



- Amarasınghe Upali, Sharma Bharat, Aloysius Noel, Scott Christopher, Smakhtin Vladimir, Charlotte de Fraiture, Sinha A, K. and Shukla A. K. (2005). "Spatial Variation in Water Supply and Demand across River Basins of India." International Water Management Institute (IWMI), Colombo, Sri Lanka.
- Anderson, M. P. & Woessner, W. W. (1992). Applied Ground Water Modeling: Simulation Of Flow And Advective Transport. Academic Press. Inc. San. Diego, New York. pp.6, 8,226,253.
- Brice, L., Yarko Nino, C. and Cristian Escauriaza, M. (2005). "Finite volume modeling of variable density shallow-water flow equations for a well mixed estuary in Central Chile." Journal of Hydraulic Research. Vol. 43(4), 339-350.
- Calcutta Metropolitan Development Authority, Calcutta & Central Public Health Engineering Research Institute, Nagpur. (1972). Seminar on Estuarine Pollution. Repot. pp. 4, 5,11,16,17,19,20,75,93,94,101,102,104,111.
- Central Soil Salinity Research Institute (CSSRI), Regional Research Station Anand, Gujarat. (1993). Vegetation Types In Mahi Right Bank Canal Command, Ukai-Kakarapar Command and Bhal Region in Gujarat. pp. 4.
- 6. Chandramohan, T. and Joseph, A. K. (1999). "Two Dimensional Finite Element Modelling of an Indian Estuary", ISH Journal of Hydraulic Engineering. Vol. 5(2)
- Chatterjee, A. K., (2003). "3D Mathematical model of an estuary." Proceedings (Water Resources) of 4th International R& D Conference on Water and Energy for 21st centaury organized by CBIP and Irrigation Dept. Govt. of Maharashtra, Aurangabad (Maharashtra), India. Vol. 1, 79-88.
- Chau, K. W. and Jiang, Y. W. (2001). "3D numerical model for Pearl River estuary." Journal of Hydraulic Engineering, ASCE. Vol. 127 (1), 72-82.
- Cheng, J. M. and Chen, C. X. (2001). "Three- dimensional modeling of density dependent salt water intrusion in multilayered coastal aquifers in Jahe river basin, Shandong Province, China." Journal of Ground Water. Vol. 39 (1), 137-143.
- Cuthbertson, A. J. S., Davies, P. A. and Guo, Y. (2006). "Model study of the influence of submerged tidal barriers on estuarine mixing and exchange processes." Journal of Hydraulic Engineering, ASCE. Vol. 132(10), 1033-1043.

- Dalwadi, H. J. (1998). "Salinity Intrusion Studies into a Coastal Aquifer with Impounding Reservoir on Estuary." Ph.D. Thesis, IIT-Bombay, India. pp. 1, 2, 20, 38, 203.
- 12. Delleur, J. W. (1999). The Handbook of Groundwater Engineering. CRC Press, Springer. pp. 20, 21.
- 13. Dhar, S., Das, S. and Mazumdar, A. (2010). "Investigation of the salt water intrusion phenomenon in the Piyali River aquifer." Proceeding of third International Conference on current and future state of Water Resources and the Environment organized by the Environmental and Water Resources Institute (EWRI) of the ASCE and IIT Madras, Chennai, India.
- Directorate of Economics and Statistics, Government of Gujarat, Gandhinagar. (1987). "Planning Atlas of Gujarat." pp.1
- Directorate of Information, Government of Gujart, Ahmedabad. (1960). Booklet on Mahi Right Bank Canal Project. pp.3, 7.
- 16. Dyer, K. R. (1979). "Estuarine Hydrology and Sedimentation." Hand Book, Cambridge University press, Cambridge, New York. pp. 1, 2, 3, 6, 11.
- 17. Elango, L. (2009). "Ground water modeling to assess the feasibility of pumping sea water from a beach well for Chennai desalination plant." Journal of Applied Hydrology, Vol. XXII (1), 84-92.
- Elango. and Senthilkumar, M. (2006). "Modelling the effect of subsurface barrier on groundwater flow regime." A paper published in proceeding of Conference on MODFLOW and More 2006: Managing groundwater systems, Colorado School of Mines, USA. 806-810.
- Environmental Modeling Research Laboratory (EMRL). (2005). GMS 6.0 Tutorials Volume-I.pp.6-4.
- 20. Environmental Modeling Research Laboratory (EMRL). (2005). GMS 6.0 Tutorials Volume-II. pp. 10-3, 11-3, 11-4, 13-3 to 13-5, 13-7 and 13-8.
- 21. Faust, C.R., Silka, L. R. and Mercer, J. W. (1981). Computer modeling and groundwater protection. Ground Water (4). pp. 362-365.
- 22. Government Of Gujarat, Ahmedabad. (1961). Gujarat State Gazetteers, Broach District. Revised Edition. pp. 2, 16, 22.
- 23. Government of Gujarat, Ahmedabad. (1979). Gujarat State Gazetteers, Vadodara District. pp.10, 18, 20,71,72,73.

