

## RESUME

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Florida International University  
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### PUBLICATION LINKS

[ORCID](#)   [RESEARCHERID](#)   [Google Scholar](#)   [ResearchGate](#)   [Academia](#)

### EDUCATION

- **Ph.D.**, Agricultural and Biological Engineering  
Concentration: Hydrologic Sciences  
Minor 1: Environmental Engineering  
Minor 2: Remote Sensing  
University of Florida, 2002
- **M.E (Master of Engineering)**, Agricultural and Biological Engineering  
Concentration: GIS (Geographic Information Systems)  
Minor: Civil Engineering  
University of Florida, 2000.
- **M. Eng. Sc (Master of Engineering Science)**., Agricultural Engineering  
National University of Ireland, 1991.
- **B.Sc.**, Agricultural Engineering  
Alemaya University, 1986.
- **Graduate Certificates**
  - Interdisciplinary GIS, University of Florida, 2002
  - GPS for Planners, University of Florida & TRIMBLE, 2001

**2011/2012: Fulbright Scholar (Research and Teaching)**

**2004/2005:** Listed in „**Who is Who in Science and Engineering**“ 8<sup>th</sup> Edition, 2004

**2006/2007:** Listed in „**Who is Who in Science and Engineering**“ 9<sup>th</sup> Edition, 2006

Selected for “**Who is Who in America**”, 2007

Selected for “**Who is Who in American Education**”, 2007

**REGISTRATION/CERTIFICATION:** Professional Engineer (Civil)

- Florida: License#: 58699
- North Dakota: License#: 4980

Diplomate, Water Resources Engineer (D. WRE)

**Recognition/Award (2013)**

Faculty Award for Excellence in Advising and Mentorship

### WORK EXPERIENCE

1. **08/2014-**
  - Professor, Department of Earth and Environment  
Florida International University
2. **08/2008-08/2014**
  - Associate Professor, Department of Earth and Environment  
Florida International University
3. **08/2004 – 08/2008**
  - *Assistant Professor*, Department of Earth and Environment  
Florida International University
4. **09/2002 – 08/2004**
  - *Assistant Professor & Research Assistant Professor*, Earth System Science  
Institute, School of Aerospace Sciences, University of North Dakota
  - *Adjunct Asst. Professor*, Department of Civil Engineering, School of  
Engineering and Mines, University of North Dakota.
5. **08/1998 – 08/2002:** *Research Assistant*, Department of Agricultural and Biological  
Engineering, University of Florida.
6. **03/1995 – 05/1998:** *Assistant Professor II*, Department of Agricultural Engineering,  
Alemaya University, Ethiopia.
7. **09/ 1986 – 03/1995:**
  - *Lecturer II (1991-95)*
  - *Asst. Lecturer (1988-89)*,
  - *Graduate Assistant (1986-88)*,  
Department of Agricultural Engineering, Alemaya University, Ethiopia.

**Affiliated Faculty with:**

- Department of Civil and Environmental Engineering, FIU
- Honors College (Research), FIU

**RESEARCH/EDUCATION GRANTS:**

1. NASA (2009-2014) WaterSCAPES: Science of Coupled Aquatic Processes in  
Ecosystems from Space,\$5,000,000, F. Miralles (PI), R. Price, A. Melesse (Co-PI), H.  
Fuentes, R. Garcia, D. DeAngelis, D. Fuller, M. Potts, I. Rodriguez-Iturbe, S.  
Wdowinski.
2. Caribbean Coastal Scenarios (supplemental funding), IAI (2011-2012), (\$17,252).  
Melesse, A. (PI), M. McClain, J. FU, D. Webber, J. Ortiz,
3. Florida-Caribbean Consortium for Agriculture Education and Hispanic Workforce  
Development (FCCAgeE), USDA,(2011-2015), \$3.2 million  
Bhat, M., (PI), Jayachandran, Kopter, S., Melesse, A (Senior Personnel)

4. NSF (2010-2011) Water Sustainability and Climate in the Great Lakes Region of East Africa \$136,809, Johnson, T (PI), Melesse (Senior Personnel) and others
5. Internationalization of Biofuel Research, Curriculum and Business, USDA, \$100,000, M. Bhat (PI), Jayachandran, A. Melesse (Co-PI) ( 2008-2011)
6. Curriculum Enrichment, Instrumentation and Experiential Learning in Agroecology, USDA, \$292,000, M. Bhat (PI), Jayachandran, A. Melesse (Co-PI), and S. Kopter, J. Onsted. (2008-2011).
7. Geospatial and remote sensing application in mapping hotspots of soil erosion in the Minnesota River basin, University of Minnesota, NCED, \$34, 155 ( 2008-2009) PI
8. Transboundary Water for Biodiversity and Human Health in the Mara River Basin, Kenya and Tanzania, USAID: (2008-2010), (\$1,200,000) (Renewal).  
M. McClain (PI), A. Melesse (co-PI)
9. Nile Basin Hydrology and Ecology under Extreme Climatic Conditions.  
NSF, (2007-2008), (\$38,048), Melesse, A. (PI), Senay, G.
10. Multicultural Undergraduate Scholars in Agroecology and Urban Landscape at Florida International University: An Interdisciplinary Approach, USDA, (2007-2012)  
(\$150,000)  
Jayachandran (PI), M. Bhat, A. Melesse (Co-PI)
11. Limits to Growth in Agriculture and Emerging Sustainable Farming Systems in Developing Countries, USDA (2006-2008), (\$100, 000).  
M. Bhat (PI), Jayachandran, A. Melesse (Co-PI), M. Allen and A. Ravinet
12. Caribbean Coastal Scenarios, IAI (2006-2012), (\$427,426).  
A. Melesse (PI: 2009-2012), M. McClain, J. FU, D. Webber, J. Ortiz,
13. Transboundary Water for Biodiversity in the Mara River Basin, Kenya and Tanzania, USAID: (2005-2007), (\$700,000).  
M. McClain (PI), A. Melesse (Co-PI)
14. Planning visit to study the effects of vegetation and cropping pattern on soil moisture dynamics and river flow in the Upper Blue Nile Basin, Ethiopia, NSF, (2005-2006) (\$9,896). A. M. Melesse (PI), G. Senay
15. Curricular Development and Capacity Building in Agroecology Sciences, USDA, (2005-2007), (\$229,839).  
M. Bhat (PI), Jayachandran, A. Melesse (Co-PI), and S. Kopter

