** and the **Monterey Bay National Marine Sanctuary** on a unique undersea scientific cabled observatory proposed by the Monterey Bay Aquarium Research Institute. The firm also provided monitoring during construction.
- Many of our transmission line projects have required joint EIS/EIR documents because they traverse both federal land and land under state jurisdiction. Typically these are joint **Bureau of Land Management/CPUC** documents or **U.S. Forest Service/CPUC** documents, depending on the land being crossed. Currently, we are preparing a joint document for BLM and CPUC, with the **Bureau of Indian Affairs** as a Cooperating Agency, as part of the project is on tribal lands.

## Appendix C Optional Task: NEPA Review (Task 10)

It is not certain at this time whether and at what level of NEPA review may be necessary; therefore, the review and support effort with regard to NEPA is provided as an optional task to Aspen's work and would be scoped and budgeted separately, if required.

NEPA compliance may be needed for the desalination project because of its location, its water intake and discharge requirements, and the resources affected.

The first step is to make appropriate agency inquiries in order to clarify whether the project is subject to NEPA. This initial step is included as part of the work described in Task 3. Confirming the need for NEPA compliance should occur as soon as possible so that, in a timely fashion, either (1) the CEQA document now in preparation can be amended to incorporate the requisite NEPA components, or (2) a stand-alone NEPA document can be prepared.

If it is determined that NEPA compliance is required, the appropriate document will need to be prepared (presumably by the project applicant or other parties). The Harbor District will require peer review of the NEPA documentation as well as support in navigating the NEPA process.

Although many NEPA requirements are similar to CEQA, several differ in important ways. As part of the overall NEPA review process, Aspen will assist in scoping the required document (including consulting with federal agencies on issues to be addressed in the analysis). When it is available, Aspen will peer-review the document and all supporting technical reports. Through its review, Aspen will ensure that all NEPA requirements are addressed.

In addition, the NEPA process likely will involve consultation with agencies such as NOAA's National Marine Fisheries Service (NMFS). NMFS administers the Endangered Species Act, the Marine Mammal Protection Act, and the Magnuson-Stevens Fishery Conservation and Management Act, each of which may be applicable to the proposed desalination project.

The area offshore of Moss Landing is located within the Monterey Bay National Marine Sanctuary (MBNMS), which maintains jurisdiction over activities within its boundaries. Based on the description of the desalination project, it is likely that approval from MBNMS will be required, through authorization of a Regional Water Quality Control Board (RWQCB) permit and/or authorization of a Coastal Development Permit from the California Coastal Commission. MBNMS jurisdiction over the project would trigger NEPA compliance. MBNMS regulations include a provision for the sanctuary to approve or "authorize" other agency permits for project components, such as intake and discharge facilities. Sanctuary regulations also apply to the discharge of materials outside of the sanctuary's boundaries when these materials may subsequently enter sanctuary waters and adversely impact resources in the sanctuary. It should be noted that MBNMS has established Guidelines for Desalination Plants; these are intended to assist regulatory agencies in their review of proposed desalination facilities.

The scope and cost for this optional task will depend on several factors, including:

- The type of NEPA document prepared (e.g., Environmental Assessment vs. Environmental Impact Statement)
- Whether the applicant's consultant will prepare a joint CEQA/NEPA document or the consultant (or a different entity) will prepare a separate NEPA document
- The number of federal agencies and approvals involved and the level of federal agency consultation required

A scope and budget will be developed when it is confirmed that NEPA is required and the nature of the document and the role of agencies are known in more detail. Aspen, assisted by Vicki Hill, is fully qualified and equipped to perform the necessary peer review of all NEPA compliance documents as well as conduct required agency consultation. Ms. Hill has prepared NEPA documents and performed review of NEPA documents on coastal projects in California, including the Monterey Bay area. Ms. Hill will join the project team if this Optional Task is authorized. Her resume is attached.

# VICKI A. HILL

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## Education

**HARVARD UNIVERSITY, CAMBRIDGE, MASSACHUSETTS**

**John F. Kennedy School of Government, Master of Public Administration**

Emphasis in public agency management and environmental policy

**University of California,  
Santa Barbara**

Bachelor of Arts in  
Environmental Studies

**University of California,  
Santa Cruz**

Course work in biology, environmental  
studies, and geology

## Experience

Vicki Hill has 30 years of public agency consulting experience, specializing in National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance and environmental planning, often serving as an extension of agency staff. She has managed numerous complex planning projects and environmental studies. In addition, Ms. Hill has in-depth experience in public agency and consultant management, policy analysis and development, public outreach programs, and report writing and editing. She has worked in the coastal California environment on high-profile projects and plans, and is very familiar with the various stakeholders and with planning and regulatory issues in the area.

**1984–Present**

### **ENVIRONMENTAL PLANNING & MANAGEMENT CONSULTANT**

**Clients:** National Marine Sanctuaries, coastal counties, transportation agencies, California Public Utilities Commission, and U.S. Forest Service.