- 24. Goyal, R. (2003). "Introduction to GMS" in Resources on the Web AICTE-ISTE Summer School on Use of GIS for Groundwater Modeling organized by Department of Civil Engineering, Malaviya National Institute of Technology, Jaipur.
- 25. Gross, E. S., McWilliams, M. L. and Kimmerer, W., (2005). "Simulating periodic stratification in the San Francisco Estuary". Proceeding of the ninth International Conference on Estuarine and Coastal Modeling, ASCE. 155-175.
- 26. Gujarat Ecology Commission, Vadodara. (1997). Ecological Degradation around Gulf of Khambhat, Gujarat. A Status Report. pp.10, 11,12,13,18.
- 27. Gujarat Water Resources Development Corporation Limited, Gandhinagar. (1987). Report on Ground Water Condition and Resources Estimation in Narmada Command Area between River Narmada and Mahi, Gujarat State. pp.10...
- 28. Gujarat Water Resources Development Corporation Limited, Gandhinagar. (1998-99). Artificial Groundwater Recharge Studies in Vadodara Taluka. pp.11.
- 29. Harbaugh, A. W., Banta, E.R., Hill, M. C. and McDonald M. G. (2000). User Guide to Modularization concepts and the Ground-Water Flow Process, MODFLOW-2000, The U. S. Geological Survey Modular Ground-Water Model. USGS, open file report 00-92, pp. 9 to 11
- 30 Ippen, A. T. (1966). Estuary and Coastline Hydrodynamics. Engineering Societies Monographs, McGraw Hill Book Company, New York. pp. 11,575,598,609,630,673 to 678.
- 31. Knowles, N. (2002). "Natural and management influences on fresh water inflows and salinity in the San Francisco Estuary at monthly to interannual scales." Journal of Water Resources Research. Vol. 38 (12), 25.1-25.11.
- 32. Kumar C. P. (2001). "Simulation of sea water intrusion and tidal influence." The Indian Society for Hydraulics. Journal of Hydraulic Engineering. Vol. 7 (1), 1-11.
- 33. Kumar, A. R. S., Bhaskara Rao, K. and Appa Rao, A. P. V. (2006). "Sea water intrusion and its effect on water quality in Godavari Estuary." A paper published in proceeding of the International conference on Hydrology and Watershed Management organized by Centre for Water resources, Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad. 1427-1437.
- 34. Kumar, C. P. (2002). "Numerical simulation models for sea water intrusion." Journal of Indian Water Resources Society. Vol. 22 (3), 125 130.