16. Global Water for Sustainability (GLOWS), USAID (PI: McClain), 2004-2009, \$3,750,000.  
Melesse: Lead Investigator for hydrological modeling component
17. Northern Great Plains Center for People and the Environment - Year 3, NASA (2003-04), (\$2,700,000)  
Seielstad, G.A (PI), O. Beeri, A. Melesse, P. Carter, R. Hanley, , G. Johnson, S. Laguette, R. Phillips, S. Seelan, X. Zhang
18. Northern Great Plains Center for People and the Environment - Year 4. NASA (2004-05), (\$2,149,000)  
Seielstad, G.A (PI), O. Beeri, A. Melesse, P. Carter, R. Hanley, , G. Johnson, S. Laguette, R. Phillips, S. Seelan, X. Zhang
19. Quantifying Environmental Benefits from Precision Agriculture, USDA-ARS: (2003-2004) (\$347, 000)  
Seielstad, G.A, R. Phillips (PI) and A. Melesse
20. Team Express: Crop Range Alert System-Phase 4, Raytheon, 2003 (\$ 688,265)  
Seielstad, G.A (PI), O. Beeri, P. Carter, A. Melesse, R. Hanley, G. Johnson, S. Laguette, R. Phillips, S. Seelan, X. Zhang
21. Team Express: Crop Range Alert System-Phase 5, Raytheon, 2004 (\$275,000)  
Seielstad, G.A (PI), O. Beeri, P. Carter, R. Hanley, A. Melesse, G. Johnson, S. Laguette, R. Phillips, S. Seelan, X. Zhang.

#### **Research activities in the Blue Nile River basin, Ethiopia**

1. Capacity building of water resources professionals and provide trainings on GIS, remote sensing and hydrological modeling (May-July, 2011).  
Funding: The SWHISA Project and Amhara Regional Water Resources Bureau
2. Geospatial mapping of irrigation schemes in Amhara Region (Dec. 2008-June 2010)  
Funding: The SWHISA Project and Amhara Regional Water Resources Bureau
3. Development of technical manual and guideline for hydrometereological data collection and analysis in the Blue Nile basin (May –Nov. 2011)  
Funding: The SWHISA Project and Amhara Regional Water Resources Bureau
4. Training on climate change and remote sensing hydrology (Feb-March 2012)  
Funding: Lake Tana Basin Water Authority

## Postdocs and students

### Post-docs

Shimelis G. Setegn, 2009-2012

Mohammad Haji Gholizadeh, 2017-2018

Woubet Alemu, 2018-

### Graduate Students

|                  | Name                      | Degree | Dept./University                  | Year |
|------------------|---------------------------|--------|-----------------------------------|------|
| <b>Graduated</b> |                           |        |                                   |      |
| 1                | Jason Oberg               | M.Sc   | Civil Engineering (UND)           | 2004 |
| 2                | Pavel Terselich           | M.Sc   | Earth and Environment (FIU)       | 2007 |
| 3                | John Stiefel              | M.Sc   | Earth and Environment             | 2007 |
| 4                | Christina Hoffman         | M.Sc   | Earth and Environment             | 2007 |
| 5                | Himadri Biswas            | M.Sc   | Earth and Environment             | 2008 |
| 6                | Nenpan Tukunda            | M.Sc   | Earth and Environment             | 2009 |
| 7                | Sirikanth Pilli*          | M.Sc   | Civil and Env. Engineering        | 2009 |
| 8                | Luam Azmera*              | M.Sc   | Civil and Env. Engineering        | 2009 |
| 9                | Sejal Kunchwar*           | M.Sc   | Civil and Env. Engineering        | 2009 |
| 10               | Liya Mango                | M.Sc   | Earth and Environment             | 2010 |
| 11               | Fukhrudin K. Maalim       | M.Sc   | Earth and Environment             | 2010 |
| 12               | Matilde Dugue             | M.Sc   | Earth and Environment             | 2010 |
| 13               | Mengistu B. Defersha      | M.Sc   | Earth and Environment             | 2010 |
| 14               | Genevieve Diamond         | M.Sc   | Earth and Environment             | 2011 |
| 15               | Juliana Msagahaa          | M.Sc   | Earth and Environment             | 2012 |
| 16               | Yirgalem A.Chebud         | Ph. D  | Earth and Environment             | 2012 |
| 17               | Shimelis Behailu          | Ph. D  | Earth and Environment             | 2013 |
| 18               | Leigh Ammon               | M.Sc   | Earth and Environment             | 2013 |
| 19               | Cristobal Ceron           | M.Sc   | Earth and Environment             | 2014 |
| 20               | Audrey Becnel*            | M.Sc   | Earth and Environment             | 2014 |
| 21               | Hari Prasad Kandel        | Ph. D  | Earth and Environment             | 2015 |
| 22               | Tara Blakely              | Ph. D  | Earth and Environment             | 2015 |
| 23               | Mohammad Haji Gholizadeh* | Ph. D  | Civil and Environment Engineering | 2016 |
| <b>Current</b>   |                           |        |                                   |      |

|    |                     |       |                       |      |
|----|---------------------|-------|-----------------------|------|
| 24 | Anteneh Zewdie Abiy | Ph. D | Earth and Environment | 2019 |
| 25 | Ikechukwu Onwuka*   | Ph. D | Earth and Environment | 2020 |
| 26 | Samuel Kent         | Ph.D  | Earth and Environment | 2021 |
| 27 | Angelica Moncada    | Ph.D  | Earth and Environment | 2021 |
| 28 | Temesgen Kahsai G.  | Ph.D  | Earth and Environment | 2022 |
| 29 | Maria Maquez        | Ph.D  | Earth and Environment | 2020 |
| 30 | Parker Fink         | M.Sc  | Earth and Environment | 2020 |
| 31 | Manzar Abbas        | M.Sc  | Earth and Environment | 2018 |

