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### **EDUCATION:**

PhD, (2003-2008). Watershed Management, Tehran university, Tehran, Iran.

MSc. (1994 -1997). Watershed Management, Tehran University, Tehran, Iran

B.Sc., (1991-1994). Range and Watershed Management, Gorgan University of

Agriculture and Natural Resources Sciences, Gorgan, Iran.

## **RESEARCH INTEREST:**

- Integrated watershed management
- Soil erosion processes modelling
- Watershed sediment yields
- Natural hazards management
- Flood management
- Debris flow management



### **PUBLICATION:**

- 1. Somayeh Galdavi, Marjan Mohammadzadeh, Abdolrassoul Salmanmahiny, Ali Najafi Nejad, 2013. Urban change detection using multi-temporal remotely sensed imagery (Case study: Gorgan Area, Northern Iran). Environment and Urbanization Asia, 4(2), 339-348.
- 2. Keith Clarke, Abdolrassoul Salmanmahiny, Ali Najafinejad, 2014. Water Quality Restoration Using Landscape Metrics Analysis: A Case Study in the Golestan Province of Iran. Journal of Environmental Resources Research, 2(1), 77-94.
- 3. Amir Sadoddin, Vahed Berdi Sheikh, Majid Ownegh, Ali Najafi Nejad, Hamid Reza Sadeghi, 2016. Development of a National Mega Research Project on the integrated watershed management for Iran. Environmental Resources Research, 4(2), 231-238.
- 4. Alireza Daneshi, Roy Brouwer, Ali Najafinejad, Mostafa Panahi, Ardavan Zarandian, Fatemeh Fadia Maghsood, 2021. Modelling the impacts of climate and land use change on water security in a semi-arid forested watershed using InVEST. Journal of Hydrology, 593, 125621.
- 5. Heidary, K, Ali Najafi Nejad, Dekker, LW, Majid Ownegh, Ali Mohammadian Behbahani, 2018. Impact of soil water repellency on hydrological and erosion processes; A review. Ecopersia, 6(4), 269-284.
- 6. Mahsa Mirdashtvan, Ali Najafinejad, Arash Malekian, Amir Sa'doddin, 2018. Downscaling the contribution to uncertainty in climate-change assessments: representative concentration pathway(RCP) scenarios for the South Alborz Range, Iran. Meteorological Applications, 25(3), 414-422.
- 7. Somayeh Galdavi, Marjan Mohammadzadeh, Abdolrassoul SalmanMahiny, Ali Najafi Nejad, 2019. Comparison of Logistic Regression and Geomod Approaches to Forest Change Modeling in the Period of 1988–2025. Asian Journal of Research in Agriculture and Forestry, 4(4), 1-15.
- 8. Esmaeil Khaleghi, Amir Sadoddin, Ali Najafinejad, Abdolreza Bahremand, 2020. Flood hydrograph simulation using the SWMM model: A semiarid zone watershed case study, Shiraz Khoshk River, Iran. Natural Resource Modeling, 33(2), e12269.
- 9. Mahsa Mirdashtvan, Ali Najafinejad, Arash Malekian, Amir Sa'doddin, 2020. Regional analysis of trend and non-stationarity of hydro-climatic time series in the Southern Alborz Region, Iran. International Journal of Climatology, 40(4), 1979-1991.
- 10. Tajiki, M., G. Schoups, H. J. Hendricks Franssen, Ali Najafinejad, Abdolreza Bahremand, 2020. Recursive Bayesian estimation of conceptual rainfall-runoff model errors in real-time streamflow forecasting. Water Resource Research. 56(2), e2019WR025237.
- 11. Mahsa Mirdashtvan, Ali Najafinejad, Arash Malekian, Amir Sa'doddin, 2021. Sustainable water supply and demand management in semi-arid regions: optimizing water resources allocation based on RCPs scenarios. Water Resources Management, 35, 5307-5324.

