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| 2 | 11.5.28 | WaterWise Consulting..... | 11-15 |
| 3 |         |                           |       |

**11.1 Project Management Team (2006–2010)**

Karen Scarborough, Chair, California Natural Resources Agency

Jerry Johns, California Department of Water Resources

Ron Milligan, U. S. Bureau of Reclamation

Laura King Moon, State Water Contractors

Karla Nemeth, California Natural Resources Agency

**11.2 Project Management Team (2011–2013)**

Jerry Meral, Chair, California Natural Resources Agency

Mark Cowin, California Department of Water Resources

Dale Hoffman-Floerke, California Department of Water Resources

Paul Helliker, California Department of Water Resources

Laura King Moon, California Department of Water Resources

Karla Nemeth, California Natural Resources Agency

Carl Wilcox, California Department of Fish and Wildlife

Cathy Crothers, California Department of Water Resources

Marc Ebbin, Ebbin, Moser + Skaggs

**11.3 State and Federal Water Contractors**

Steven Arakawa, Metropolitan Water District of Southern California

Ara Azhderian, San Luis & Delta Mendota Water Agency

Judy Bendix, Bendix Associates

Frances Brewster, Santa Clara Valley Water District

Cindy Kao, Santa Clara Valley Water District

Joan Maher, Santa Clara Valley Water District

Roger Patterson, Metropolitan Water District of Southern California

- 1 Jason Peltier, Westlands Water District
- 2 Becky Sheehan, Metropolitan Water District of Southern California
- 3 Laura Simonek, Metropolitan Water District of Southern California
- 4 Brent Walthall, Kern County Water Agency

## 5 **11.4 California Department of Water Resources**

### 6 **11.4.1 Technical Staff**

- 7 Maninder Bahia
- 8 Jessica Barnes
- 9 Gina Benigno
- 10 Mike Bradbury
- 11 Delores Brown
- 12 Kevin Clark
- 13 Nicole Darby
- 14 Al Davis
- 15 Carol DiGiorgio
- 16 Gordon Enas
- 17 Cliff Feldheim
- 18 Bill Harrell
- 19 Paul Helliker
- 20 Dale Hoffman-Floerke
- 21 Gardner Jones
- 22 Kathy Kelly
- 23 Joy Khamphanh
- 24 Marianne Kirkland
- 25 John Leahigh
- 26 Paul Marshall
- 27 Zoltan Matica
- 28 Dennis McEwan

- 1 Leah McNearny
- 2 Aaron Miller
- 3 Javier Miranda
- 4 Parviz Nader-Tehrani
- 5 James Newcomb
- 6 Laura Patterson
- 7 Roy Peterson
- 8 Erik Reyes
- 9 Arnold Sanchez
- 10 Andrew Schwarz
- 11 Alicia Seesholtz
- 12 Gina Skurka
- 13 Tim Smith
- 14 Ted Sommer
- 15 Stephani Spaar
- 16 Russ Stein
- 17 Danika Tsao
- 18 Jean Witzman

## 19 **11.5 Consultant Team**

### 20 **11.5.1 ICF International**

#### 21 **11.5.1.1 Consultant Team Management**

- 22 David Zippin, Program Manager
- 23 Chris Earle, Project Manager (all other chapters)
- 24 Jennifer Pierre, Project Manager (Chapter 5)
- 25 Rebecca Sloan, other chapters coordinator
- 26 Nicole Williams, effects analysis coordinator

- 1 **11.5.1.2 Technical Staff**
- 2 Kasey Allen, GIS
- 3 Bill Baber, terrestrial biology
- 4 Alan Barnard, graphic design
- 5 Deborah Bartley, editing
- 6 Paola Bernazzani, habitat conservation
- 7 Ellen Berryman, wildlife biology, terrestrial resources lead
- 8 Gregory Blair, fish biology
- 9 Erika Britney, Endangered Species Act compliance
- 10 Richard Brody, regulatory analysis
- 11 Russell Brown, hydrology
- 12 Daniel Cardoza, regulatory compliance
- 13 Eric Christensen, wildlife biology
- 14 Laura Cooper, editing, document management
- 15 Patrick Crain, fish biology, floodplain restoration
- 16 Terah Donovan, Endangered Species Act compliance
- 17 Eric Doyle, fish biology
- 18 John Durnan, graphic design
- 19 Christopher Earle, ecology, conservation strategy lead
- 20 Lesa Erecius, effects analysis coordinator
- 21 Rachel Gardiner, wildlife biology
- 22 Teresa Giffen, figures coordination
- 23 Larry Goral, technical writing
- 24 Gregory Green, wildlife biology
- 25 Marin Greenwood, fish biology
- 26 Erin Healy, contaminants
- 27 Jonathan Hecht, economic cost-benefit analysis lead
- 28 Rachel Henry, biology
- 29 Carol-Anne Hicks, document production
- 30 Aaron Holmes, ornithology