\* Co-Advisor

### Graduate student supervision at other institutions (International collaboration and research)

|    | <b>Name</b>         | <b>Degree</b> | <b>University</b>   | <b>Year</b> |
|----|---------------------|---------------|---|-------------|
| 32 | Mulate Mekonnen     | M.Sc          | Bahir Dar University, Ethiopia                                    | 2009        |
| 33 | Tigist Bekele       | M.Sc          | Bahir Dar University, Ethiopia                                    | 2009        |
| 34 | Meaza Tefera        | M.Sc          | Bahir Dar University, Ethiopia                                    | 2009        |
| 35 | Haile Getachew      | M.Sc          | Bahir Dar University, Ethiopia                                    | 2012        |
| 36 | Fiseha Behulu*      | Ph.D          | Roma Tre University, Italy  | 2013        |
| 37 | Anwar Assefa        | M.Sc          | Bahir Dar University, Ethiopia                                    | 2013        |
| 38 | Mulatu Liyew*       | M.Sc          | Addis Ababa University, Ethiopia                                  | 2013        |
| 39 | Solomon Berhane*    | M.Sc          | Addis Ababa University, Ethiopia                                  | 2013        |
| 40 | Moges Asfaw*        | M.Sc          | Addis Ababa University, Ethiopia                                  | 2013        |
| 41 | Mahtsente Tibebe*   | M.Sc          | Addis Ababa University, Ethiopia                                  | 2013        |
| 42 | Hassen Mohamed*     | Ph.D          | Harmaya University, Ethiopia                                      | 2014        |
| 43 | Fitsum Berhe        | Ph.D          | Addis Ababa University, Ethiopia                                  | 2015        |
| 44 | Belete Berhanu*     | Ph.D          | Addis Ababa University, Ethiopia                                  | 2015        |
| 45 | Temesgen Enku       | Ph.D          | Bahir Dar University, Ethiopia                                    | 2016        |
|    | <b>Current</b>      |               |   |             |
| 46 | Hagos Gebreselasie* | Ph.D          | Addis Ababa University, Ethiopia                                  | 2018        |
| 47 | Fikru Fentaw*       | Ph.D          | Addis Ababa University, Ethiopia                                  | 2018        |
| 48 | Eyaya Belay         | Ph.D          | Entoto Observatory Institute,<br>Addis Ababa University, Ethiopia | 2019        |
| 49 | Agenagnew Asfaw     | Ph.D          | Entoto Observatory Institute,<br>Addis Ababa University, Ethiopia | 2019        |
| 50 | Alemu Osore*        | Ph.D          | Addis Ababa University, Ethiopia                                  | 2019        |
| 51 | Surafel Mamo*       | Ph.D          | Addis Ababa University, Ethiopia                                  | 2019        |
| 52 | Minychil Gitaw      | Ph.D          | Bahir Dar University, Ethiopia                                    | 2022        |

|    |                 |      |   |      |
|----|-----------------|------|---|------|
| 53 | Mengistu Addis  | Ph.D | Addis Ababa Science and Technology University | 2023 |
| 54 | Mulugeta Admasu | Ph.D | Addis Ababa Science and Technology University | 2023 |
| 55 | Fikremariam     | Ph.D | Addis Ababa Science and Technology University | 2023 |

### Graduate Committee membership

|    | <b>Name</b>            | <b>Degree</b> | <b>Department</b>   |
|----|------------------------|---------------|---|
| 56 | Celeste Diaz-Consul    | Ph.D          | Civil and Environment Engineering, FIU                    |
| 57 | Mehrnoosh Mahmoudi     | Ph.D          | Earth and Environment, FIU                                |
| 58 | David Lagomasino       | Ph.D          | Earth and Environment, FIU                                |
| 59 | Adelaide Hummel        | Ph.D          | Civil and Environment Engineering , FIU                   |
| 60 | Yao Yan                | Ph.D          | Civil and Environment Engineering, FIU                    |
| 61 | Diana K. Ter-Ghazaryan | Ph.D          | International Relations, FIU                              |
| 62 | Mauro Nalesso          | Ph.D          | Civil and Environment Engineering , FIU                   |
| 63 | Yu Chen                | Ph.D          | Economics, FIU  |
| 64 | Beth McCarthney        | M.Sc          | Earth and Environment, FIU                                |
| 65 | George Atisa           | M.Sc          | Earth and Environment, FIU                                |
| 66 | Erin Hanan             | M.Sc          | Earth and Environment, FIU                                |
| 67 | Estefania Sandoval     | M.Sc          | Earth and Environment, FIU                                |
| 68 | Kelly Gustafson        | M.Sc          | Earth and Environment, FIU                                |
| 69 | John B. Brakeall       | M.Sc          | Earth and Environment, FIU                                |
| 70 | Elena Neibaur          | M.Sc          | Earth and Environment, FIU                                |
| 71 | Wondwossen M. Seyoum   | Ph.D          | Dept. of Geology, University of Georgia                   |
| 72 | Mario London           | M.Sc          | Earth and Environment, FIU                                |
| 73 | Amirmasoud Hamed       | Ph.D          | Civil and Environment Engineering, FIU                    |
| 74 | Tasnuva Mahjabin       | M.Sc          | Civil and Environment Engineering, FIU                    |
| 75 | Mohamed Islam          | M.Sc          | Civil and Environment Engineering, FIU                    |
| 76 | Diana Alexis           | M.Sc          | Earth and Environment, FIU                                |
| 77 | Daniel Bekele          | Ph.D          | Soil and Water Engineering, Haramaya University, Ethiopia |
| 78 | Mustafa Kamal Sikder   | M.Sc          | Earth and Environment, FIU                                |
| 79 | Dillon Reio            | M.Sc          | Earth and Environment, FIU                                |
| 80 | Michael Kiflai         | Ph.D          | Earth and Environment, FIU                                |
| 81 | James Dautel           | M.Sc          | Earth and Environment, FIU                                |
| 82 | Shishir Kumar Sarker   | M.Sc          | Earth and Environment, FIU                                |

|    |                 |      |                              |
|----|-----------------|------|------------------------------|
| 83 | Nicolas Charles | M.Sc | Earth and Environment, FIU   |
| 84 | Eric Cruz       | Ph.D | International Relations, FIU |

## **Supervised Research/Independent study projects**

### **Graduate Students**

- Renato Stela, 2016, Geo-Spatial Evaluation of Groundwater Monitoring System in South Florida.
- Genevive Diamond, 2008. Rainwater Harvesting for Agriculture in the Bahamas – A Feasibility Study
- Nenpan Tunkuda, 2008, Utilizing GIS and Remote Sensing for Watershed Analysis in the Milk River basin, Jamaica
- Sejal Kuchwar, 2008, Statistical Downscaling for simulating climate change using SDSM
- Sirikanth Pilli, 2008, Estimation of Evapotranspiration using SEBAL Model for the Landsat 7 ETM+ Imagery of South Florida
- Matilde Dugue, 2008, Evaluation of wildlife's habitat restoration in the Lake Apopka.
- Luam Azmera, 2009. GIS-based estimation of ravines sediment load from upland agricultural field for Le Sueur River watershed in Minnesota.
- Yirgalem A. Chebud, 2009. Lake Tana Stage Level and Volumetric Simulation Using Stochastic Approaches

