RESUME

Name: Monica Bufill (Dr.)

Qualifications: Ph. D, University of Wollongong (Australia), 1989.
Master of Science (Imperial College, London), 1981.
Civil Engineer (University of Buenos Aires), 1976.

Fields of Expertise

- Project management
- Consulting and research in water resources
- Environmental impact assessment

Teaching Experience

April 2016 University of Yaounde, Cameroon (through an agreement with the University of Padova)
Teacher of Civil Engineering
Subjects: Hydraulic Constructions II (Masters course)

2014 - 2016 Illawarra Institute, NSW TAFE (Australia)
Teacher of Civil Engineering
Subjects: Surface and Subsurface Drainage

2011 – 2015 Sydney College, NSW TAFE (Australia)
Teacher of Civil and Structural Engineering.
Subjects: Hydraulics, Hydrology, Environmental Controls, Statics, Strength of Materials, Mathematics and Excel.

2013 Sydney College, NSW TAFE (Australia)
Teacher of Surveying and Spatial Information Systems
Subjects: Advanced Computations, Sustainability.

1992 – 1998 University of Technology, Sydney
Lecturer of Surface Hydrology in the Masters course run by the National Centre for Groundwater Management.

1990-1991 University of Wollongong (Australia)
Lecturer of Computer Applications, Department of Civil and Mining Engineering
Joint supervisor of theses of Master students

1987-1990 University of Wollongong (Australia)
Tutor in Hydraulics, Department of Civil and Mining Engineering.
Tutor in Computer Laboratories

Research Activities

2017 International Research School of Planetary Sciences, Università d'Annunzio
Management of scientific projects
Assistance with the review of technical documents and preparation of proposals

2017 Alma Mater Studiorum Universtità di Bologna
Critical review of scientific articles and papers and advice on the preparation of scientific proposals

1989 – 1991 Land and Water Research and Development Corporation Principal Researcher (Australia)
Methods for the prediction of water quantity and quality in urban catchments

1986 – 1989 University of Wollongong (Australia)
Doctoral thesis: Effects of urbanization on flooding

1980 – 1981 Imperial College of Science and Technology (University of London)
Master of Science studies. Thesis: Rainfall-runoff modelling of a motorway catchment

1976 – 1986 Instituto Nacional de Ciencia y Técnica Hídricas (Argentina)
Hydrologist and Senior Hydrologist. Development of research projects in stormwater modelling.

Industrial Experience

2000 – 2002 Sydney Water Corporation
Leader of the Stormwater Environment Improvement Program. Management of education projects, water resources studies, monitoring projects and construction projects (GPTs, wetlands and creek naturalization).

1997 – 2000 AWT Engineering (Australia)
Catchment studies involving hydraulic and hydrologic modeling.

Environmental impact assessments for water supply, wastewater and stormwater works carried out by Sydney Water Corporation.

1995 – 2011 Impress Pty. Ltd. (Australia)
Catchment studies involving hydrologic modelling.
Research into alternative construction materials in dwellings (for the Department of Architecture, University of New South Wales).

1991 – 1994 Snowy Mountains Engineering Corporation (Australia)
Senior Consultant. Key projects:
Streamflow modelling of catchments in the Hunter Valley
Hydrologic investigations and road drainage design for the RTA
Darling Mills stormwater management strategy
Letsibogo Dam study (Botswana)
Gold Creek dam safety review
Logan River hydraulic investigation
Caboolture flood study
Nymboida dam prefeasibility study
The Bluff mine rehabilitation study

Other qualifications and areas of interest

English and Spanish teacher – Salaborsa (2017)
Clinical psychology – Lifeline counselor (1995-1997).
Optical Dispenser. OTEN (2003)

Languages other than English

English: spoken, read and written
Spanish: spoken, read and written
Italian: fair skills

PUBLICATIONS

BUFILL, M (2002). Programs for the improvement of stormwater quality in Sydney, Australia. Global Solutions for Urban Drainage 2002, Pages 1-6. Proceedings of the Ninth International Conference on Urban Drainage (9ICUD), Portland, Oregon, USA. **https://ascelibrary.org/doi/abs/10.1061/40644%282002%29158**

BOYD M J, BUFILL MC and KNEE RM (1994). Predicting pervious and impervious storm runoff from urban drainage basins. Hydrological Sciences Journal, Vol. 39 No.4. August 1994, pp. 321-332.

BOYD M J, BUFILL M C and KNEE R M (1993). Pervious and impervious runoff in urban catchments. Hydrological Sciences Journal, Vol. 38, No. 6. December 1993, pp. 463-478.

BUFILL, MC and BOYD, M J (1992). A Simple Flood Hydrograph Model for Urban Catchments. Int. Symp. on Urba n Stormwater Management, IAHR, IEAust, IAWPRC. Sydney, February. pp. 98-103.

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BUFILL, MC and BOYD, M J (1990). Modelling Runoff from Impervious Urban Areas. Proc. 5th International Conference on Urban Storm Drainage, Osaka. pp 185-195.

https://books.google.it/books/about/Proceedings_of_the_Fifth_International_C.html?id=BKtWYgEACAAJ&redir_esc=y

BUFILL, MC and BOYD, M J (1989). Effect of Urbanisation on Catchment Lag Parameters. IEAust Hydrology and Water Resources Symposium, Christchurch. https://trove.nla.gov.au/work/17853578?q&sort=holdings+desc&_=1532418913781&versionId=195993365. Conference Publication 89/19 . pp 171-175.

BUFILL, MC and BOYD, M J (1989). Determining Runoff Routing Model Parameters without Rainfall Data. Journal of Hydrology, Volume 108. pp 281-294. https://www.sciencedirect.com/science/article/pii/0022169489902898

BUFILL, MC and BOYD, M J (1988). A Flood Study of Three Urban Catchments near Sydney. Institution of Engineers, Australia. Hydrology and Water Resources Symposium, Canberra, February. pp 211-215. https://search.informit.com.au/documentSummary;dn=692996874248139;res=IELENG

BUFILL, MC and BOYD, M J (1987). Predicting Runoff from Field Catchments using a Parallel Reservoir Model. 22nd Congress Int. Association for Hydraulic Research. Lausanne, September 1987 pp. 65-70. https://books.google.it/books/about/Proceedings_of_XXII_Congress_Internation.html?id=WS8RtAEACAAJ&redir_esc=y

BUFILL, MC (1984). Hydrological Aspects of the Study of Non-point Poliution on a Motorway Catchment. 3rd International Conference on Urban Storm Drainage, Goteborg, June. pp 275-283 . http://www.worldcat.org/title/proceedings-of-the-third-international-conference-on-urban-storm-drainage-goteborg-sweden-june-4-8-1984/oclc/456200734

BUFILL, M C (1989). Effects of Urbanisation on Floods. PhD Thesis, Department of Civil & Mining Engineering, University of Wollongong.

BUFILL, MC (1981). Hydrological Aspects of the Study of Non-point Pollution on a Motorway Catchment. MSc Thesis, Imperial College, London. August 1981.