Division of Flood Management

Principal-In-Charge
John Bischoff, PE, GE

Quality Assurance/ Quality Control
Lelio Mejia, PhD, GE

Procurement, Contract & Administrative
Don Fournier

Program Management
Said Salah-Mars, PhD, PE
Program Manager

Martin W. McCann Jr., PhD
Technical Manager

Task Order (TO) Management
TO Manager to be appointed for each TO from Topic Expertise or Project Management Pool, as relevant

Risk Resource Group

C. Allin Cornell, PhD	*Risk Analysis, Uncertainty, Seismic*
Gregory Baecher, PhD	*Probability, Geotech, Reliability*
Des Hartford, PhD	*Policy & Risk Analysis, Geotech, Floods*
Ralph Keeny, PhD	*Decision Analysis, Public Policy*
David Mitchell	*Economics, Water Resources*

Subconsultants

URS	URS Corporation
JBA	Jack R. Benjamin & Associates, Inc.
EI	Economic Insights
GMX	Geomatrix Consultants, Inc.
HEI	Hansen Environmental Inc.
HTE	Hultgren—Tillis Engineers
HM	HydMet
HFI	Hydro Focus, Inc.
I	Independent
JS	Jones & Stokes
JRP	JRP Historical Consulting
K	Kleinfelder
LLNL	Lawrence Livermore National Laboratory
MBK	MBK Engineers
MN	Moffatt Nichol Engineers
PE&A	Pacific Engineering & Analysis
PWA	Phillip Williams & Associates, Ltd.
RMA	Resource Management Associates
WEI	Watercourse Engineering, Inc.
WLA	William Lettis & Associates, Inc.
WR	Wood Rogers

Topic Expertise

Hazards

Seismic Hazard/Ground Motion
- **Ivan Wong (URS)**
- **Kevin Coppersmith (I)**
- **Robert Youngs (GMX)**
- William Lettis (WLA)
- Jeffrey Unruh (WLA)
- Kathryn Hanson (GMX)
- Walt Silva (PE&A)

Flood Hazard
- **Mike Radaideh (WR)**
- **Tom MacDonald (URS)**
- Joe Countryman (MBK)

Subsidence
- **Steven Deverel (HFI)**
- **Kevin Tillis (HTE)**
- Scott Shewbridge (K)

Climate Change
- **Philip Duffy (LLNL)**
- Qingyun Duan (LLNL)
- Jack Humphrey (HM)

Other Hazards
- **Ed Hultgren (HTE)**
- **Ron Heinzen (K)**

Levee Assessment & Repair

Levee Integrity/Fragility
- **Said Salah-Mars (URS)**
- **Faiz Makdisi (GMX)**
- Edwin Hultgren (HTE)
- Kevin Tillis (HTE)
- Robert Green (URS)
- Rajendram Arulnathan (URS)
- Scott Shewbridge (K)
- Ron Heinzen (K)

Levee Operation/Maintenance Status
- **Edwin Hultgen (HTE)**
- Ulrich Luscher (URS)

Breach Modeling
- **Mike Deas (WEI)**
- **Tom MacDonald (URS)**
- Said Salah-Mars (URS)
- Philip Meymand (URS)
- Chris Bowles (PWA)
- Kevin Tillis (HTE)
- Scott Shewbridge(K)

Emergency Response & Repair
- **Richard Rhoads (MN)**
- **Michael Forrest (URS)**
- John Roadifer (URS)
- Kevin Tillis (HTE)
- Ron Heinzen (K)

Water Analysis & Management

Hydrodynamics/Water Quality
- **John DeGeorge (RMA)**
- Richard Rachiele (RMA)
- Ed Gross (I)
- Mike Deas (WEI)
- Steve Ritchie (I)
- Terence Cooke (URS)

Water Management
- **Will Betchart (JBA)**
- **Walter Bourez (MBK)**
- John DeGeorge (RMA)
- Steve Ritchie (I)
- Steve Ottemoeller (URS)
- with input from DWR & USBOR Operations

Consequence Analysis

Ecosystem—Fisheries/Aquatic
- **Chuck Hanson (HEI)**
- **Jeffrey Kozlowski (JS)**
- Robert Nielson (URS)

Ecosystem—Other
- **Steve Kellogg (URS)**
- **Steve Leach (URS)**
- **Francesca Demgen (URS)**
- Corinna Lu (URS)
- Dan Weinberg (URS)

Water Export Disruption
- **Will Betchart (JBA)**
- John DeGeorge (RMA)

Economic Impacts
- **Wendy Illingworth (EI)**
- Roger Mann (I)
- Steve Hatchet (I)

Delta Infrastructure & Land Use
- **Scott Kelsey (URS)**
- **Sally Zeff (JS)**
- Richard Rhoads (MN)

Other Impacts—Environmental/ Social/Institutional/Life/Safety
- **Craig Stevens (JS)**
- Janet Barbieri (JS)
- Vance Bente (URS)
- Rand Herbert (JRP)

Risk Analysis & Management

Risk Analysis
- **Martin McCann (JBA)**
- Will Betchart (JBA)
- Kim Lutz (JBA)
- Ram Kulkarni (URS)

Risk Management Strategy & Policy
- **Martin McCann (JBA)**
- **Ram Kulkarni (URS)**

Risk Reduction Alternatives
- **Will Betchart (JBA)**
- **Michael Forrest (URS)**
- Francesca Demgen (URS)
- Chris Bowles (PWA)
- Michael Deas (WEI)
- Edwin Hultgren (HTE)

Supplemental Expertise and Support—From the Indicated Firms, As Needed

Engineering Management
- URS Corporation

Seismology
- URS
- GMX
- WLA

Tidal Processes
- RMA

Terrestrial Biology
- URS

Climate Change
- LLNL
- HM

Public Processes and Policy
- JS

Subsidence/Seepage
- HFI
- HTE
- K
- URS

Recreation
- JS

Vector Management
- URS

Financing
- EI

Wetland Issues
- PWA
- URS

Risk and Decision Analysis
- JBA
- URS

Geomorphology
- WEI
- PWA

Water Quality (THM & Hg)
- RMA
- URS

Exotic Species
- HEI
- URS

Socio-Economics
- JS
- URS
- JRP

Geotechnical Earthquake Engineering
- URS
- GMX
- K

Sediment Transport
- URS
- WEI
- PWA

Aquatic Biology & Fisheries
- HEI
- URS

Delta & Statewide Water Operations
- URS
- JBA
- MBK

Geology
- WLA
- GMX
- URS

Historical Sites/Archaeology
- URS
- JRP

Process Facilitation
- JS

Hydraulics/Hydrology
- URS
- MBK
- WR

Land Use
- JS

Habitat Restoration
- WEI
- PWA
- URS

Simulation Modeling
- URS
- JBA
- RMA
- MBK

Delta Levee Engineering
- URS
- HTE
- K

Transportation & Navigation
- URS
- MN

Avian & Waterfowl Science
- URS
- JS

Economic Impact Analysis
- EI

Geotechnical Engineering
- URS
- GMX
- HTE
- K

GIS/CADD
- URS