### **Undergraduate students**

- Debra Deras Coastal Flooding mapping using GIS (2006)
- Imrul Hack Climate change and water resources of South Florida (2006)
- Melisa Miano Land-use change analysis of South Florida (2006)
- Ashley Thomas Sediment analysis and estimation in the Le Suer River, Minnesota (2008)
- Tania Alfred Dams (2010)
- Tempest Newton Water usage in renewable energy systems & conventional energy systems, (2014)



- Jessica Egan                    The Hydrologic Impacts of Ethiopia: Brought On By and Effecting Human Communities (2014)
- Nathassha Astorga        Fog Harvesting: Technology, sustainability and future Panorama (2014)

### **International Research Scientists and Visiting Scholars hosted**

- Agenagnew Asfaw (visiting Scholar), Ethiopian Space Science and Technology Institute, June 17-August 16, 2018
- Fikru Fentaw (Visiting Scholar), Addis Ababa Institute of Technology, Addis Ababa University, November 17, 2017-Januray 17, 2018.
- Antonio Anis, (Visiting Scholar), September, 2016-February, 2017, University of Florence, Italy.
- Belete Berhanu, (Courtesy Research Associate), Addis Ababa Institute of Technology, Addis Ababa University, August 1- October 31, 2013.
- Fitsum Tesfaye, (Courtesy Research Associate), Addis Ababa Institute of Technology, Addis Ababa University, September 1-Nov. 30, 2011.
- Orville Grey, University of West Indies at Mona (Ph. D student), Jamaica, July 2011
- Fiseha Behulu (Courtesy Research Associate), Civil Engineering Department, Roma Tre University, Nov. 2010-October 2011
- P. K. Singh (Fulbright Scholar), Maharana Pratap University of Agriculture and Technology, India, Sep. 2009-Jan. 2010
- Flavio Lupia, Italian National Institute for Agricultural Economics, Italy, July-August, 2009
- Shimelis G. Setegn, Royal Institute of Technology, Sweden, March –Nov. 2009

### **Courses developed/taught at FIU**

GIS 3048 Int. to GIS

GIS 5050/EVR 4934 Environmental GIS

EVR 3010 Energy Flow

EVR 4211 Water Resources

EVR 4920 Senior Seminar

EVR 5219 Water Resources Assessment

EVR 7056 GIS in Water Resources

EVR 6268 Remote Sensing in Hydrology

### **Courses taught at University of North Dakota**

GLY 427 Groundwater Modeling

Fall 2003

### **Courses taught at Alemaya University, Ethiopia**

|           |                                  |           |
|-----------|----------------------------------|-----------|
| Ag En 201 | Int. to Agricultural Engineering | (1986-87) |
| Ag En 211 | Descriptive Geometry             | (1986-87) |
| Ag En 222 | Technical Drawing                | (1987-89) |
| Ag En 331 | Engineering Materials            | (1991-92) |
| Ag En 561 | Design of Farmstead Structures   | (1992-96) |
| Ag En 332 | Strength of Materials            | (1994-96) |
| Agri 162  | Int. to Agri. and Forestry       | (1995-96) |

### **RESEARCH EXPERIENCE AND INTERESTS**

- Spatially distributed hydrologic modeling and scaling
- Climate change and water resources variability
- Integration of hydrological models and remote sensing data into GIS
- Surface and groundwater interactions modeling
- Sediment transport
- Spatial and temporal land cover dynamics and scaling, spatial analysis
- Watershed characterization and modeling using Remote sensing and GIS
- Ecohydrology
- Climate change water resources variability
- ANN, Neuro-fuzzy and data fusion techniques
- Water, carbon and energy flux coupling
- Evapotranspiration estimation using satellite imagery

### **Reserach geographic area and basin**

- Nile River basin (Blue Nile River, Ethiopia)
- Mara River basin (Lake Victoria basin, Kenya & Tanzania)

- South Florida: Everglades, USA
- Caribbean hydrology
  - Jamaica: Rico Cobre River and Great River watersheds
  - Dominican Republic: Haina River and Yuna River watersheds
  - Puerto Rico: Rio Manati and Rio Plat Watersheds

## PROFESSIONAL AND UNIVERSITY SERVICE

- Editor-in-Chief, [Sensors](#), Remote Sensor section
- Editor, Nile River: Climate, land use and hydrology, Springer Science Book
- Guest Editor, Special Issue: Climate, weather and hydrology of East African Highlands" as part of the journal [Hydrology and Earth System Sciences \(HESS\)](#)
- Member, Fulbright Panel Review committee, Fulbright, 2012
- Member, Southwest Florida Water Management District (SWFWMD) Agricultural Advisory Committee
- Guest Editor, Special Issue: Climate change, land-use dynamics and ecohydrology of the Nile River basin, [Hydrological Processes](#)
- Member, Editorial Advisory Board, [J. of Spatial Hydrology](#), 2009-2012
- Editor-in-Chief, [J. of Spatial Hydrology](#) (2006-2009)
- Guest Editor, *Special Issue*: [Remote Sensing of Natural Resources and the Environment](#) for [Sensors](#) journal
- Editor, Proceedings of the [Nile workshop](#) on the hydrology and ecology of the Nile River under extreme conditions.
- Guest Editor, Special issue [Land surface Fluxes](#), Remote Sensing journal
- Guest Editor, Special issue [Hydrologic System Analysis, Patterns, and Predictions for Arid and Semi-arid Environment](#), Water journal
- Member, Editorial Advisory Board for [Sensors](#) journal (RS section)
- Member, Editorial Board, [Remote Sensing](#) journal
- Member, Graduate Admission Committee (EVR) (2004-2008), 2009-2011
- Member, University-wide Mentor Advisory Board
- Faculty Senate, Alternate Member
- Library Representative, E & E, 2012