- 1 John Howe, wildlife biology
- 2 Deborah Jew, document production
- 3 Todd Jones, wildlife biology, GIS
- 4 Alexis Kessans, regulatory compliance
- 5 William Kohn, wildlife biology
- 6 Stephanie Lawrence, economic cost-benefit analysis
- 7 Leo Lentsch, adaptive management and monitoring
- 8 Eric Link, GIS
- 9 Wendy Luce, environmental chemistry, transport of toxics
- 10 Victoria Luiting, technical coordination
- 11 Kimberley Marcotte, agency comment and response management, project coordination
- 12 Christine Martin, GIS
- 13 Chip McConnaha, fish biology, habitat restoration
- 14 Elizabeth McCullough, plan funding
- 15 Michael McNabb, fish biometrics modeling
- 16 Bill Mitchell, Yolo Bypass restoration
- 17 Timothy Messick, graphic design
- 18 Daniel Moreno, GIS
- 19 Alex Moscoso, economic cost-benefit analysis
- 20 Erin Pace, technical/figure coordination
- 21 Bill Parker, GIS
- 22 Ryan Patterson, document production
- 23 Rori Perkins, GIS
- 24 Sarah Perrin, wildlife biology
- 25 Jennifer Pierre, effects analysis lead
- 26 Robert Preston, botany
- 27 Daniel Schiff, GIS
- 28 Kristen Schlech, biology
- 29 Kerry Schlichting, plan funding
- 30 Paul Shigley, editing

- 1 Logan Sholar, GIS
- 2 Rebecca Sloan, botany, conservation strategy coordinator
- 3 Chris Soncarty, fish biology, aquatic biological goals and objectives
- 4 Bob Sullivan, fish biology
- 5 Elizabeth Strange, climate change, foodweb, species accounts
- 6 Darle Tilly, editing
- 7 Silas Toms, GIS
- 8 Terry Unger, plan funding
- 9 Erica Villing, GIS
- 10 Jenna Wallis, ecosystem effects
- 11 Margaret Widdowson, aquatic plants
- 12 Richard Wilder, aquatic resources
- 13 Margaret Williams, economic cost-benefit analysis
- 14 Nicole Williams, climate change
- 15 Barbara Wolf, editing
- 16 Andrew Wones, fish biology
- 17 Matthew Yelin, data specialist
- 18 David Zippin, Endangered Species Act and Natural Community Conservation Planning Act
- 19 compliance lead

## 20 **11.5.2 The Brattle Group**

- 21 David Sunding, economics lead, seismic, regulatory certainty
- 22 Steven Buck, economics
- 23 Dina Gorenshteyn, economics, habitat restoration, water price and consumption, seismic, regulatory
- 24 certainty
- 25 Armando Levy, economics, habitat restoration
- 26 Vaughn Quoss, economics, GIS
- 27 Isaac Toussie, economics, water price and consumption
- 28 Michelle Tran, economics, water quality, agricultural water reliability

