Michael S. Brown

ADDRESS 850 Cathedral Vista Ln

Santa Barbara, CA 93110

PHONE 805-898-0980

E-MAIL <u>msbrownsb@gmail.com</u>

mike@bw-environmental.com michaelsbrown@ucsb.edu

EDUCATION Ph.D., Cornell University, City and Regional Planning, 1984

M.R.P., Cornell University, City and Regional Planning, 1980 A.B., University of California at Santa Cruz, Politics, 1974

PROFESSIONAL EXPERIENCE

1/06-present Principal, Brown and Wilmanns Environmental, LLC, Santa Barbara, CA

Founder and managing partner of environmental and sustainability management consulting firm. Services include sustainability policies, strategies, and programs; technical evaluations of activities, products, and services, including life cycle assessment; sustainability performance metrics and standards; economic and environmental performance of product end-of-life strategies; corporate social responsibility performance; and environmental and social responsibility reporting. Clients include Alaska Air, Aramark, Aveda, Ben and Jerry's, Burberry, Canada Goose, Canadian Tire, Cartridge World, Caesarstone, City of Irvine, CA, Clif Bar, Clorox, Columbia Sportswear, Cuyana, DockATot, Dogwood Alliance, Eileen Fisher, Ergobaby, Estee Lauder, Faith in Nature, Foria, Greenfire, G-III, Good Housekeeping Institute, Gypsum Association, ICL, Intelligent Nutrients, Iululemon, Lubrizol, Made-By, Mindbody, Mo'olelo Theatre, Mountain Equipment Coop, Made-By, New Balance, Nike, Norm Thompson, Numi, Outdoor Industry Association, Patagonia, prAna, Responsible Business Association, Revolution Living, SGS, Shift Advantage (The Real Real), Suay, Sustainable Apparel Coalition, Termokir, Textile Exchange, The Renewal Workshopp, Timberland, TRC Engineering, Trove, Twine, Under Armour, Unifi, Yolo Colorhouse.

W12, W15, F15,

Lecturer, University of California at Santa Barbara, Santa Barbara, CA

F16, W17, F17,

W18, F18, W19, ENV S 118 Industrial Ecology W20, S20, W21, ENV S 193CE Circular Economy

S21, W22, S22,

ENV S 193SI Sustainability and Innovation

W23, W24, S24

10/00, 10/01 Adjunct Professor, Antioch University, Santa Barbara, CA

Environmental Management and Marketing short course

5/99-3/06 Principal, Michael S. Brown and Associates, Santa Barbara, CA

Consultancy specializing in environmental strategies for business. Clients include large retail chain, apparel manufacturer, and winery. Business focus covers the integration of environmental programs with company-specific organizational structures, development of training and education strategies on sustainability, use of metrics in establishing corporate goals, and the strategic use of research in promoting long-term environmental goals. Projects include research on integrating materials and product development with sustainability principles, sourcing of alternative materials, alternative energy choices, and consumer education.

1/93-4/99 Director of Environmental Research and Development, Patagonia, Inc., Ventura, CA

Oversaw company-wide efforts to eliminate environmental impacts associated with products and corporate activities. Responsible for developing strategic plans and corporate goals, researching impacts and associated alternatives to current practices, and educating staff, customers, suppliers, and the interested businesses. Developed principles of sustainability and educational tools for staff and management team. Developed life cycle tools to analyze products and production processes identifying significant environmental opportunities. Implemented product environmental review process that identified product related environmental improvements. Contributed to marketing efforts related to company environmental performance. Member of the team that led the successful conversion of all cotton-containing products to organically grown cotton. Cofounder of EcoPartners, a group of environmental sustainability managers at companies interested in establishing state-of-the-art environmental programs.

2/90-12/92 Manager of Environmental Affairs, Office of Environmental Affairs, City of Irvine, Irvine, CA

Responsible for reducing pollution and related environmental hazards. Administered City ordinance restricting the use of chlorofluorocarbons and other ozone-depleting chemicals; developed regulations, conducted compliance program, and provided technical assistance. Wrote and received state grant to provide pollution prevention assistance to industry and training to planning and building inspection staff. Promoted pollution prevention policies in the planning and development review process; assisted operating divisions in regulatory compliance; assisted in development of solid waste source reduction and recycling plan.