- Chair, Curriculum Committee (EVR) 2008-2009
- Member, Curriculum Committee (EVR) (2007-2011)
- Member, Human Resources Committee (E & E) (2012)
- Secretary, Departmental Faculty Meeting (2005/06)
- Member, Science Task Force (EVR) (2005-2006)
- Member, University-wide Remote Sensing and GIS Advisory Committee (FIU) 2004-
- Member of College-wide School of the Environment exploratory Committee (2005)
- Member faculty search committee (Climatology position) (2011)
- Member faculty search committee (Meteorology position) (2010)
- Member, Faculty Advisory Council for Center for African New World Studies
- Director, Graduate Certificate in Water, Environment, and Development Studies (WEDev) Program, (EVR)
- Director, Undergraduate Certificate in Environmental Studies Program
- Director, Graduate Certificate in GIS Program (FIU) 2017-
- Member, Coordinating Committee for Certificate in Agroecology, (EVR)
- Member, Graduate Certificate in GIS Program (FIU) 2007-2017
- Member, Sustainability Degree Committee, CAS
- Florida Chapter Representative in SWFWMD, American Society of Agricultural and Biological Engineers (ASABE).
- Alternate FIU Representative, Consortium of Universities for the Advancement of Hydrological Science (CUAHSI)
- Faculty Advisor, FIU AWRA Student Chapter
- Member, EORSA Program Committee, Second International Workshop on Earth Observation and Remote Sensing Applications (EORSA 2012), Tongji University, Shanghai City from June 8 to June 11, 2012.
- Advisory Committee member, [4<sup>th</sup> International Symposium on Sensor Science \(I3S2015\)](#)
- Advisory Committee member, [5<sup>th</sup> International Symposium on Sensor Science \(I3S2016\)](#)

## **PROFESSIONAL MEMBERSHIP**

- Member, Academy of American Water Resource Engineers, 2009-present
- Order of the Engineer, 2000 – present.
- Member, American Geophysical Union (AGU), (1999 - present)
- Member, American Society of Agricultural Engineers (ASAE), (1999 - present)
- Member, Gamma Beta Chapter of Alpha Epsilon, (2000 - present)

## **JOURNAL/BOOK CHAPTER REVIEWER**

- Water Resources Research
- Hydrology and Earth System Sciences (HESS)
- Advances in Water Resources
- Journal of Hydrology
- Remote Sensing of Environment
- Hydrological Processes
- Journal of Environmental Management
- Brazilian Geophysical Society
- Sensors
- Geocarta International
- Natural Hazards Review
- Journal of American Water Resources Association
- Transactions of American Society of Agricultural Engineers: Soil and Water Division
- Transactions of American Society of Agricultural Engineers: Information & Electrical Technologies Division
- Hydrobiologia
- Hydrological Sciences Journal
- Journal of Water Resources Management
- Atmospheric Research
- Photogrammetric Engineering and Remote Sensing (PE&RS)
- Journal of Coastal Research
- Journal of Environmental Quality

### **Book/Book Chapter Review**

- Book Review, Springer
- Book Review CRC Press/Taylor & Francis Group
- Scaling issue in Remote sensing, Book review, John Wiley & Sons
- Book Proposal Review, Elsevier

### **Dissertation/Thesis Review**

- University of Engineering and Technology, Texila, 3 dissertations
- Bahir Dar University, 3 theses
- University of United Arab Emirates, 1 thesis
- Conference of Southern Graduate Schools Thesis Award
- University of Florence, Italy, Dissertation Review

### **PANEL MEMBER/PROPOSALS REVIEWER**

- NSF EPSCoR RSV (Panel Review)
- NSF EPSCoR RII,Track-1 Program (Panel Review)
- Oak Ridge Associate Universities (ORAU), Ralph Powe Award Program Review
- Belgian Earth Observation Programme, STEREO III Programme
- Washington Fellowship For Young African Leaders, President Obama Initiative
- Fulbright Program Panel Review 2012
- NASA Postdoc Program Review
- Steering Committee Member, HiWET, Belgium, 2016-2018
- REACH, Global Advisory Panel member, 2018-
- NSF Environmental Sustainability Program (Panel Review)
- Netherlands Space Office (NSO)
- NSF, Geography and Regional Science Program
- United States Department of Agriculture (USDA)
- U.S. Civilian Research & Development Foundation, Cooperative Grants Program
- The Netherlands Organization for Scientific Research
- National Institute for Space Research Program, Bureau External Research (The Netherlands), Earth Observation Research
- BARD, the United States - Israel Binational Agricultural Research & Development Fund

- NIWR-USGS National Competitive Grants Program
- Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)
- Wageningen Institute for Environment and Climate Research (WIMEK,) Wageningen University, Netherlands
- AWRA's Richard A. Herbert Scholarship Award
- National Center for Science and Technology Evaluation, Kazakhstan
- Member, Pharmaco-Kinesis Scientific Advisory Board, 2016
- United Arab Emirates University (UAEU)
- Swiss National Science Foundation (SNSF)

## PUBLICATIONS

350+ books, journal articles, book chapters, proceedings, edited special issues, conference abstracts/presentations

## PUBLICATION LINKS

[Google Scholar](#) [ORCID](#) [RESEARCHERID](#) [RESEARCHGATE](#) [ACADEMIA](#)

\*Post-doctoral

\*\*Graduate student advised

\*\*\*Undergraduate student advised

### Books

1. Melesse, A., Abtew, W., Senay, S. (Editors), Extreme Hydrology and Climate Variability: Monitoring, Modeling, Adaptation and Mitigation, Elsevier (coming soon)
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#### **PEER-REVIEWED CONFERENCE PROCEEDINGS**

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191. \*\*Enku T., van der Tol, **Melesse, A.M.**, Moges, S. A. 2013. *Multi-model and approach for spatial Evapotranspiration mapping: Comparison of models performance for different ecosystems*, International Conference on Science and Technology towards the Development of East Africa- ICST 2013, May 17-19, 2013, Bahir Dar, Ethiopia.
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## CONFERENCE PRESENTATIONS WITH ABSTRACTS