## 29 **11.5.3 Canyon Creek Consulting**

- 30 Jay Brueggeman, marine mammals

**1 11.5.4 Cardno ENTRIX**

- 2 Tim Abbe, hydrogeomorphology, stream restoration
- 3 Michael Aceituno, fisheries, aquatic ecology
- 4 Carlos Alvarado, wildlife ecology
- 5 Sam Bacchini, terrestrial ecology, birds, herps, permitting
- 6 Jean Baldrige, fisheries, aquatic science, estuaries, water quality
- 7 Kyle Brakensiek, fisheries, data analysis
- 8 Susan Burke, economics
- 9 Karen Butler, word processing/editing/production
- 10 Beth Cody, project management and contracting
- 11 Celeste Cooper, word processing/editing/production
- 12 Tom DeGabriele, fisheries, aquatic ecology, data analysis
- 13 Paula DeMichele, word processing/editing/production
- 14 Reinhold Dillon, word processing/editing/production
- 15 Lee Elder, word processing/editing/production
- 16 Iris Eschen, word processing/editing/production
- 17 Emily Floyd, fisheries, aquatic ecology, estuaries, toxics
- 18 Cody Graf, economics
- 19 Eric Harlow, fisheries, aquatic science
- 20 Laurie Herson, NEPA/CEQA, water resources
- 21 Susan Hootkins, MUP, regulatory compliance
- 22 Mark Horne, NEPA/CEQA, water resources, watershed planning
- 23 Daniel Huang, aquatic ecologist, fisheries, water quality
- 24 Richard Johnson, fisheries
- 25 Lauren Klimetz, data analysis, physical modeling
- 26 Tamara Klug, wetlands, monitoring, terrestrial ecology
- 27 Melissa Klungle, fisheries, aquatic ecology
- 28 Anthony Knaapen, fisheries, aquatic ecology
- 29 Chad Krofta, fluvial engineering
- 30 Neil Lassetre, hydrogeomorphology, aquatic ecology, stream restoration

- 1 May Lau, Wildlife and aquatic ecologist
- 2 Gretchen Lebednik, wetlands, plant biology
- 3 Virginia Mahacek, hydrogeomorphology, stream restoration
- 4 Amy Mai, Fisheries, aquatic ecology, estuaries, rivers
- 5 Joel Mulder, wildlife ecologist
- 6 Leaha Murphy, word processing/editing/production
- 7 Jessica Nadolski, wildlife ecologist
- 8 Kevin O'Dea, regulatory compliance
- 9 Ramona O'Halloran-Swenson, fisheries, aquatic ecology, estuaries, adaptive management
- 10 Duane Paul, economics
- 11 Steve Pavich, economics
- 12 Amy Poopatanapong, ecologist, monitoring, birds
- 13 Steve Ralph, fisheries, aquatic ecology, rivers
- 14 Laura Riege, aquatic ecology, estuaries, experimental design, contaminants
- 15 Teal Riege, field ecologist
- 16 Andrew Simon, river hydrogeomorphology
- 17 Sandra Slayton, fisheries, aquatic ecology
- 18 John Spranza, fisheries, aquatic ecology, water quality, wetlands
- 19 Ryan Stifter, economics
- 20 Robert Stoddard, fisheries, aquatic ecology, rivers, lakes, water quality
- 21 Thomas Taylor, Fisheries, Aquatic ecology, estuaries, rivers
- 22 Rosemary Thompson, aquatic and terrestrial ecology, monitoring
- 23 Robert Thomson, Hydrology, water quality, limnology
- 24 Curtis Weeks, water quality, estuaries
- 25 Rick Williams, terrestrial ecology, birds
- 26 Larry Wise, fisheries, aquatic ecology, estuaries
- 27 Paul Wisheropp, hydrology, fluvial engineering, water quality
- 28 Robert Wurgler, project management
- 29 Barbara Wyse, economics

**1 11.5.5 CBEC**

- 2 Chris Bowles, hydraulics, hydrology, sediment transport, numerical modeling, geomorphology
- 3 Chris Campbell, hydraulics, hydrology, sediment transport, numerical modeling, geomorphology, GIS
- 4 Christopher Hammersmark, geomorphology, hydraulics, hydrology, numerical modeling
- 5 April Sawyer, hydraulics, aquatic ecology, numerical modeling, GIS
- 6 John Stofieth, hydraulics, hydrology, sediment transport, numerical modeling, geomorphology, GIS

