

The Florida Water and Climate Alliance

Originally funded by NOAA Climate Program Office-Climate Societal Interactions Program (CSI) and the NOAA Sectoral Applications Research Program (SARP)



Goal: To increase the regional relevance and usability of climate and sea level rise models for the specific needs of water suppliers and resources managers in Florida.

Project Activities



- Develop a **collaborative Working Group** comprised of public water suppliers, water resource managers, climate scientists, and hydrologic scientists
- Evaluate the practical applicability of current climate data/models predictions at **utility relevant space-time scales**
- Evaluate the usefulness of these data/models for **minimizing current and future public water supply risks** associated with climate variability/climate change and/or sea level rise

Academic Partners: UF Water Institute ; UF Center for Public Issues Education; FSU COAPS; U Miami RSMAS; Florida Climate Institute

Public Utilities: Broward County; West Palm Beach; GRU; Miami-Dade County; OUC; Palm Beach County; Peace River Manasota Regional Water Supply Authority; Tampa Bay Water

Water Management Districts: SFWMD, SWFWMD; SJRWMD

Florida Water and Climate Alliance

Now funded by financial and in-kind contributions from FWCA partners



FloridaWCA Steering Committee



Tirusew Asefa
Ph.D., P.E.,
D.WRE
Manager,
Planning &
System
Decision
Support Tampa
Bay Water
tasefa@tampabaywater.org



Chris Martinez
Ph.D
Associate
Professor,
Agricultural &
Biological
Engineering
University of
Florida
chrisjm@ufl.edu



Kevin Morris
P.E., B.C.E.E,
C.G.F.M,
Science and
Technology
Officer
Peace River
Manasota
Regional Water
Supply
Authority
kmorris@regionalwater.org



Rob Teegarden
Vice President
of Water
Orlando
Utilities
Commission
rteegarden@ouc.com



Vasu Misra
Ph.D.
Associate
Professor,
Meteorology,
(COAPS),
Florida State
University
vmisra@fsu.edu



Tracy Irani
Ph.D.
Department
Chair, Family,
Youth &
Community
Sciences,
University of
Florida
irani@ufl.edu



Ed Carter
Hydrologist,
St. Johns River
Water
Management
District
ecarter@sjrwmd.com

Collaborative working group

Actionable climate science -
Data/models/tools relevant to water supply
operations and management



Domain

Learning together

Practice

Community

Public water suppliers, resource managers, climate, social and hydrologic scientists, local planners

Workshops, projects, research, website, reports, emails, personal communication, outreach

Evaluate the applicability and usefulness of climate data/models/tools for water supply

Learning together

Domain

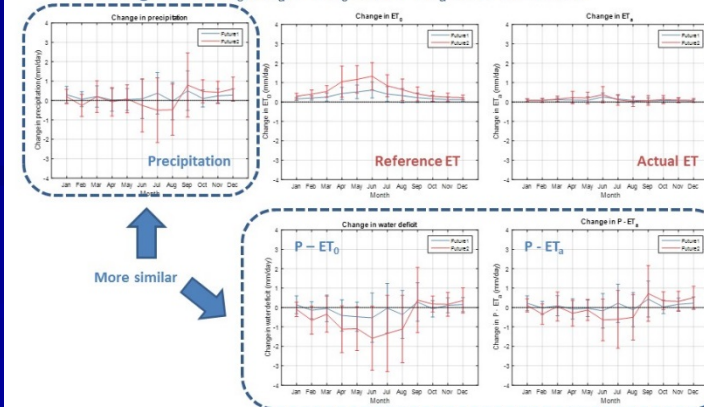
- **SEASONAL SCALE PREDICTIONS**– Diagnose seasonal predictability and forecast skill for precipitation, temperature, evapotranspiration and streamflow in multiple watersheds in Florida
- **SEA LEVEL RISE** – Improve access to existing information
- **LONG TERM CLIMATE PROJECTIONS**– Evaluate the ability of downscaled reanalysis data and retrospective GCM output to reproduce current climate and hydrologic patterns, and implications of future GCM projections on climate and hydrologic patterns, in Florida



03 Tampa Bay region

Florida Water & Climate Alliance

Change in P , ET_0 , ET_a , $P-ET_0$ and $P-ET_a$ over all GCMs





The Florida Water & Climate Alliance (FloridaWCA)

Collaborative • Actionable • Locally Relevant

Climate change, climate variability, sea level rise and associated uncertainties and risks pose complex challenges to the planning and operations of Florida’s public water supply utilities. **The Florida Water and Climate Alliance** is a stakeholder-scientist partnership committed to increasing the relevance of climate science data and tools at relevant time and space scales to support decision-making in water resource management, planning and supply operations in Florida.

The FloridaWCA collaborative [Learning network](#) is engaged in co-exploration and co-development of actionable climate science. FloridaWCA [Projects](#) contribute to assessing and developing relevant climate data and tools and ensuring their usefulness to water supply and resource planning. According to FloridaWCA utility stakeholders the most important drivers that they currently face relative to climate change and variability are related to a) changes in precipitation, temperature and evapotranspiration patterns/extreme events and b) sea level rise.

[Common Utility Questions and Needs regarding climate information](#)

Utilities need climate/sea level rise information, data and models to understand, predict and adapt to potential impacts of climate change and variability including

FloridaWCA CURRENTS



Join us at the next FloridaWCA workshop
Monday, OCTOBER 2nd, 2017
 hosted by UF Water Institute in Gainesville, FL

To access previous FloridaWCA workshop reports & presentations> [Click here](#)

Items of Interest

--The **6th University of Florida Water Institute Symposium** is scheduled for February 6-7, 2018 on the University of Florida Campus. For information on previous Symposia> [Click here](#)

--Dr. Alison Adams has been a "champion" of the FloridaWCA from its beginning. In honor of her retirement from Tampa Bay Water recently, FloridaWCA colleagues prepared a brief tribute to recognize Alison's contributions to the network. >[Click here](#)

--Tampa Bay Water featured in U.S. Climate

Save the Date!!!

6th Biennial University of Florida Water Institute Symposium:



Sustainable Water Resources

Complex Challenges, Integrated Solutions



February 6-7, 201 Reitz Union, University of Florida, Gainesville, FL.



Questions.... Comments?