224. \*\*Abiy, A., **Melesse, A.M.**, 2018. *Historical drought variability in Southeast Florida and teleconnections to ENSO, PDO, and AMO*, EGU Meeting, Vienna, Austria, April 08-13, 2018.
225. \*\*Fikru Fentaw, **Melesse, A.M.**, Dereje Asfaw, Agizew Nigussie 2018. *Impacts of Climate Changes on the Water Resources of Tekeze River Basin part of Eastern Nile, Ethiopia*, EGU Meeting, EGU2018-3102, 2018, Vienna, Austria, April 08-13, 2018.
226. **Melesse, A.M.**, Tara Blakey, Mohammad Haji Gholizadeh, Mohd Manzar Abbas, and Anteneh Abiy, 2018. *Near-shore shallow water algal bloom mapping using Remote sensing tools: Challenges and opportunities*, EGU Meeting, Vienna, Austria, April 08-13, 2018.
227. \*\*Abiy, A., Wossenu Abtew, **Melesse, A.M.**, *Evaluation of regional hydroclimate variability and links to the hydrology and saltwater intrusion in South Florida*. GEER 2017, April 17-20, 2017.
228. \*\*Enku, T., **Melesse, A.M.**, Essayas K Ayana, Seifu A Tilahun, Mengiste Abate, Tammo S Steenhuis, 2017. *Response of Groundwater table to Eucalyptus Plantations in a Tropical Monsoon Climate, Lake Tana Basin, Ethiopia*, EGU Meeting, Vienna, Austria, April 23-28, 2017.
229. Melesse, AM., Mohammad Haji Gholizadeh, Blakey, T. 2017. *Inland-coastal water interaction: Remote sensing application for shallow-water quality and algal blooms modeling*, EGU Meeting, Vienna, Austria, April 23-28, 2017.
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231. \*\*Mohammad Haji Gholizadeh, **Melesse, A.M.**, and Reddi. L. 2016. *Comparison of Space and Air-borne Sensors Capabilities in Water Quality Monitoring*, World Environmental & Water Resources Congress 2016, West Palm Beach, Florida | May 22-26, 2016.
232. \*\*Mohammad Haji Gholizadeh, **Melesse, A.M.**, and Reddi. L. 2016. *Analysis of Spatiotemporal trends of Water Quality Parameters Using Cluster Analysis in South Florida*, World Environmental & Water Resources Congress 2016, West Palm Beach, Florida | May 22-26, 2016.
233. \*\*Abiy, A., **Melesse, A.M.**, 2016. *Evaluation of Watershed Scale Change in Groundwater Storage using Landscape and GRACE Data*, World Environmental & Water Resources Congress 2016, West Palm Beach, Florida | May 22-26, 2016.



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236. \*\*Mohammad Haji Gholizadeh, **Melesse, A.M.**, and Reddi. L. 2016. *Analysis of Spatiotemporal trends of Water Quality Parameters Using Cluster Analysis in South Florida*, Graduate Student Symposium, FIU.
237. \*\*Enku, T. and **Melesse, A.M.** 2015 *Temperature based Evapotranspiration estimation method: A case study for Rift valley of Ethiopia*, in Exceed International: 7-10 September, 2015, Zomba, Malawi.
238. Temesgen Enku, **Assefa M Melesse**, Essayas K Ayana , Seifu A Tilahun, Tammo S Steenhuis 2015. *Dynamic surface-groundwater interactions in the semi humid environment of the Lake Tana sub-basin, Ethiopia: A case of Fogera floodplain*. 10th Alexander von Humboldt International Conference, Water-Food-Energy River and Society in the Tropics, Addis Ababa | Ethiopia | 18 – 20 November 2015
239. \*\*Juliana J. Msaghaa , **Melesse, A.M.** 2015. *Sediment Yield modeling and Identification of Erosion hotspots in Tropical watersheds: The case of Upper Ruvu catchment in Tanzania*, OpenWater2015 Symposium, Addis Ababa, Ethiopia, September 14-17, 2015.
240. Melesse, AM 2015. *Sensors and Role of Remote Sensing in Coastal and Wetland Studies*, 4th International Symposium on Sensor Science, July 13-16, 2015, Basel, Switzerland.
241. \*\*Enku T, **Melesse, A.M.**, Essayas K.A., Seifu A.T., T.S. Steenhuis, 2015. *Dynamics of watershed storage in the distinct wet seasons of the Anjeni watershed, upper Blue Nile basin*, Ethiopia, 3<sup>rd</sup> International Conference on Advancement of Science and Technology May 8-9, 2015, Bahir Dar, Ethiopia.
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246. Melesse, A.M., Cereon, C. 2014. *Operational actual wetland evapotranspiration estimation for the Everglades using MODIS imagery*. EGU Meeting, Vienna, Austria, April 28-May 02, 2014
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249. \*\*Blakey, T., **Melesse, A.M**, 2013 *Algal blooms and freshwater nutrient sources in Florida Bay*, GIS Symposium: Exploring and Exchanging Spatial Knowledge, October 24, 2013, Naples, FL.
250. \*\* Kandel, H., **Melesse, A.M**, 2013. *Effect of Land use/ land covers change on radar refelectivity based convective precipitation in south Florida*, GSA Meeting, October 27-30, 2013, Denver, CO.
251. \*\*Blakey, T., **Melesse, A.M**, 2013 *Connecting Florida Bay algal blooms to freshwater nutrient sources* , Fall AGU Meeting, San Francisco, CA Dec, 9-13, 2013
252. \*\* Kandel, H., **Melesse, A.M**, 2013. *Human Induced Changes on Land Surface Temperature and Convective Rainfall in South Florida*, AWRA Annual Conference, Portland, OR, Nov. 4-7, 2013.
253. Sandoval1, E., Price, R.M., Whitman, D., **Melesse, A.M**. 2013 *Effects of Hydrologic Restoration on the Residence Times and Water Quality of a Coastal Wetland in the Florida Everglades.*, AGU Meeting of the Americas, May 14-17, 2013, Cancun, Mexico.

254. \*\*Dessu, S.B., **Melesse, A.M.** Bhat, M., 2013. How much does it cost to dry-up a river? Florida AWRA Conference, Jan. 25, 2013, Ft. Meyers, FL.
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260. \*\* Kandel, H., **Melesse, A.M.**, Change in minimum temperature as a response to land cover change in south Florida, , AGU Fall Meeting, 3-7 Dec., 2012, San Francisco CA.
261. \*\*Ammon, L; **Melesse, A.** 2012. DRASTIC Vulnerability Index for the Broward County Portion of the Biscayne Aquifer, GIS Symposium: Discovering technology-based Solutions, October 17, 2012, Naples, FL.
262. \*\*Kandel, H., **Melesse, A.M.**, 2012. Pre and Post-drainage South Florida: Land Cover Change and Temperature Response, GIS Symposium: Discovering technology-based Solutions, October 17, 2012, Naples, FL.
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264. Sandoval1, E., Price, R.M., Whitman, D., **Melesse, A.M.** 2012. Water Residence Time and Water Quality in Taylor Slough – Everglades National Park, FL, USA, INTECOL Conference, Orlando, FL from June 3-8, 2012
265. \*Setegn, S., **Melesse, A.M.**, 2011 Combined land use and climate change impact on