**7 11.5.6 CH2M HILL**

- 8 Lucas Bair, natural resource and environmental economics
- 9 Gwen Buchholz, environmental engineering
- 10 Rajat Chakraborti, hydrology and hydrodynamics
- 11 Chandra Chilmakuri, hydrology and hydrodynamics
- 12 Tapash Das, climate variability and change, basin scale hydrological modeling and analysis,  
13 sustainable water resources planning and management
- 14 Rosemarie Dimacali, hydrodynamic modeling
- 15 Carroll Gloria, administration
- 16 Rebecca Fugate, administration
- 17 Pam Goulart, administration
- 18 Stephen Hatchett, natural resource and environmental economics
- 19 Connie Hathaway, administration
- 20 Jagjit Kaur, hydrology and hydrodynamics
- 21 Robert Leaf, water resources modeling
- 22 Duncan MacEwan, natural resources economics
- 23 Chakradhar Goud Malakpet, hydrology and hydrodynamics
- 24 Armin Munévar, lead hydrology and hydrodynamics
- 25 Sirisha Nemani, hydrology and hydrodynamics
- 26 Pam Newsome, administration
- 27 Jessica Prince, hydrology and hydrodynamics
- 28 Marcelo Reginato, hydrology and hydrodynamics
- 29 Janet Rheem, administration
- 30 Ashraf Shaqadan, hydrology and hydrodynamics

- 1 Paula Silva, hydrology and hydrodynamics
- 2 Amy Stapley, Administration
- 3 Derya Sumer, hydrology and hydrodynamics
- 4 Giuseppe Tomasino, civil engineering
- 5 Lee Traynham, hydrology and hydrodynamics
- 6 Kyle Winslow, hydrology and hydrodynamics

### 7 **11.5.7 Conservation Biology Institute**

- 8 Wayne Spencer, Independent Science Input Facilitation

### 9 **11.5.8 Cramer Fish Sciences**

- 10 Paul Bergman, modeling and analysis
- 11 Anna Brodsky, data presentation
- 12 Bradley Cavallo, technical expert
- 13 Steven Cramer, modeling and analysis
- 14 Phil Gaskill, technical writing
- 15 Kay Holzweissign, library research
- 16 Jenny Melgo, processing flow data
- 17 Kirsten Sellheim, fish biology
- 18 Steve Zeug, modeling and analysis

### 19 **11.5.9 Ducks Unlimited**

- 20 Jeffrey McCreary, strategy analysis and mitigation
- 21 Mark Petrie, TrueMet modeling, impact analysis and mitigation
- 22 Kevin Petrik, GIS, TrueMet Model
- 23 Aaron Will, project management, waterfowl biology

### 24 **11.5.10 Ebbin, Moser + Skaggs**

- 25 Marc Ebbin, lead outside counsel, strategy, document architecture, adaptive management,
- 26 assurances, legal review, QA/QC review of all chapters, lead author of Implementation Structure
- 27 chapter and Implementing Agreement
- 28 Sean Skaggs, governance, legal review, implementing agreement

