Resume

Paul D. Cylinder, Ph.D.

Western Director for Conservation Planning Science Applications International Corporation (SAIC) 1810 S Street Sacramento, CA 95811

EDUCATION

Ph.D., Botany, University of California, Berkeley, 1987 B.A., Biological Sciences, University of Chicago, 1980

WORK SUMMARY

Dr. Cylinder is a recognized leader in habitat conservation planning, regulatory compliance, and natural resources planning. He has 20 years of experience serving clients in regulatory compliance. He has served as program manager, principal-in-charge, and project manager for a wide range of multidisciplinary and biological resources-related environmental projects. He provides high-level expertise in federal and state environmental regulations, including the Endangered Species Act (ESA), Clean Water Act (CWA) Section 404, National Environmental Policy Act (NEPA), California Endangered Species Act (CESA), California Environmental Quality Act (CEQA), and California Fish and Game Codes. He has prepared project and regional habitat conservation plans (HCP), biological assessments (BA), natural community conservation plans (NCCP), and integrated natural resources management plans (INRMP). His experience and expertise include facilitation of large groups in regulatory compliance processes under ESA and CWA; leading preparation of large complex BA's under ESA Section 7 and HCP's under ESA Section 10; development of innovative uses of existing regulations for compliance with ESA and CWA; development of creative approaches to resolving conflicts between human development and the conservation of natural resources. Dr. Cylinder has presented workshops on ESA compliance through university extensions for over 15 years and has served four times as co-chair of the University of California, Davis Extension Annual Conference on the Endangered Species Act.

PROFESSIONAL EXPERIENCE

Described below are recent projects for which Dr. Cylinder had a major role. This experience includes projects at SAIC and with his former employers.

Projects with Science Applications International Corporation (2005 to Present)

Bay-Delta Conservation Plan (BDCP) – California Resources Agency and BDCP Steering Committee (over 25 stakeholder members). Consulting Team Program Manager for the BDCP. BDCP is a joint HCP/NCCP for the Sacramento-San Joaquin Delta to provide Federal and California Endangered Species Act compliance for water deliveries from Federal and State water projects supplying over 25 million people and 2.5 million acres of farmland. Budget \$5.6 million.

Butte Regional HCP/NCCP – Butte County Association of Governments. Program manager for a regional habitat conservation plan covering approximately 620,000 acres of lowland Butte County and including portions of the Feather River. Addressing grasslands, wetlands (including vernal pools), oak woodlands, and agricultural lands. Budget approximately \$1.8 million.

Laguna Reservoir Project Environmental Assessment and Permitting -- Bureau of Reclamation Yuma Area Office. Program manager for NEPA and CWA Section 404 compliance for the restoration of capacity of the Laguna Reservoir on the Colorado River near Yuma, AZ. Supported Reclamation preparation of compliance documents and development of mitigation strategy, including a wetlands mitigation plan. Approximately \$350k budget.

Lower Colorado River Multi-Species Conservation Program (MSCP) Science Strategy – Bureau of Reclamation. Program manager for development of a science strategy report in support of implementation of the 50-year conservation program for 400 miles of the Colorado River from Lake Mead to the Mexican border. Approximately \$80k budget.

Lower Colorado River MSCP Site Selection Criteria – Bureau of Reclamation. Program manager for development of criteria for determining the most appropriate and cost effective sites for restoration of endangered species habitat along the lower Colorado River. Document provides clear guidance and supports implementation of the \$620 million MSCP. Approximately \$130k budget.

Campo Indian Tribe Landfill Project Endangered Species Compliance – Bureau of Indian Affairs. Served as principal regulatory specialist supporting the Bureau of Indian Affairs (BIA), Campo Indian Tribe, and BLT Enterprises in compliance with ESA Section 7 for impacts of a proposed landfill on the Quino checkerspot butterfly. Provided negotiation support among the BIA, project applicants, and U.S. Fish and Wildlife Service. Approximately \$50k budget for task.

Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan – Jones & Stokes Associates. Providing high-level technical expertise and advice to client regarding compliance with ESA and California Natural Community Conservation Planning Act and regional CWA compliance for a regional conservation plan covering build out of Silicon Valley in San Jose and Santa Clara County, CA. Budget \$16k.

Sample recent projects while a Principal with Jones & Stokes Associates, Inc. (1988 to 2005)

Lower Colorado River Multi-Species Conservation Program—Science Applications International Corporation (Prime). Served as principal-in-charge for a multi-species habitat conservation plan (HCP), Section 7 biological assessment, and Section 2081

permit covering 400 miles of river, 720,000 acres of floodplain, and 31 species of fish, wildlife, and plants from Lake Mead to the Mexican border. Program participants included Bureau of Reclamation; Fish and Wildlife Service; Bureau of Indian Affairs; National Park Service; water, power, and fish and game agencies from Arizona, Nevada, and California; and five tribal governments. Final ESA and CESA permits signed in April 2005. Approximately \$1.8 million budget.

CALFED Program Multi-species Conservation Strategy—CALFED Bay-Delta Solutions Program. Principal-in-charge for unique multi-species conservation strategy document that served as a Section 7 ESA biological assessment and NCCP for entire CALFED program. Document covered the Sacramento—San Joaquin River Delta (700,000 acres), north San Francisco Bay, Sacramento and San Joaquin River systems, and 12 potential water storage sites and evaluated 243 species of fish, wildlife, and plants. Final ESA and NCCP authorization provided in August 2000. Approximately \$750k budget.

East Contra Costa County HCP/NCCP and EIR/EIS—Habitat Conservation Association. Principal-in-charge for multi-species regional HCP/NCCP and regional CWA Section 404 compliance for 174,000 acres of eastern Contra Costa County. Participants include cities of Brentwood, Clayton, Oakley, Pittsburg, regional park district, and water district. Document covers 27 species of plants and wildlife. Approximately \$1.3 million budget.

Desert Tortoise and Rare Plant Surveys for the Groundwater Project — Southern Nevada Water Authority. Served as project director for protocol level surveys of desert tortoise and sensitive plant species and full counts of cactus and yucca plants along 80 miles of proposed water pipeline corridor north of Las Vegas, NV. On short notice, rapidly developed contract and fielded a team of biologists to provide key NEPA and ESA compliance data in support of the Groundwater Project. Approximately \$480k budget.

Mountain Park Project CWA Section 404/California Fish and Game Code Section 1602 Permitting—The Irvine Community Development Company. Served as principal-in-charge for delineation of wetland, stream, and riparian resources; development of individual CWA Section 404 permit application and alternatives analysis and streambed alteration agreement for master-planned residential development on 3100-acre site. Approximately \$250k budget.

ADDITIONAL TRAINING (Samples)

- SAIC Senior Project Management
- Frontline Leadership
- Facilitating for Results
- Federal Wetland Regulation
- · Wetland Delineation
- Hydric Soils and Wetland Hydrology

- Basic Elements of Management Leadership
- Professional Supervision Skills
- Tropical Ecology

SELECTED PUBLICATIONS

Cylinder, P.D., K. Bogdan, D. Zippin. 2004. Understanding the habitat conservation planning process in California: a guidebook for project and regional conservation planning. Institute for Local Self Government, Sacramento, California.

Cylinder, P.D., K. Bogdan, A. Zohn, J. Butterworth. 2004. Wetlands, streams, and other waters: regulation, conservation, mitigation planning. Solano Press, Point Arena, California.

Cylinder, P.D. 1997. Monterey pine forest conservation strategy. Fremontia 25(2):21-26.

Cylinder, P.D. 1995. The Monterey ecological staircase and subtypes of Monterey pine forest. Fremontia 23(1):7–13.

Cylinder, P., K. Bogdan, E. Davis, A. Herson. 1995. Wetlands regulation: a complete guide to federal and California programs. Solano Press, Point Arena, California.

Cylinder, P.D. 1987. Competition for pollination in a montane meadow. Ph.D. dissertation. University of California, Berkeley, California.