- Surface and Ground water resources in the Rio Cobre and Great River basin, Jamaica, AGU Fall Meeting, San Francisco, CA, Dec. 5-9, 2011.
266. \*\*Behulu, F., Setegn, S., **Melesse, A.**, Aldo, F., 2011. Impact of climate Change on Groundwater Recharge in the Tiber River Basin (Central Italy) Using Regional Climate model Outputs, AGU Fall Meeting, San Francisco, CA, Dec. 5-9, 2011.
267. \*\*Kandel, H., **Melesse, A.M.**, 2011. Analysis of Land Use Change and Possible Influence on Rainfall Pattern in South Florida, GIS Symposium: Inspiration Through Technology and Networking, November 9, 2011, Naples, FL.
268. \*Setegn, S., **Melesse, A.M.**, Vicioso, F., Veloz, R., Nunez, F., 2011. Assessment of land use change impact on water resources variability using GIS and hydrological model, GIS Symposium: Inspiration Through Technology and Networking, November 9, 2011, Naples, FL.
269. \*\*Msaghaa, J., **Melesse, A.M.** 2011. Integration of GIS technology and Soil erosion models towards tropical watershed management GIS Symposium: Inspiration Through Technology and Networking, November 9, 2011, Naples, FL.
270. \*\*Ammon. L., **Melesse, A.**, 2011. Spatiotemporal Trends of Contaminants in the Broward County Portion of the Biscayne Aquifer GIS Symposium: Inspiration Through Technology and Networking, November 9, 2011, Naples, FL
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272. \*Setegn, S., **Melesse, A.M.**, 2011. Application of a Semi-Distributed Model and Its Prediction Uncertainty for Simulation of Streamflow in the Rio Grande De Manati River Basin, Puerto Rico, Florida Section American Society of Agricultural and Biological Engineers 2011 Annual Conference, 15-18 June 2011, Naples, FL, USA.
273. \*Setegn, S., **Melesse, A.M.**, 2011. Hydrologic Impacts of Land use/Land cover Changes in the Rio Cobre Watershed, Jamaica, Florida Section American Society of Agricultural and Biological Engineers 2011 Annual Conference, 15-18 June 2011, Naples, FL, USA.
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275. \*Setegn, S G., **Melesse. A.M.** 2011. *Climate change and its impact on the hydrological processes in the Caribbean islands of Puerto Rico, Jamaica*

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276. \*\* Dessu , S.B., Melesse, A.M., Bhat, M., McClain, M. 2010 *Application of Method of Variation to Predict Human Induced Modifications of Water Resource systems*, AGU Fall Meeting, San Francisco, CA, Dec. 13-17, 2010.
277. \*Setegn, S., Melesse. A.M., 2010 *Climate Change Trend in the Tropical and Caribbean Regions and its Hydrological Impacts*, AGU Fall Meeting, San Francisco, CA, Dec. 13-17, 2010.
278. \*\*Chebud Y and Melesse A., 2010. *Application of Remote Sensing and Neural Network Approaches For Prediction of Chlorophyll-a over the Shallow Water Bodies of South Florida*, Presented at the WaterSCAPES, NASA Project, Meeting, FIU, USA.
279. \*Setegn, S., Melesse. A.M., McClain, X. Wang, 2010. *Tropical Hydrology under a changing Land Use Dynamics: Development of sustainable watershed conservation scenarios in the Reo Cobre Watershed, Jamaica*, 2010 AWRA Summer Specialty Conference, Tropical Hydrology & Sustainable Water Resources in a Changing Climate, Rio Grande, Puerto Rico, August 30 - September 1, 2010.
280. \*Setegn, S., Melesse, A.M., M. McClain, X. Wang, 2010. *Hydrological response of watershed systems to combined land use and climate changes in the in Rio Haina Basin, Dominica Republic*, 2010 AWRA Summer Specialty Conference, Tropical Hydrology & Sustainable Water Resources in a Changing Climate, Rio Grande, Puerto Rico, August 30 - September 1, 2010.
281. \*Setegn, S., Melesse, A.M., 2010. *Impact of climate changes on the water resources variability in Rio Grande De Manati and Plata River Basins, Puerto Rico, USA*, 2010 AWRA Summer Specialty Conference, Tropical Hydrology & Sustainable Water Resources in a Changing Climate, Rio Grande, Puerto Rico, August 30 - September 1, 2010.
282. Melesse, A., Miralles, F. 2010 *Impact of Tropical Storms on the Vegetation Biomass of Everglades and Chl-a Concentration in Coastal Waters of Everglades: Application of MODIS and SeaWiFS Sensors*, AGU Meeting of the Americas 08–13 August 2010, Foz do Iguassu, Brazil.
283. \*\*Maalim, Fukhrudin K., Melesse. A. M., Belmont, P. 2010. *Modeling Upland Erosion Potential in the Le Sueur Watershed: A GIS Mediated Application of the WEPP Model*, AWRA Spring Specialty Conference: GIS & Water Resources VI, March 29-31, 2010, Orlando, FL.

284. Melesse, A, Miralles, F. 2010 *Fractional vegetation and impervious surface dynamics in the wetland-urban-agriculture interfaced systems of south Florida: A remote sensing perspective*, AWRA Spring Specialty Conference: GIS & Water Resources VI, March 29-31, 2010, Orlando, FL.
285. Melesse, A., Miralles, F. Thomas, A. 2010 *SeaWIFS-based chlorophyll-a concentration in coastal waters of Everglades*, AWRA Spring Specialty Conference: GIS & Water Resources VI, March 29-31, 2010, Orlando, FL.
286. \*\*\*Thomas, A., Melesse. A. M., M., Setegn, S., Nunez, F, Chalas, J, Castillo, A.G 2010. *The effect of reservoir on spatial variation of water quality parameters in Yuna River watershed, Dominican Republic*, AWRA Spring Specialty Conference: GIS & Water Resources VI, March 29-31, 2010, Orlando, FL.
287. \*\*Mekonnen, M, Melesse, A.M., 2010. *Spatial Runoff and Mapping of Potential Water Harvesting Areas: A GIS and Remote Sensing Perspective*, 2010 Water Resources Conference in Ethiopia, Jan. 12-16, 2010, Addis Ababa, Ethiopia.
288. Melesse, A., McClain, M. Miralles, F. Wang, X 2010. *Surface energy fluxes: Reflection of vegetation dynamics and land management*, 2010 Water Resources Conference in Ethiopia, Jan. 12-16, 2010, Addis Ababa, Ethiopia.
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304. \*Setegn, S.G., **Melesse, A.M.**, Dargahi, B., Srinivasan, R. 2009 ***Water Resources Variability as a Result of Changing Climate: A Case Study in the Lake Tana Basin, Blue Nile Ethiopia***, AWRA Spring Specialty Conference: *Managing Water Resources & Development in a Changing Climate*, Anchorage, AK, May 4-6, 2009
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323. Melesse, A., V. Nangia, Baumgartner, D. 2004. *Grid-based Surface Water Balance mapping using Remote Sensing and GIS*, AWRA Annual Conference, 1-4 Nov, 2004, Orlando FL.
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#### Technical Reports and Manual