1 **11.5.11 Economic Insights**

2 Wendy Illingworth, economics

3 **11.5.12 ESA PWA**

4 Elizabeth Andrews, floodplain restoration feasibility

5 Ann Borgonovo, economics, wetland restoration feasibility

6 Matthew Brennan, wetland restoration feasibility

7 Stephen Crooks, wetland restoration feasibility

8 Eddie Divita, wetland restoration feasibility

9 Eric Ginney, south Delta habitat and flood planning/floodplain restoration feasibility

10 Christian Nilsen, floodplain restoration feasibility

11 Jessica Olson, wetland restoration feasibility

12 Michelle Orr, wetland restoration feasibility

13 Minta Schaefer, floodplain restoration feasibility

14 Lindsey Sheehan, wetland restoration feasibility

15 Christina Toms, wetland restoration feasibility

16 Elena Vandebroek, wetland restoration feasibility

17 Louis White, Economics, wetland restoration feasibility

18 **11.5.13 ESSA Technologies, LTD**

19 Clint Alexander, ecological modeling flows tool

20 **11.5.14 The Essex Partnership**

21 Jim Anderson, fisheries

22 Karen Biastre, administration

23 Bruce DiGennaro, facilitation

24 Ron Kneib, aquatic ecology

25 Jonathan Petrillo, restoration ecology

26 Denise Reed, coastal geomorphology

27 Kenny Rose, fish population modeling

1 **11.5.15 Estep Environmental Consulting**

2 James Estep, Lead Wildlife Ecology

3 **11.5.16 Glibert, Patricia**

4 Patricia Glibert, aquatic nutrients and foodweb

5 **11.5.17 Hallmark Group**

6 Chuck Gardner, project management

7 Karen Moon, contract management

8 **11.5.18 Hansen, Eric**

9 Eric Hansen, wildlife ecology

10 **11.5.19 Hanson Environmental**

11 Danielle Favella, fisheries biology

12 Charles Hanson, lead fisheries ecology

13 Sandra Hanson, fisheries biology

14 Traci Linder, fisheries ecology

15 Toni Sanders, fisheries biology

16 Natalie Stauffer, fisheries ecology

17 **11.5.20 International Crane Foundation**

18 Gary Ivey, wildlife ecology

19 **11.5.21 Michael MacWilliams**

20 Edward Gross, (subcontractor to Michael MacWilliams), hydrology and hydrodynamics

21 Michael MacWilliams, hydrology and hydrodynamics

22 **11.5.22 M. Cubed**

23 David Mitchell, economics

24 **11.5.23 R2 Resource Consultants, Inc.**

25 Robert Lessard, fisheries ecology (subcontractor to R2)

26 Albert Noble Hendrix, fisheries ecology

## 1 **11.5.24 Resource Management Associates**

2 Mark Ackerman, numerical model integration software

3 Steven Andrews, surface water flow, water quality, sediment transport, and particle simulation  
4 modeling

5 Ben Chacon, computational fluid mechanics

6 Sherry Dahlquist, contract administration, document preparation

7 John DeGeorge, technical lead, multidimensional models for surface water systems, RMA Bay/Delta  
8 Model application

9 Joshua DeGeorge, computer systems administration

10 Rami Gasim, computer systems administration

11 Stacie Grinbergs, tidal marsh restoration, surface water flow, water quality, sediment transport, and  
12 particle simulation modeling (RMA Bay Delta Model)

13 Edward Gross, surface water flow, water quality, sediment transport, and particle simulation  
14 modeling

15 Marianne Guerin, surface water flow, water quality including nutrients and temperature, sediment  
16 transport, and particle simulation (RMA Delta model, DSM2 HYDRO, QUAL, and PTM)

17 Shannon Larson, data management, numerical model testing and QA/QC

18 Peter Morris, model testing and QA/QC

19 Shannon Newbold, GIS mapping

20 Richard Rachiele, surface water flow, water quality, sediment transport, and particle simulation  
21 modeling, RMA Bay Delta Model

22 Ryan Ripken, database systems

23 Donald Smith, river-reservoir, water quality, and temperature modeling

## 24 **11.5.25 QEDA**

25 Albert Noble Hendrix, fisheries ecology

## 26 **11.5.26 Science Applications International Corporation**

27 Paul Cylinder, project management

28 Jean-Luc Cartron, wildlife ecology

29 Joel Degner, data analysis and GIS

30 John DeMartino, GIS

31 Kim Duvall, editing, document production

- 1 Vanessa Emerzian, coordination
- 2 Anthony Finley, editing, document production
- 3 Catherine Fitzgerald, graphic arts
- 4 Victoria Frank, data analysis and data validation
- 5 Juan Pablo Galvan, terrestrial ecology
- 6 John Gerlach, lead botany and vegetation
- 7 Catrina Gomez, terrestrial ecology
- 8 Sharon Goodhart, project control
- 9 Chadi Groome, project coordination
- 10 Daniel Heilprin, fisheries ecologist
- 11 Jon Hilliard, environmental planning
- 12 Monica Hood, covered activities
- 13 Christopher Hunt, fisheries ecology
- 14 Andrew Knaack, project control
- 15 Stephan Kohlmann, terrestrial ecology
- 16 Claudia Laughlin, graphic design
- 17 Jamie Leiendecker, applied geospatial science
- 18 Christopher McColl, data management and GIS
- 19 Thomas Mulroy, botany
- 20 Trevor Pattison, terrestrial ecology
- 21 Ellen Rager, document production manager
- 22 Pete Rawlings, natural communities and terrestrial resources
- 23 Trina Smith, administration
- 24 Monica Stillman, restoration ecology
- 25 Bernice Tennenbaum, wildlife biology and marine mammals
- 26 Aaron Tibbs, administration
- 27 Gregory Wadsworth, document production
- 28 Laurel Widman, graphic arts
- 29 Richard Wilder, aquatic resources and project management
- 30 Joe Willich, project management

- 1 Holly Wilson, project and meeting coordination
- 2 Chris Woods, GIS
- 3 **11.5.27 SWALE Inc.**
- 4 Kateri Harrison, independent science input facilitation
- 5 **11.5.28 WaterWise Consulting**
- 6 Sophia Unger, fisheries ecology