Exhibit SVWU 101
Walter Bourez Resume

EDUCATION

- California State University, Sacramento, MS in Civil Engineering, 1995
- California State University, Sacramento, BS in Civil Engineering, 1988

PROFESSIONAL LICENSES, SOCIETIES, and HONORS

- Registered Civil Engineer in California
- Member, American Society of Civil Engineers
- Sacramento-San Joaquin Bay-Delta Hugo B. Fischer Award

PROFESSIONAL HISTORY

2000 - Present	MBK Engineers, Sacramento, CA, Principal
1996 - 1999	Surface Water Resources, Inc., Sacramento, CA, Senior Water Resources Engineer
1989 - 1996	Water Resources Management, Inc., Sacramento, CA, Water Resources Engineer
1987 - 1989	Boyle Engineering, Sacramento, CA, Civil Engineer

PROJECT HISTORY

- COA Analysis – Performed COA sensitivity studies using both CalLite and CalSim II. This analyses explored changes in the percentages for meeting in-basin use and sharing unstored water for export between the Projects, sharing responsibility for meeting Delta outflow requirements added since the original COA was negotiated, and export priority for senior CVP demands. Recreated the original COA analysis using CalSim II under various regulatory conditions, including SWRCB D-1485 with and without CVPIA, and existing operating criteria with D-1641, CVPIA, and current salmon and smelt biological opinions.

- Franks Tract Project – Coauthored spreadsheet model to analyze how CVP/SWP operations would respond to changes in Delta salinity conditions which result from operation of a gate on Threemile Slough. Water operations model simulated changes in upstream reservoir operations, Delta exports, and south-of-Delta deliveries to support the evaluation of various project alternatives, selection of a preferred alternative, and development of environmental documentation. Project included review of project operations and benefits when operated under the Biological Opinions for Delta smelt (2008) and Chinook salmon (2009).

- Long-Term Water Transfer EIS – Coauthored spreadsheet model of CVP/SWP operations to simulate movement of transfer water through system. Model simulated groundwater substitution, crop idling, reservoir release, and conserved water transfers from the Sacramento and San Joaquin Valley for diversion at Freeport, Contra Costa WD, and CVP/SWP south Delta export facilities. Updated model to include ability to regulate transfer water in CVP/SWP reservoirs, and utilize available export capacity in July through September.

- Evaluation of State Water Resources Control Board Water Availability Analysis - Completed evaluation for the State Water Resources Control Board (SWRCB) to review their method of Water Availability Analysis (WAA) for accuracy and defensibility. The SWRCB WAA is used to determine if water is available for diversion and to evaluate the potential environmental impacts due to additional appropriations. Natural flow must be determined when developing a WAA; and most streams where a WAA is needed are not gaged. Thus, natural flow is often determined using rainfall-runoff methods. This review focused on methods for estimating natural flow based on precipitation records for delineated watershed areas.

- Revise CalSim Model for Colusa Basin and Sacramento River - Provide a revision to the CalSim model schematic to better represent the physical characteristics of the Colusa Basin, Stony Creek, and portions of the Sacramento River. The task included revising the model connectivity and logic that routes water through the system. A working version of the model was produced, with model development and refinement of model

inputs in order to: 1. Revise depiction of agricultural demands; 2. Validate diversions and stream flows using recent historical data; 3. Revise accretions in Colusa Basin; 4. Revise representation of refuge operation.

- Hydrologic Support for Development of CalSim-III - Hydrologic analysis and support needed to improve and enhance the CalSim-II water resources planning model. The project goals are to: 1. Improve accuracy of representation of water supplies and water use; 2. Reconcile differences between CVGSM and CalSim; 3. Reduce development time for new hydrology inputs associated with new land use scenarios; 4. Represent groundwater sufficiently accurately for impact analysis and preliminary conjunctive use studies; 5. Be relatively simple, accessible, and well-documented. Performed water budgets for CalSim III to determine natural flows, water demands, and available water supply.

- Upper San Joaquin River Basin Storage Investigation - Served as an integral part of the team evaluating new storage in the upper San Joaquin River Basin watershed for Reclamation. Responsible for development of analytical tools and performing hydrologic analysis for reservoir operations and conjunctive management of Friant water supply. Evaluated effects of new storage on CVP/SWP water system using CalSim II.

- San Joaquin River Basin CalSim Model Development - Key developer of the CALSIM depiction of the San Joaquin River Basin and reservoirs including New Hogan, New Melones, Don Pedro, New Exchequer, Eastman, Hensley, and Millerton Reservoirs; including operations of all water districts in the San Joaquin River Basin. Calculate stream accretions/depletion by estimating unimpaired precipitation runoff by stream reach.

- Delta Risk Management Strategy - Developed reservoir operations model to simulate CVP/SWP system response to Delta levee breaches and changed Delta conditions. Integrated reservoir operations module with Delta hydrodynamic calculator to dynamically operate system reservoirs and revise water allocations in the CVP/SWP export area.

- Folsom Dam & Reservoir Interim Reoperation Agreement - Sacramento Area Flood Control Agency (SAFCA). Performed hydrologic and temperature model simulations for the SAFCA Interim Reoperation of Folsom Dam and Reservoir Environmental Impact Report/Environmental Assessment. Primary hydrologic issues requiring consideration included changes in reservoir storage and river flows in the American River and Central Valley Project/State Water Project system. Provided technical assistance on all water supply, power analysis, and temperature studies for impact analyses.

- Sacramento Area Water Forum Plan Supplement and Environmental Impact Report – City/County Office of Metropolitan Water Planning - Developed modeling assumptions regarding reservoir operations and hydrologic data for all hydrologic and temperature analyses related to the Water Forum EIR. Performed all hydrologic, temperature, and salmon mortality modeling for the CVP and SWP system that was used as the basis of impact assessment for water supply, power, fisheries, riparian vegetation, recreation, and cultural resources.

- Hamilton City Pumping Plant Fish Screen Improvement Project EIR/EIS - Glenn-Colusa Irrigation District - Developed the water supply model to assess environmental impacts associated with project alternatives for the Hamilton City Pumping Plant Fish Screen Improvement Project. Performed the temperature and salmon mortality modeling for assessing impacts due to project alternatives.

- Long-Term Groundwater Stabilization Project EIR - Placer County Water Agency/Northridge Water District - Developed hydrologic and temperature modeling assumptions and performed model simulations. Designed model simulations to investigate potential effects on fishery, riparian habitat, power supply, water-related recreation, and cultural resources along the American River and CVP system.

- Central Valley Project Water Supply Contracts EIS/EIR - Sacramento County Water Agency - Performed the hydrologic and water temperature modeling to determine potential impacts to the lower American River, Sacramento River, and the Delta that could result from diverting a portion of Central Valley Project Water Supply Contracts P.L. 101-514 water from Folsom Reservoir. Worked closely with SWRI fishery biologists to design the hydrologic modeling studies and to determine output needed to conduct the necessary environmental assessments.