- Langevin, C. D. and Guo, W. (2006). "MODFLOW/MT3DMS based simulation of variable- density ground water flow and transport." Journal of Ground Water. Vol. 44(3), 339-351.
- Lenore S. Clesceri, WEF, Chair Arnold E. Greenberg, APHA and Andrew D. Eaton, AWWA. (1998). "Standard Methods for the Examination of Water and Wastewater".
 20th Edition published by American Public Health Association, Washington.
- 37. Liu, W. C., Hsu, M. H. and Kuo, A. Y. (2001). "Investigation of long-term transport in Tanshui River estuary, Taiwan." Journal of waterway, port, Coastal and Ocean Engineering, ASCE. Vol. 127(2), 61-71.
- 38. Liu, W. C., Hsu, M. H., Wang, C. F. and Kuo, A. Y. (2004). "Modeling salt water intrusion in Tanshui River estuarine system- Case Study Contrasting Now and Then." Journal of Hydraulic Engineering, ASCE. Vol. 130 (9), 849-859.
- Lung, W. S. and O'Connor, D. J. (1984). "Two-Dimensional mass transport in estuaries." Journal of Hydraulic Engineering, ASCE. Vol. 110 (10) 1340-1357.
- 40. Mane, M. S., Singh, D. K., Bhattacharya, A. K. and Singh, A. K. (2005). "GIS interface for groundwater model-MODFLOW." Proceedings of fifth International R & D Conference on Development and Management of Water and Energy Resources organized by CBIP and Government of Karnataka, Bangalore, India. Vol. 4, I-99 I-100.
- McDonald, M. G. and Harbaugh, A. W. (1988). A Modular Three- Dimensional Finite- Difference Ground-Water Flow Model, USGS Techniques of Water-Resources Investigations Chapter 6-A1, pp. 252,254 to 257, 259.
- 42. Ministry of Irrigation (1984). Report of the Groundwater Estimation Committee-Groundwater Estimation Methodology, Govt. of India, New Delhi.
- 43. Ministry of Water Resources (1997). Report of the Groundwater Resource Estimation Committee-Groundwater Resource Estimation Methodology, Govt. of India, New Delhi.
- 44. Mistry, J. F. (1988). "Important Aspects of River Valley project." Hydrology and Water Planning, Mahajan Book Distributors, Ahmedabad. Vol.1. pp-40.
- 45. Mohapatra, P. K., Nayak, R. K. and Madhusudan, B. J. (2006). "Optimization of groundwater monitoring stations: A case study in Balasore District of Orissa, India." Second International conference Ground Water for Sustainable Development, Problems, perspectives and challenges (IGC-2006), Jawaharlal Nehru University, New Delhi. Volume of Abstracts and Souvenir. pp.21, 32, 75.

- 46. Multimedia Consulting Engineers & Dr. C. R. Shah. (1997). Design of weir on river Mahi at Sindhrot, Dist. Vadodara for Gujarat Water Supply Grid Ltd. Report. pp. 4, 5, 6.
- Narmada Water Resources and Water Supply Department. (1999). "Flood Memorandum." Government of Gujarat, Gandhinagar. pp. 120.
- Varmada Water Resources and Water Supply Department. (1999). Government of Gujarat, Gulf of Khambhat Development (KALPASAR) project, specific studies vol. IV-B, pp.B-IV-7, Vol. V-C, pp. C-16.
- 49. National Bureau Of Soil Survey And Land Use Planning (ICAR) Nagpur In Cooperation With Department Of Water Resources And Agriculture, Government Of Gujarat. Gujarat Soils, Soil Map.
- 50. National Environmental Engineering Research Institute (NEERI) and National Institute of Oceanography (NIO). (1975). "Report on Baroda Effluent Channel Project." pp. 29, 30, 31, 39, 145, 231, 234.
- 51. National Environmental Engineering Research Institute (NEERI). (2005). "Preparation of Environmental Management Plan For Tamperproof Effluent Conveyance Systems Of ECPL Baroda." Sponsored by Effluent Channel Project Ltd., Vadodara. pp. 1.1, 2.1, 3.1.
- 52. National Institute Of Oceanography (NIO). (2005). "Release Of Treated Industrial Effluent from ECPL in Mahi Estuary." Sponsored by Effluent Channel Project Ltd., Vadodara. pp. 1, 2, 3, 6, 38.
- 53. Nirmala,E., Remani, K. N. and Nair, S. R. (1990). "Pollution in the coastal zone of Kerala." National symposium on protection of environment of city water fronts organized by Central Water Commission, New Delhi, India. II-35- II-43.
- Operations Research Group (ORG). (1982). Mathematical Modelling Of Groundwater System Narmada-Mahi Doab. pp.17, 28.
- 55. Operations Research Group (ORG). (1993). Groundwater Systems Study: Sabarmati-Banas Doab. pp.58.
- 56. Parekh, V. P. (2009). "Development of Parameters to Study the Efficacy of Sea water Intrusion Preventive Structures of Saurashtra Region." Ph.D. Thesis. The M. S. University of Baroda, Vadodara. pp.11.
- 57. Patel, A. S. and Shah D. L. (2008). "Water Management, Conservation, Harvesting and Artificial Recharge." New Age International (p) Ltd. Publishers, New Delhi. Book. pp. 1