- 12. Seyed Hamidreza Sadeghi, Ali Najafinejad, Sudabeh Gharemahmudli, Behrouz Zarei Darki, Ali Mohammadian Behbahani, Hossein Kheirfam, 2021. Reduction in soil loss caused by a freeze-thaw cycle through inoculation of endemic soil microorganisms. Applied Soil Ecology, 157, 103770.
- 13. Sudabeh Gharemahmudli, Seyed Hamidreza Sadeghi, Vahideh Sadat Sadeghi, Ali Najafinejad, Atefeh Jafarpoor, 2022. Morphometrical analysis of cracks and crevices on a cyanobacterized soil surface subjected to a freeze-thaw cycle using image processing. CATENA, 213, 106150.
- 14. Vahedberdi Sheikh, Amir Sadoddin, Ali Najafinejad, Arash Zare, Arashk Hollisaz, Hamid Siroosi, Maryam Tajiki, Mostafa Gholipouri, Javad Sheikh, 2022. The density difference and weighted RVA approaches for assessing hydrologic regime alteration. Journal of Hydrology, 613, 128450.
- 15. Sudabeh Gharemahmudli, Seyed Hamidreza Sadeghi, Ali Najafinejad, Behrouz Zarei Darki, Hossein Kheirfam, Ali Mohammadian Behbahani, 2023. Changes in overall and inter-variability of runoff and soil loss for a loess soil resulted from a freezing—thawing cycle. Environmental Monitoring and Assessment journal, 195(7), 860.
- 16. Sudabeh Gharemahmudli, Seyed Hamidreza Sadeghi, Ali Najafinejad, Behrouz Zarei Darki, Ali Mohammadian Behbahani, Hossein Kheirfam, 2024. Controlling enhanced surface runoff components as a result of a freezing-thawing cycle by inoculating soil bacteria and cyanobacteria. Soil and Tillage Research, 237, 105989.
- 17. Seyed Pedram Nainiva, Ali Najafinejad, Habib Nazarnejad, Arash Zare, 2024. Investigating the Accuracy of Predictive Mapping of Water Erosion Hazard and Determining the Impact of Input Factors in a Qharnaveh Watershed using the PAP/RAC Model. Extension and Development of Watershed Management, 12(44), 53-67. In Persian
- 18. Ali Najafinejad, Ali Mohammadian Behbahani, A, 2024. Investigating the Effect of Combined and Separate Application of Organic and Inorganic Soil Amendments on Reducing Soil Erosion and Runoff in Loess Deposits. Iranian Journal of Watershed Management Science and Engineering, 18(66), 11-25.
- 19. Leila Pishdad, Amir Sadoddin, Ali Najafinejad, 2024. Predicting the impacts of anthropogenic drivers on management scenarios using Bayesian belief network in the Zeribar freshwater wetland, Iran. Journal for Nature Conservation, 78, 126570.
- 20. Zohreh Hallaji Kalahroudi, Marjan Mohammad Zadeh, Abdulrassoul Salman Mahini, Farshad Kiani, Ali Najafinejad, 2023. Impacts of tourist trampling and topography on soil quality characteristics in recreational trails. Soil & Environment, 42(1).
- 21. Heidary, K., Ali NajafiNejad, Dekker, L. W., Majid Ownegh, Ali Mohammadian Behbahani, 2018. Impact of soil water repellency on hydrological and erosion processes; A review. Ecopersia, 6(4), 269-284.
- 22. Seyed Pedram Nainiva, Ali Najafinejad, Habib Nazarnejad, Arash Zare Garizi, 2024. Investigating the uncertainty of factors affecting water erosion Hazards in the Qharnaveh

- watershed using the Bayesian Averaging Model. Integrated Watershed Management. In Persian
- 23. Soraya Yaghobi, Choghi Bairam Komaki, Mohsen Hosseinalizadeh, Ali Najafinejad, Hamidreza Pourghasemi, Marzban Faramarzi, 2023. Frequency Analysis of Maximum Daily Rainfall and Determining the Best Appropriate Distribution Functions in the Bostan Watershed, Golestan Province. JWSS-Isfahan University of Technology, 27(1), 59-81. In Persian
- 24. Marziye Kayhanpanah, Ali Najafinejad, Hamidreza Pourghasemi, Ali Mohammadian, 2023. Comparison and evaluation of spatial changes of sediment connectivity and sediment delivery ratio in Marcheshme watershed (Semnan province). Iranian Journal of Soil and Water Research ISNN, 2423, 7833. In Persian
- 25. Dadkhah, M, Najafinejad A, 1996. Effectiveness of erosion potential method (EPM) in estimation of soil erosion and sediment yield of Latian dam watershed. Natural resources journal. In Persian
- 26. Jandaghi, N, A, Birodian, N., Majid Ownegh, Ali Najafinejad, 2005. Granolometry comparison of 3 type flood flows in Ziarat watershed. Journal of agriculture and natural resources sciences, Vol 2. In Persian
- 27. Jandaghi, N., Ali Najafinejad, Birodian, N., Majid Ownegh, 2005. Sedimentological characteristics of debris flow in Ziarat watershed. Journal of agriculture and natural resources sciences, Vol 1. In Persian
- 28. Khalilizadeh M, Mosaedi A, Ali Najafinejad, 2006. Flood risk zoning in a part of Ziarat river in Gorgan urban watershed. Journal of Agriculture and Natural Resources Sciences, Vol 12. In Persian
- 29. Mosaedi, A, Mohammadi A, Ali Najafinejad, Yaghmaei F, 2006. Optimization of discharge and suspended sediment in selective station in Gorgan River. Iran natural resources journal, Vol 59, No 2. In Persian
- 30. Gharib M., Mosaedi A., Ali Najafinejad, Yakhkeshi M A, 2007. Risk zoning and flood hazard evaluation, Gharaeh chay river watershed, Ramian city. Iran natural resources journal Vol, No 7. In Persian
- 31. Kabir A., Ali Najafinejad, Hemmatzadeh Y., Korokinejad M, 2007. Effects of check dam building on time of concentration, Rodbar Gheshlagh watershed. Journal of agriculture and natural resources sciences, No 2. In Persian
- 32. Kabir A., Noura N., Ali Najafinejad ,2007. Rainfall and effective runoff modeling, Kechik watershed case study. Journal of agriculture and natural resources sciences, No 7. In Persian
- 33. Mohammadi Y, Fathi P, Ali Najafinejad, Noura N, 2008. Average monthly discharge estimation using artificial neural network, Gheshlag, Sanandaj watershed case study. Journal of agriculture and natural resources sciences, Vol 15, No 4. In Persian
- 34. Khaksefidi A, Noura N, Brodian N, Ali Najafinejad, 2009. Time distribution pattern of rainfall in Systan and Balochestan province. Journal of agriculture and natural resources