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337. Bhat, M. G., K. Jayachandran, Melesse, A.M, J. Onsted, and S. Koptur. “Curriculum Enrichment, Instrumentation, Experiential Learning in Agroecology: Annual Report for Period ending July 2011.” Submitted to the Department of Agriculture under the Cooperative Agreement 2008-38422-19209, Department of Earth and Environment, Florida International University, Miami, October 2011.
338. Melesse, A., Setegn, S., McClain, M, Vicioso, F., Veloz, F., Fu, J, Webber, D., Ortiz, J, Nunez, F. “Caribbean Coastal Scenarios Project”, Fifth year Final Report submitted to IAI under the agreement CRN II-061, Department of Earth and Environment, Florida International University, May 2011, pp 104.
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340. Bhat, M. G., G. Philippidis, K. Jayachandran, and Melesse, A.M. “Internalization of biofuel research, curriculum, and business promotion: Annual Progress Report for Period ending August 2010.” Submitted to the Department of Agriculture under the Cooperative Agreement 2008-51160-

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351. Melesse, A., Tien, K., Judge, J., Jordan, J. Remote Sensing and Geographic Information System in Land Cover Study and Runoff Coefficient Estimation for Irrigated Regions in southern Taiwan. User's Manual for Tsao-Jiin Research Project Grant, April 2002.
352. Melesse, A., Judge, J., Jordan, J. Remote Sensing and Geographic Information System in Runoff Coefficient Estimation for Irrigated Regions in Southern Taiwan. Final Report for Tsao-Jiin Research Project Grant, March 2002.

#### **Invited Seminars/Lectures**

1. **Transboundary Water Resources Management: Challenges and Lessons**  
GLOWS Presentations for Study tour for Ghana Community Water and Sanitation Agency participants, September 16, 2014.
2. **Human and climate induced changes and impacts on hydrologic regimes of selected river basins**, Department of Earth and Environment, Jan. 16, 2013
3. **Water Resource Management challenges in the 21st century: Human and climate induced changes and impacts on hydrologic and sediment regimes of selected river basins**, Mekele University, April 03, 2012.
4. **Hydrologic response of river basins to the human and climate induced changes: Examples from selected studies**, Melkasa Agricultural Research center April 4, 2012.
5. **Water Resource Management challenges in the 21st century: Human and climate induced changes and impacts on hydrologic and sediment regimes of selected river basins**, Arba Minch University, April 6, 2012.

6. **WaterSCAPES: Hydrology of Wetlands from Space**, Department of Civil Engineering, Haramaya University, Feb. 13, 2012
7. **Water Resource Management challenges in the 21st century: Human and climate induced changes and impacts on hydrologic and sediment regimes of selected river basins**, Hawassa University, Feb. 7, 2012.
8. **WaterSCAPES: Hydrology of Wetlands from Space**, Department of Civil Engineering, Addis Ababa University, Dec. 16, 2011
9. **Water Resources challenges in the 21st century: An overview of need-driven research activities across the spectrum of various ecohydrologically diverse regions**, Ethiopian Water Institute, Addis Ababa University, Nov. 22, 2011.
10. **Climate Change and Coastal Resources: Caribbean Coastal Scenarios experience**, Ministry of Environment, Dominican Republic, June 29, 2011
11. **Hydrology of the Upper Blue Nile River Basin: Facts, Trends and Indicators of Changes**, January 28, 2011, Department of Earth and Environment, FIU.
12. **Understanding the ecohydrological response of impacted watersheds to restoration: Remote sensing and GIS application**, National Center for Earth-Surface Dynamics, An NSF Center of Excellence, Oct. 30, 2006: University of Minnesota.
13. **Evapotranspiration mapping using remote sensing** (Video conference Lecture), April 2005, Department of Earth Systems and Policy, University of North Dakota.
14. **Evapotranspiration mapping using remote sensing** (Video conference Lecture), April 2006, Department of Earth Systems and Policy, University of North Dakota.
15. **The role of science in integrated water resources management**, July 2006, Alemaya University, Ethiopia.
16. **Water Resources Research: Challenges and opportunities**, 2006, Civil and Environmental Engineering, FIU.
17. **The role of GIS and remote sensing in water resources Research**, 2006, Honor's College, FIU.
18. **GIS and remote sensing in water resources research: Application examples**, Feb. 2006, GIS Day, FIU.
19. **Impervious surface area dynamics and storm runoff response**, Sep. 2006, Environmental Studies, FIU.
20. **Impervious surface Dynamics in South Florida**, Oct. 2006, Applied Research Center, FIU.

#### **Technical Trainings/workshops offered**

21. Potential irrigation area mapping in Amhara Region using GIS and Remote Sensing, Ziway, Ethiopia, December 19-31, 2016.
22. Potential irrigation area mapping in Oromia Region using GIS and Remote Sensing, Bahir Dar, Ethiopia, June 04-16, 2016.
23. Advanced GIS: Application to water resources Engineering, Addis Ababa Institute of Technology, Addis Ababa University, May 7-18, 2012.
24. Climate Change and Water Resources, Bahir Dar University, March 14-17, 2012.
25. Remote Sensing in Hydrology, Bahir Dar University, March 19-23, 2012.
26. Impacts of human and climate change induced drivers on the ecohydrology of the Mara River basin, Egerton University, Kenya, Feb. 16-23, 2012.
27. Impacts of human and climate change induced drivers on the ecohydrology of the Mara River basin, University of Dar es Salaam (UDSM), Tanzania, Feb. 24-29, 2012.
28. Advanced GIS, Bureau of Water Resources, ANRS, SWHISA, 2010, Bahir Dar, Ethiopia.
29. GIS in Water Resources, Bureau of Water Resources, ANRS, SWHISA, 2010, Bahir Dar, Ethiopia.
30. Image Analysis, Bureau of Water Resources, ANRS, SWHISA, 2010, Bahir Dar, Ethiopia.
31. Principles of GIS, Bureau of Water Resources, ANRS, SWHISA, 2009, Bahir Dar, Ethiopia
32. SWAT application in the Caribbean Islands. May 26-27, 2009, Santa Domingo, Dominican Republic.
33. SWAT application in the Caribbean Islands. May 29-30, 2009, Kingston Jamaica.
34. SWAT: Theory and application, May 17-18, 2008, Quito, Ecuador.
35. SWAT application to watershed modeling in the Mara River basin, June 26-27, 2006, Kissimu, Kenya.