11/86-2/90 Director, Office of Safe Waste Management, Massachusetts Department of Environmental Management, Boston, MA

Responsible for policy, budgets, legislative relations, intra- and interagency coordination, and public outreach. Oversaw technical assistance to businesses, nonprofit organizations, communities, and private citizens on hazardous waste management, long-term waste management planning, and grant programs for communities. Established source reduction technical assistance program, received \$290,000 EPA grant for innovative technical assistance program, distributed matching grants for household hazardous waste collections, and developed a state hazardous waste management planning document.

11/06 2/06

12/85-10/86

Program Manager, Office of Safe Waste Management, Massachusetts Department of Environmental Management, Boston, MA

Developed statewide programs encouraging small quantity generators of hazardous waste to reduce waste streams and comply with state and federal regulations. Conducted outreach effort to 2,300 auto body shops that increased regulatory compliance and good management practices. Supervised program staff. Wrote 1987 Statewide Environmental Impact Report on Hazardous Waste Management.

7/84-12/85

Research Associate, Center for the Study of Drug Development, Tufts University, Boston, MA Principal investigator on projects concerning patient attitudes towards drug risks and benefits and use of expert advisory committees by regulatory agencies. Coordinated lecture series on medical practice and health sciences.

2/84-5/85

Instructor, Hobart and William Smith Colleges, Geneva, NY

Taught introductory course on urban and regional planning.

10/81-2/84

Research Analyst, Program on Science, Technology, and Society, Cornell University, Ithaca, NY

Functioned as co-investigator on National Science Foundation grant evaluating worker attitudes towards toxic chemicals. Coordinated field work and supervised interviewers. Prepared survey instrument and collected data from union, industry, and government sources. Analyzed data, co-authored book and articles on research.

6/80-9/81

Regulatory Analyst, Office of Toxic Substances, U.S. Environmental Protection Agency, Washington, DC

Conducted research and analysis as member of chlorofluorocarbon regulatory team. Analyzed regulatory alternatives with a special emphasis on market incentives, investigated substitute chemicals, and wrote policy papers, draft regulations, draft report to Congress, and speeches. Reviewed exemption requests. Chaired CFC work group within the Inter-Agency Regulatory Liaison Group.

PUBLICATIONS BOOKS

D. Nelkin and M. Brown, *Workers at Risk: Voices from the Workplace*, Chicago: University of Chicago Press, 1984.

ARTICLES

- C. Bennett and M. Brown, "Energy and Waste Management," in A. Sahota (ed.), *Sustainability:* How the Cosmetics Industry is Greening Up, Chichester, W. Sussex: John Wiley & Sons, 2014.
- M. Brown, "Going a Deeper Shade of Green," Organic Processing 5(3):32-42, May-June 2008.
- D. Smith and M. Brown, "Sustainability and Corporate Evolution: Integrating Vision and Tools at Norm Thompson Outfitters," Journal of Organizational Excellence 22(4):3-14, 2003.
- Y. Chouinard and M. Brown, "Going Organic: Converting Patagonia's Cotton Product Line," *Journal of Industrial Ecology 1:1*, Spring 1997.
- M. Brown and E. Wilmanns, "Quick and Dirty Environmental Analyses: What Do We Need to Know?" *Journal of Sustainable Product Design*, Issue 1, 1996, pp. 28-35.
- J. Walsh and M. Brown, "Pricing Environmental Impacts: A Tale of Two T-shirts," *Illahee* 11:3/4:174-181, 1996.