### **Papers in International Conferences:**

- 1. Ali Najafinejad, 1996. Review of Watershed Management Strategy and Policy in Iran, International Workshop on Soil Erosion and Dry Land Farming, Yangling, China
- 2. Ali Najafinejad, 1997. Methodology of soil erosion mapping in Iran, *International soil erosion conference, Xian, China*
- 3. Ali Najafinejad, 1998. Integrated Watershed Management in Iran, *International Conference on Integrated Watershed Management, Xian, China*
- 4. Ali Najafinejad, Sadat Faiznia, 2001. Sedimentological characteristics and role of debris flow in watershed sediment yield, *IAHR*, *Beijing*, *China*
- 5. Ali Najafinejad, 2001. The role of debris flow in sediment yield of small watersheds, 29th IAHR congress, China
- 6. Ali Najafinejad, Sepideh Rezazadeh, 2002. Gully Development in Loess Hilly Area of Gorgan, Northeast of Iran, 12th ISCO, p: 296-298, Beijing, China
- 7. Ali Najafinejad, 2002. Environmental effects of flash floods, Golestan 1380 flood case study, ISFD, Beijing China
- 8. M. Nasiri, A. Darijani, Ali Najafinejad, Amir Saddodin, 2010. Factors influencing adoption of soil conservation measures(terracing), Chamany watershed, Golestan province, Iran, *The first international conference on plant, water, soil and weather modeling, 14-15 Nov 2010 Kerman, Iran*
- 9. A. Arefi asl, Ali Najafinejad, F. Kiani, 2010, The effect of map spatial resolution on simulation result of SWAT, case study: Chelchay watershed, Golestan province in Iran, 2010 SWAT international conference, Korea
- 10. Amir Sadoddin, Esmaeil Khaleghi, Ali Najafinejad, Abdolreza Bahremand, 2011. Hydrograph simulation using the SWMM model in the Khoshk River basin, Shiraz-Iran. *The First International Sustainable Watershed Management (SuWaMa Conference), Istanbul, Turkey.*
- 11. Amir Sadoddin, Ali Najafinejad, Leila Pishdad, Ehsan Alvandi, 2017. Developing a decision support system for integrated catchment–scale management of the Zeribar Lake. The Second IAHS Panta Rhei International Conference on Water System Knowledge Innovation and its Practices in Developing Countries. November 20-22, 2017. Gorgan, Iran.

#### **Book:**

1. Watershed management field manual, Watershed survey and planning, FAO, 1996, Translated by Ali Najafinejad

- 2. Torrent control and stream bed stabilization, FAO, 1998, Lopez Candenas de Llano, F. Translated by Ali Najafinejad
- 3. Ecohealth and Watersheds, 2016, M.W.Parkes, K.E Moorrison, M.J. Bunch, H.D. Venema., translated by Ali Najafinejad, Leila Pishdad Soleiman
- 4. Pegram, GuyLi, YuanyuanLe Quesne, TomSpeed, RobertLi, JianqiangShen, Fuxin. River basin planning principles: procedures and approaches for strategic basin planning (ISBN: 978-6-00972-457-4). Translated by Ali Najafinejad, Maryam Tajiki. Published in Persian by Gorgan University of Agricultural Sciences and Natural Resources Publisher (2017)

### **ACADEMIC TEACHING EXPERIENCE:**

**B.Sc.** 1- Soil conservation 2- Watershed management

M.Sc.1-Soil erosion modelling 2-Natural hazard management 3-Urban watershed management

PhD. 1- Advanced soil and water conservation 2-Soil and water conservation project evaluation

### **SERVICE AND PROFESSIONAL MEMBERSHIP:**

Member of the editorial board of Forest and Range Journal (1993-1994)

Member of National Committee of Soil Erosion and Sediment, (National Commission of UNESCO), (1996-1999)

Member and representative of the National Watershed Management Expert Association (1996 up to now)

Member of the scientific committee of Watershed Management Organization (1996-1999)

Representative of the World Association of Soil and Water Conservation in IRAN, (2002-2004)

Member of the working group in "watershed management and water resources" at the Academy of Sciences of Iran, (2022, 2023)

# **LANGUAGES:**

Advanced: English

Native: Persian