#### **REPRESENTATIVE PROJECTS**

- **NEPA Coordinator, NOAA.** Managed Environmental Impact Statement (EIS) for Cordell Bank and Gulf of the Farallones National Marine Sanctuary Expansion: scoped EIS document; prepared EIS work plan; developed and implemented procedures to achieve tight EIS schedule; analyzed impacts and wrote EIS sections; interacted with staff on a daily basis; guided/reviewed/edited staff contributions to report; coordinated internal reviews; and produced Administrative Draft, Draft and Final EIS.
- **EIS Coordinator, Sanctuary Management Plan Updates, NOAA.** Coordinated NEPA review of management plan updates for three central/northern California national marine sanctuaries. Assisted in developing work plan, project description and schedule; directed EIS preparation and reviewed/edited EIS; participated in public workshops; coordinated input from sanctuary staff; responded to comments; and assisted with Record of Decision.
- **NEPA Coordinator, Fiber Optic Cable Project.** Helped direct the joint NEPA/CEQA process for a fiber optic cable project (MBARI) in Monterey Bay and participated in agency review panel. Work involved EIR/EIS consultant selection; stakeholder interaction; EIS scoping; public meeting attendance; consultant management and review/edit of all reports.

- **Technical Review Panel Member, Central Coast Regional Studies Program.** Provided NEPA, resource planning and energy development expertise to six coastal counties from Sonoma to Monterey; identified environmental impact issues; critiqued federal oil/gas leasing EISs; and reviewed consultant work.
- **NEPA/CEQA Contract Planner, Santa Barbara County.** Advised County planning staff regarding CEQA/NEPA compliance and developed public policy for large-scale coastal energy projects: issued RFPs, prepared work scopes and supervised consultants; wrote, reviewed, and edited NEPA/CEQA documents and planning reports; prepared policy documents, staff reports, project findings, and conditions; and served on agency review boards.
- **NEPA/CEQA Consultant.** Prepared environmental analyses for joint EIS/EIRs for several large-scale energy projects in Santa Barbara County.
- **Environmental Review Manager, Sonoma-Marin Area Rail Transit District (SMART).** Managed preparation of complex EIR and Supplemental EIR for 70-mile passenger rail project, including adjacent 50-mile multiuse pathway. Responsibilities included: developing and implementing tight schedule; managing large consultant team; coordinating with local, regional, state and federal resource agencies; developing feasible mitigation measures; interacting with the public; and writing/editing documents.
- **Director of Environmental Services, Dyett and Bhatia Urban Planners (ongoing).** Manage General Plans and Environmental Impact Reports; interact with public agencies; develop land use policy and programs; direct preparation of General Plan EIRs; and provide environmental impact assessment training to staff.
- **Consultant, Southern Sonoma County Resource Conservation District.** Provided project management support on Sonoma Creek & Tributaries Feasibility Study for flood reduction. Supervised technical team, helped develop overall work program, coordinated with federal sponsor – Army Corps of Engineers, and reviewed deliverables. Organized public workshops. Authored portions of the Sonoma Valley Watershed Enhancement Plan update.
- **Project Coordinator, City of Rohnert Park General Plan Update.** Managed complex and controversial general plan revision process: coordinated local and regional agency input; directed advisory committee comprised of local officials and staff; led successful completion of new general plan and growth strategies; supervised general plan and EIR consultants; edited reports for technical accuracy and public presentation; and acted as liaison with City Council.
- **Manager, Transportation Plan EIRs for Metropolitan Transportation Commission (MTC).** Developed work scope, directed impact analyses, reviewed administrative draft documents, responded to comments, and consulted with agencies for program EIRs on MTC Regional Transportation Plan updates. MTC work required close coordination with Attorney General's office.

**1977 –1983 SANTA BARBARA COUNTY, RESOURCE MANAGEMENT DEPARTMENT****Project Coordinator/Senior Planner (1980-1983)**

- Managed the processing of major oil development applications for offshore oil and gas production and marine terminal. Led federal and state agency joint review panel; managed consultants and directed NEPA/CEQA process.
- Directed preparation and adoption of County zoning ordinances for implementation of new General Plan, the first successful revision of ordinances in 30 years. Authored major sections of Santa Barbara County's first Coastal Zoning Ordinance.

**Planner (1977-1979)**

- Managed commercial, industrial, and residential development applications:
- Analyzed project proposals and conducted site assessments.
- Prepared reports and recommendations for decision-making bodies.
- Made presentations at public hearings.
- Provided zoning and Comprehensive Plan information to the public.

**Other Related Experience**

- 2008–2015 **Member, Sonoma Valley Groundwater Management Plan Advisory Panel.** Under direction of the Sonoma County Water Agency, worked with stakeholders and provided technical and policy guidance for preparation of the Valley's first Groundwater Management Plan.
- 1999–2001 **Volunteer, Glen Ellen Community.** Assisted community stakeholders in developing policies for development standards; interacted with Sonoma County planners.
- 1986–1988 **Board Member, Community Environmental Council, Santa Barbara.** Supervised California Environmental Quality Act study on mitigation and the need for environmental monitoring (prior to implementation of AB 3180).