- L. Hopkins, D. Allen, and M. Brown, "Quantifying and Reducing Environmental Impacts Resulting from Transportation of a Manufactured Garment," *Pollution Prevention Review 4*(4): 491-500, 1994.
- M. Brown, "Irvine's Balancing Act with CFCs," Los Angeles Times, July 30, 1994, p. B7.
- M. Brown and A. Hart, "Reducing the Use of Ozone Depleting Chemicals: The Irvine, California Ordinance," *Journal of the Air and Waste Management Association* 42(4):429-432, 1992.
- M. Brown and K. Lyon, "Holes in the Ozone Layer: A Global Environmental Controversy," in D. Nelkin (ed.), *Controversy: Politics of Technical Decisions*, Beverly Hills, CA: Sage Publications, 3rd. Ed., 1992.
- M. Brown, L. Wastila, C. Barash, and L. Lasagna, "Patient Perceptions of Drug Risks and Benefits," *RISK--Issues in Health and Safety* 1(Summer):203-216, 1990.
- M. Brown, "Building a Progressive Agenda in Environmental Planning," *Planners Network*, #79:3-4, 1989.
- B. Kelley, C. Goldwater, and M. Brown, "Evaluation of a Statewide Matching Grant Program for the Collection of Household Hazardous Waste," *JAPCA 39*(4):427-430, 1989.
- M. Brown and M. Reich, "Why AIDS Drugs are Withheld," The Washington Post, January 24, 1989.
- M. Brown, "Reducing Toxics Use and Hazardous Waste," *New England Sierran* 19(10):6, December 1988-January 1989.
- M. Brown, B. Kelley, and J. Gutensohn, "A Pilot Outreach Program for Small Quantity Generators of Hazardous Waste," *American Journal of Public Health* 78(10):1343-1347, 88.
- M. Brown and B. Richard, "Advisory Committees and the Drug Approval Process," *Journal of Clinical Research and Drug Development 2*:15-27, 1988.
- M. Brown, "Communicating Information about Workplace Hazards: Effects on Workers' Perceptions of Risks," in B. Johnson and V. Covello (eds.), *The Social and Cultural Construction of Risks*, Dortrecht, Netherlands: Reidel Publishers, 1987.
- M. Brown, "Assessing Health Hazards in the Workplace," Business and Health 10(3)14-18, 1986.
- M. Brown, "Disputed Knowledge: Worker Access to Hazard Information," in D. Nelkin (ed.), *The Language of Risk: Competing Perspectives on Occupational Health*, Beverly Hills, CA: Sage Publications, 1985.
- D. Nelkin and M. Brown, "Observations on Workers' Perceptions of Risks, *Science, Technology, and Human Values 9*(2):3-10, 1984.
- D. Nelkin and M. Brown, "Knowing About Occupational Risks," *Science for the People 16*(1):17-22 1984.
- D. Nelkin and M. Brown, "Taking Risks," Society 21(5):43-47, 1984.
- M. Brown, "Acceptable Risks: Occupational Health in the Nuclear Industry," Ithaca, NY: PURS Publications in Environmental Health, 1980.
- M. Brown, "Setting Occupational Health Standards: The Vinyl Chloride Case," in D. Nelkin (ed.), *Controversy: Politics of Technical Decisions*, Beverly Hills, CA: Sage Publications, 1979, 2nd Ed., 1984, 3rd Ed., 1992.

REPORTS

- "California Gypsum Wallboard Material Flow Study and Recovery and Recycling Analysis," Gypsum Association, 2023.
- "2015-2016 Earth and Community Care Report," Aveda Corporation, 2017.
- "2013-2014 Earth and Community Care Report," Aveda Corporation, 2015.
- "2013-2014 Earth and Community Care Report," Aveda Corporation, 2015.
- "Made to Move," 2012 Corporate Responsibility Report, New Balance, Inc.
- "2007-2008 Earth and Community Care Report," Aveda Corporation, 2009.
- "2006 CERES Brochure," Aveda Corporation, Aveda Corporation, 2007.
- "2005 CERES Report," Aveda Corporation, Aveda Corporation, 2006.
- "South Coast Regional Impacts of Growth Study," Santa Barbara Region Economic Community Project, Fall 2003.