- 58. Patel, A.V., Bhatt, N.M., Parthasarathy, G.S. and Modi, P. M. (1985). "Salinity distribution, pollution, dispersion and tidal flushing a case study." Journal of Environmental Science and Technology for Balanced Development, Asian Environment. Vol. 7 (3), 8-12.
- 59. Patel, A.V., Bhatt, N.M., Parthasarathy, G.S. and Modi, P. M. (1986). "Effects of waste water discharges on estuary." Journal of Environmental Science and Technology for Balanced Development, Asian Environment. Vol. 8 (4), 11-17.
- Patel, Anup V. (1983). "Discharges of Industrial Effluent to Estuary (with special Reference to Effluent channel project Baroda)." M. E. Dissertation, M. S. University of Baroda, Vadodara. pp.66, 125.
- 61. Patel, J. K., Desai, N. B., Pinge, V. L. and Shah, J. C. (1990). "River water quality of some rivers in Gujarat." National Symposium on protection of environment of city water fronts organized by Central Water Commission, New Delhi, India. II-57- II-62.
- 62. Patel, J. N. (2006). "Strategy for improvement of groundwater quality in the coastal area near a River." Proceeding of International Conference on Hydrology and Watershed Management organized by Centre for Water Resources, Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad, India. 783-786.
- 63. Patel, Mitun M. (2003). "Impact of weir to be constructed in Mahi Estuarine Area." M. E. Dissertation, M.S. U., Vadodara. pp.34.
- 64. Pinho, Jose L.S. and Vieira, Jose M.P. (2005). "Mathematical modeling of salt water intrusion in a Northern Portuguese estuary." The fourth Inter-Celtic Colloquium on Hydrology and Management of Water Resources 11-14 July 2005.
- Pitty, Alistair F. (1971). "Introduction to Geomorphology." Methuen and CO. Ltd. Book. pp.236
- Raghunath, H. M., (1987). "Groundwater" (Second Edition). Wiley Eastern Limited, New Delh. Book. pp.1, 291.
- 67. Ranjan, S. P., Kazama, S. and Sawamoto, M. (2006). "Effects of climate and land use changes on ground water resources in coastal aquifers." Journal of Environmental Management, ELSEVIER Ltd. Vol. 80, 25-35.
- Rao, K. L. (1975). "India's Water Wealth, Its Assessment, Uses and Projections." Orient Longman Limited, New Delhi. Book. pp. 24,25,74,75.

- 69. Rastogi, A. K. and Sulekha, (2000). "A coupled groundwater flow and solute transport model to ascertain spread of pollutants in an irrigated area." Proceeding (Water Resource) of Third International R & D Conference on Sustainable development of water and energy resources organized by CBIP, Jabalpur, India. Vol.1, 54-60.
- Ravi, R. (2003). "Numerical analysis of salt water-fresh water interface in coastal unconfined aquifer." Journal of Indian Water Works Association. April-June, 103-115.
- Reid, George K. (1961). "Ecology of Inland Waters and Estuaries Ground Water Hydrology." D. Van Nostrand Company, NewYork. Book. pp.59, 69, 70, 71, 140.
- 72. Richards, D. R. and Jones, N. L., (1997). "A conceptual model approach to modeling ground water with GMS." A paper published in proceeding of the 27th congress of the International Association for Hydraulic Research on "Water for a changing Global Community" Groundwater, An Endangered Resource theme C, Published by the ASCE, New York. 325-330.
- 73. Roelfzema, Perrels P. A. J., Scholten W. N. G. and Wekken A. V. D., (1987). "Developing a Mathematical Model system for the Rhine-Meuse estuary", Proceedings of International Symposium on New Technology in Model Testing in Hydraulic Research Organized by CBIP, New Delhi, India. Vol. I, 57-62.
- Rushton, K. R. (2003). Groundwater Hydrology: Conceptual and Computational Models. John Wiley and Sons Ltd. pp.2, 377,378,384.
- 75. Sanders, B. F. and Piasecki, M. (2000). "Mitigation of salinity intrusion in well-mixed estuaries by optimization of fresh water diversion rates." Journal of Hydraulic Engineering, ASCE. Vol. 128(1), 64-77.
- 76. Sarma, PBS (2008). Groundwater Development and Management. Water Technology Centre; Indian Agricultural Research Institute New Delhi; ALLIED publishers private Ltd. pp.636
- 77. Sen Gupta, R. and Deshmukhe, Geetanjali. (2000). Coastal and Maritime Environments of Gujarat: Ecology and Economics, Gujarat Ecological Society, Vadodara. pp.1
- Senthilkumar, M. and Elango, L. (2004). "Three-dimensional mathematical model to simulate ground water flow in the lower palar river basin, Southern India." Journal of Hydrogeology, Springer. Vol. 12, 197-208.