- "2001-2002 CERES Report," Aveda Corporation, September 2003.
- "2000 CERES Report," Aveda Corporation, April 2003.
- "Sustainability Toolkit," Norm Thompson Outfitters, Spring 2002.
- "1999 CERES Report," Aveda Corporation, August 2001.
- "Patagonia Environmental Assessment Report, 1995-1996," August 1996.
- "Organic Cotton Story," Summer 1995.
- "Patagonia Environmental Assessment Report, 1994-1995," July 1995.
- "Patagonia Environmental Assessment Report, 1993-1994," August 1994.
- "1987 Statewide Environmental Impact Report on Hazardous Waste Management in Massachusetts," Office of Safe Waste Management, Massachusetts Department of Environmental Management, Boston, MA, July 1987.
- "Final Report: Auto Body Shop Project," prepared for the U.S. Environmental Protection Agency, Region I, Office of Safe Waste Management, Massachusetts Department of Environmental Management, Boston, MA, June 1987.

UNPUBLISHED/ PRESENTATIONS

- M. Brown, "The Right to Know: Hazard Information and the Control of Occupational Health Risks," Ph.D. dissertation, Department of City and Regional Planning, Cornell University, Ithaca, NY, 1984.
- M. Brown, "California Gypsum Wallboard Material Flow Study and Recovery and Recycling Analysis," Gypsum Association Sustainability Task Group, September 2023.
- M. Brown, "Moving Forward on Sustainability at MindBody," MindBody webinar presentation, February 2023.
- M. Brown, "Life Cycle Assessment Issues and Hacks," Tel Aviv University, Graduate LCA course, November 2021.
- M. Brown, "The Textile Exchange Material Snapshots," Textile Exchange webinar presentation, February 2016.
- M. Brown, "Working on the Supply Chain: A Life Cycle Commitment," presented at Monterey Institute for International Studies, October 2014.
- M. Brown, "Bridging Sustainability and Business Strategy," presented at Porter School of Environmental Studies, Tel Aviv University, November 2013.
- M. Brown, "Setting Sustainability Goals: Making Good Goals that Work for You," Sustainable Food Trade Association webinar presentation, February 2013.
- M. Brown, "The Art and Science of Clean Business," presented at Clean Business Investment Summit, August 2012.
- M. Brown, "Nike Materials Sustainability Index (MSI)," BizNGO webinar presentation, October 2011.
- M. Brown, ""Marketing Sustainability: Dos, Don'ts, and D'uhs," presented at Good and Green Conference, May 2011.
- M. Brown, "Standards, Labels, Certifications, and Seals," presented at Green Chemistry and Commerce Council Retailers Meeting, May 2011.
- M. Brown, "What Makes a Material Environmentally 'Better'?" presented at GreenBiz Forum, January 2011.
- M. Brown, "Measuring Sustainability Progress: Getting Started on Environmental Footprints," presented at Organic Exchange Annual Conference, October 2010.
- M. Brown, "Building a Carbon Footprint: Getting on the Low Carbon Path," presented at Organic Exchange Annual Conference, October 2010.
- M. Brown, "Practicing Industrial Ecology: Lessons from the Corporate World," presented at Academy of Management Annual Conference, August 2009.
- M. Brown, "Sustainability on the Edge: Where are the Leaders Going?" presented at RADTech International Annual Winter Meeting, November 2008.

- M. Brown, "Building Sustainability Strategies to Drive Revenue" presented at US Green Building Council, Santa Barbara Region, July 2008.
- M. Brown, "How Sustainable is Sustainable: Assessing the Impact of Your Materials," presented at Organic Exchange Annual Conference, October 2007.
- M. Brown, "Creating Environmental Value through Facility Management," presented at Roche Facility Managers Meeting, March 2006.
- M. Brown, "Building a Sustainable Vision for the Orange County Great Park," August 2004.
- M. Brown and P. Saley, "South Coast Regional Impacts of Growth Study," multiple presentations to elected officials, business organizations, community and neighborhood groups, 2003-2004.
- M. Brown, "Integrating Environmental Value into Entrepreneurial Organizations," presented at the UCLA Entrepreneur Association Conference, May 2003.
- D. Smith and M. Brown, "The Norm Thompson Sustainability Scorecard and Toolkit: Developing an Effective Approach for Moving Products Towards Sustainability," presented at the Businesses for Social Responsibility Annual Conference, November 2002.
- M. Brown, "Sustainability Tools for Small and Medium Size Businesses," TNS Sustainability and Products Meeting, February 2002.
- M. Brown, "Industrial Design and Environmental Life Cycles," presented at the California College of Arts and Crafts, October 2001.
- M. Brown, "Practical Metrics and Reporting," presented at Portland State University, March 2001.
- M. Brown, "Sustainable Products and Life Cycle Analysis: The Patagonia Case," presented at Sustainable Products Training Conference, March 2000.
- M. Brown, "New Ways of Thinking: Ethics, Customer Service and our Environment," presented at City of Beverly Hills, January 2000.
- M. Brown, "Having Fun with Carbon: Lessons from the Cutting Edge of Offsets and Green Energy Sourcing," presented at the E-Source Annual Meeting, November 1999.
- M. Brown, "Patagonia and the Case for Corporate Sustainability: What's a Clothing Company Doing Talking About Sustainability?" UCLA School of Public Health, April 1999.
- M. Brown, "Improving Your Bottom Line and Environmental Performance, presented at TetraTech, San Francisco, February 1999.
- M. Brown, "Working with Suppliers to Improve Environmental Performance," presented at the National Academy of Engineering International Conference on Industrial Environmental Performance Metrics, November 1998.
- M. Brown, "Patagonia: Seeking New Directions in Environmental Performance," presented at UC Santa Cruz, Feb 1997, Feb 1999, UCLA School of Public Health, May 1998.
- M. Brown, "Committing to Organic Cotton and Recycled Fibers," presented at the Fiber Futures Conference, Monterey, CA, June 1997.
- M. Brown, "Improving Your Bottom Line and the Environment," presented at the California Resource Recovery Association Annual Conference, Monterey, CA, June 1997.
- M. Brown, "Patagonia's Environmental Efforts," presented at Neocon, Chicago, IL, May 1997.
- M. Brown, "Approaching Green Building," presented at Sedlak Forum on Warehouse Development, April 1997, the Greening of the Built Environment II, Milwaukee, WI, September 1998.
- M. Brown, "Waste Reduction and Other Heresies at Patagonia," presented at International City Managers Association mtg., San Francisco, CA, June 1996.
- M. Brown, "Environmental Action at Patagonia," presented at Amgen, Thousand Oaks, CA, May 1996.
- M. Brown, "What Does Sustainability Look Like in Patagonia's Future?" presented at Patagonia Supplier Conference, August 1996.

- M. Brown, "Corporate Environmentalism: Cause for Hope or Misplaced Faith?" presented at University of Washington, School of Business Administration, December 1997, Orange Coast College, Fashion Department, Costa Mesa, CA, November 1997, "Pollution Prevention 2000: Moving Beyond Compliance," Downey, CA, August, 1997, UC Santa Barbara, April 1997, UCLA (with Eric Wilmanns), April 1996, and Antioch University, May 1996.
- M. Brown, "What Do Environmental Managers Do and How Do You Get a Cool Job Like Mine," presented at University of Washington School of Business, February 1996.
- M. Brown, "What Do Your/Our Customers Want," ATMI E3 Seminar, September 1995.
- M. Brown, "Doing Business A Different Way: Integrating the Environment into Our Business Philosophy," presented at National Roundtable of State and Local Pollution Prevention Programs, April 1994, Third South Carolina Environmental Symposium, September 1994, Colorado State Graduate School of Business Management, February 1995, Annual Conference, American Planning Association, California Chapter, October 1995.
- M. Brown, "Technical Assistance in the City of Irvine," presented at USEPA Region IX Hazardous Waste Minimization Conference," Monterey, CA, March 1992.
- M. Brown, "Reducing the Use of Ozone Depleting Chemicals: The Irvine Ordinance," presented at the American Planning Association, California Chapter, Annual Meeting, Newport Beach, CA, September 1990.
- M. Brown, "Assessment of a Local CFC Ordinance: City of Irvine, California," World Congress of Local Governments for a Sustainable Future, New York, NY, September 1990.
- M. Brown, "Beyond Compliance: Promoting Reductions in the Use of Toxic Substances and the Generation of Hazardous Waste," prepared for the 117th Annual Meeting, American Public Health Association, Chicago, IL, October 1989.
- M. Brown and K. Porter, "Source Reduction in the Electronics Industries: Incentive Programs and Regulatory Trends in Massachusetts," presented at the National Electronic Packaging and Production Conference, Boston, MA, June 1989.
- M. Brown, "Integration of Environment, Work, and Home: Expanding the Meaning of Source Reduction," presented at the 116th Annual Meeting, American Public Health Association, Boston, MA, November 1988.
- L. Dane and M. Brown, "Source Reduction Technical Assistance: Technology Transfer and Toxic Substance Use Reduction in a Traditional Massachusetts Industry Sector," presented at the Conference on Controlling Risks of New Technologies in Mature Industries, Clark University, Worcester, MA, May 1988.
- M. Brown and B. Kelley, "Evaluation of a Statewide Matching Grant Program for the Collection of Household Hazardous Waste," presented at the 115th Annual Meeting, American Public Health Association, New Orleans, LA, October 1987.
- M. Brown and C. Isaacson, "Patient Perceptions of Drug Risks and Benefits, presented at the 114th Annual Meeting, American Public Health Association, Las Vegas, NV, September 28-October 1986.
- M. Brown and B. Richard, "Selecting the Experts: Drug Advisory Committees and the FDA," presented at the 114th Annual Meeting, American Public Health Association, Las Vegas, NV, September 1986.