- 79. Shah, C. R. (2000). "Groundwater and surface water potential of river Mahi between Umeta and Poicha" (Unpublished report).
- 80. Shah, S. M. and Dr. Patel, A. S. (2010). "Regression analysis of groundwater quality data of Anand District, Gujarat." A paper published in proceeding of the National Conference on Current trends of research and development in Civil and Environmental Engineering: An Indian Perspective organized by SVIT, Vasad. E-29.
- 81. Shoemaker, W. B. (2004). "Important observations and parameters for a salt water intrusion model." Journal of Ground Water. Vol. 42 (6), 829-840.
- Subramanya, K. (1994). "Engineering Hydrology." (Second Edition). Tata McGraw Hill Pub. Co. Ltd. New Delhi. Book. preface pp.VII
- 83. Sugio, S., Nakada, K. and Urish, D. W. (1987). "Subsurface sea water intrusion barrier analysis." Journal of Hydraulic Engineering, ASCE. Vol. 113(6), 767-779.
- 84. Survey of India. (1975). Topo sheets nos. 46 B / 11 to 12, 46 B /14 to 16 and 46 F /2 to 4 (First Edition). Scale: 1: 50000.
- 85. Thatcher, M. Llewellyn and Harleman Donald R.F. (1972). "A Mathematical Model For the prediction of unsteady salinity intrusion in estuaries." Report No. 144, Ralph M. Parsons Laboratory for water resources and Hydrodynamics Massachusetts Institute of Technology Cambridge, Massachusetts 02139. pp.9.
- Thornbury, William D. (2004). "Principles of Geomorphology." Second Edition, CBS Publishers and Distributors, New Delhi. Book. pp.170.171, 173.
- Todd, D. K. (1995). "Ground Water Hydrology" (Second Edition). John Wiley and Sons. Singapore, New York. pp. 495,496,500.
- 88. Varadaraj, N. (2010). "Status of salt water intrusion in parts of Tamilnadu Coast." Proceeding of third International Conference on current and future state of Water Resources and the Environment organized by the Environmental and Water Resources Institute (EWRI) of the ASCE and IIT Madras, Chennai, India.
- 89. Wallingford H. R. (1995). "Sardar Sarovar Projects Gujarat Command Area Hydrological Impact Assessment." Main Report EX 3183. pp. 12, 45, 46, 53, and Figure 4.3.
- 90. Wallingford H. R. and DR. C. R. Shah. (1994). "Data for Groundwater Model of Sardar Sarovar Command Area." Sponsored by Narmada Planning Group, Gandhinagar. Vol. III- Plates.
- 91. Wang, H. F. and Anderson, M. P. (1982). Introduction to Groundwater Modeling: Finite Difference and Finite Element Methods, W. H. Freeman. pp.110.

.

- 92. Water Technology Centre, Indian Agricultural Research Institute (IARI), New Delhi. (1983). Resource Analysis and Plan for Efficient Water Management, A Case Study of Mahi Right Bank Canal Command Area, Gujarat. Report. pp.1, 8, 19, 40, 44, 47, 123, 175.
- 93. Yagnik, V. M., Kavalanikar, N. B. and Gandhi, M. N. (2003). "Environmental Impact Assessment along the River Mahi due to Industrialization and Tidal Effect in Peripheral Areas of Anand and Vadodara District, Gujarat State." Proceedings of 2nd International Conference on water Quality Management organized by CBIP in association with INCOLD, New Delhi, INDIA. pp.III, 154-171.

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