STUDENT ADVISING

- Andrew Firth, Senior Thesis, "Analyzing the Impact of Chinese Waste Import Regulations on U.S. Scrap Plastic Recycling," Distinguished Senior Thesis Award, 2018.
- Yekaterina Sitnikova, Senior Thesis, "Wasted Potential: An analysis of Student Household Food Waste Separation Behavior in Isla Vista, California," Distinguished Senior Thesis Award, 2019.
- Grace Towle, Senior Thesis, "Fashion... Friend or Foe: Factors Influencing Young Consumers Toward Ethical Apparel Purchases, 2021.

PROFESSIONAL JOURNALS

Associate Editor, Journal of Industrial Ecology, 1999-present

AWARDS AND HONORS

SCAQMD Clean Air Award, Irvine CFC Reduction Program, 1992

United Nations Environment Programme, Irvine CFC Reduction Program, 1990

Commonwealth of Massachusetts, Pride in Performance Award, 1988

Cornell Graduate Fellowship and Scholarship, 1977-78, 1979-80

Mackessey Prize for Outstanding Master's Student, Cornell University, 1979

Crown College Honors, Honors in Politics, UC Santa Cruz, 1974

CIVIC ACTIVITIES

Cycling Without Age—Santa Barbara, Pilot, 2021-present

Gaviota Coast Conservancy, Board of Directors, 2014-present, Board Vice-President, 2015, President, 2016-2017

California Ocean Protection Council, Public Member, 2013-2023

The Energy Coalition, Board of Directors, 2009-present

Santa Barbara Channelkeeper, Co-Founder, Board of Directors, 2001-2010, Board President, 2008-2010, Chair, Board of Advisors, 2010-present

Santa Barbara Economic Community Project, Board of Directors, 2001-2002

Santa Barbara County Action Network, Co-Founder, Board of Directors, 2001-2011

Environmental Defense Center, Board of Directors, 1998-2000, Board President, 1999-2000

UCSC Alumni Association, Alumni Council, 1997-2003

Direct Relief International, Associates, Santa Barbara, CA, 1995-1997

University of Washington, Graduate School of Business, Environmental Program Advisory Committee, 1995-1997

EcoPartners, Co-Founder, 1993-present

USEPA, Life Cycle Analysis Advisory Committee, 1993-1994

Irvine Chamber of Commerce, Environmental Committee, Irvine, CA, 1991-1993

Medford Recycling Coalition, Co-Founder, Medford, MA, 1988-1989

Tompkins Co. Occupational Health Information Hotline, Co-Founder, Director, Ithaca, NY, 1982-1984

Suicide Prevention and Crisis Service, Crisis Counselor, 1982-1984

Blood donor, ≈150 units, 1978-2020

June 2024