

**F. Consent Agenda - Parks and Recreation Department
ITEM 9.**



**AGENDA REPORT
August 14, 2018**

**Appointment, RE: Environmentally Endangered Lands Program Selection
and Management Committee**

SUBJECT:

Appointment of a new member to the Environmentally Endangered Lands Program Selection and Management Committee - All Districts

FISCAL IMPACT:

There are no impacts to General Fund or the Environmentally Endangered Lands Program.

DEPT/OFFICE:

Parks and Recreation

REQUESTED ACTION:

It is requested the Board of County Commissioners appoint Kathryn E. Becker as a citizen volunteer to the Environmentally Endangered Lands Program Selection and Management Committee.

SUMMARY EXPLANATION and BACKGROUND:

The Selection and Management Committee (SMC) works directly with the Environmentally Endangered Lands (EEL) Program Manager to implement the management plans, educational programs and passive recreation opportunities throughout the natural EEL Sanctuary Network.

On January 30, 2018, Ross Hinkle resigned from his position on the SMC. The Sanctuary Management Manual states the SMC will be appointed by the Board of County Commissioners using the scientific criteria established in the EEL Land Acquisition manual, as recommended by the Procedures Committee and authorized by the Board of County Commissioners.

On April 24, 2018, the Board authorized staff to advertise for the vacant SMC member. One application has been received. The applicant, Kathryn E. Becker, is qualified and staff recommends her appointment.

ATTACHMENTS:

Description

- **BECKER RESUME**



Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Tammy.Rowe@brevardclerk.us

August 15, 2018

Kathryn Elizabeth Becker
4085 Old Settlement Road
Merritt Island, FL 32952

Dear Ms. Becker:

Re: Appointment to Environmentally Endangered Lands Selection and Management Committee

The Board of County Commissioners, in regular session on August 14, 2018, acknowledged your appointment as a citizen volunteer to the Environmentally Endangered Lands Selection Committee. Said term of appointment expires December 31, 2020. Enclosed are memorandums explaining the "Sunshine Law" and 2017 changes to Voting Conflict Law for your information.

Your willingness to serve the citizens of Brevard County in this capacity is appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Rowe, Deputy Clerk

/dt

Encls. (2)

cc: EEL Program Manager
Parks and Recreation Director

From: "K. Elizabeth Becker" <k.elizabeth.becker@gmail.com>
Subject: EEL Committee Member Application
Date: May 16, 2018 at 1:15:14 PM EDT
To: mike.knight@brevardfl.gov

Dear Mr. Knight,

Please find attached my application and resume for the volunteer position open on the EEL Selection and Management Advisory Committee. I look forward to your decision and the opportunity to participate in such an important program. Please feel free to contact me for any additional information regarding my qualifications for this position.

Sincerely,

Liz Becker

--

K. Elizabeth Becker
Department of Biology, BL 307
University of Central Florida
4000 Central Florida Blvd.
Orlando, FL 32816

Brevard County
Environmentally Endangered Lands (EEL) Program
Selection and Management Committee Volunteer Application

Due Date: May 18, 2018

Name: Kathryn Elizabeth Becker

Mailing Address: 4085 Old Settlement Road

City: Merritt Island **State:** FL

Zip: 32952

Phone: 321-431-3886 **Cell Phone:** SAME

Email: k.elizabeth.becker@gmail.com

The EEL Selection and Management Committee serves as an expert scientific advisory committee to the County Commission on all issues involving the acquisition and management of environmentally endangered lands within the EEL Program protected area network in Brevard County.

Please complete the following information AND include your resume as an attachment when submitting this application for consideration.

1. Please confirm your willingness to serve on the Committee for a minimum term of two (2) years.

YES

2. Please provide a brief overview AND resume of your background and expertise related to the following committee member requirements:

- **Graduate academic degree in biological or environmental sciences OR demonstrated professional expertise (minimum of 6 years) in a closely related conservation field such as ecosystem management, natural resources conservation, aquatic biology, field ecology, marine biology, botany, geology, hydrology, fire ecology, natural areas management, human use and recreation in natural areas, science education, or natural area sanctuary design.**

I am currently a Ph.D. candidate in the field of Conservation Biology at the University of Central Florida. My doctoral research is focused on the impact of land use, land use change, and land management on the carbon dynamics of Central Florida ecosystems. I have previously earned an M.S. in Biology from the University of Central Florida and a B.S. in Botany from the University of Florida. I believe my academic career as well as my additional research experiences (please see attached CV) qualifies me to serve as a capable and experienced member of the EEL Selection and Management Committee.

3. Please provide a brief overview of your background and knowledge of Brevard County ecosystems, habitat types and conservation land management techniques.

As a fourth generation Brevard County native I have had extensive experience in the county's natural areas, I am knowledgeable of the many ecosystem and habitat types the area has to offer, and feel a strong sense of duty to preserve these natural treasures for generations to come. My academic and professional experience as an ecologist has provided me with an in-depth understanding of many restoration and conservation techniques applied across landscapes in the Central Florida region, specifically the management technique of prescribed fire. The research I have conducted has provided me with an understanding of the practicalities of applying such management techniques, as well as a depth of knowledge about ecosystem response to these land management activities.

Click here to enter text.

For Staff Use Only:

Date application received: _____

By: _____ Via: Email Fax In-Person Mail

Kathryn Elizabeth Becker

Department of Biology
University of Central Florida
4000 Central Florida Blvd.
Orlando, FL 32816
(321) 431-3886
k.elizabeth.becker@gmail.com

Education

- Ph.D. Candidate Conservation Biology** August 2011 - Present
University of Central Florida Orlando, FL
Dissertation: Assessing the Impact of Land Use, Land Use Change, and Land Management on the Carbon Flux Dynamics of a Subtropical Landscape
Major Professor: Dr. C. Ross Hinkle
- M.S. Biology** May, 2011
University of Central Florida Orlando, FL
Thesis: Variability of Carbon Stock in Florida Flatwoods Ecosystems Undergoing Restoration and Management
Major Professor: Dr. C. Ross Hinkle
- B.S. Botany** December, 2008
University of Florida Gainesville, FL
-

Research Experience

- Graduate Research Assistant** August, 2012 - Present
University of Central Florida, Department of Biology
Supervisor: Dr. C. Ross Hinkle
Carbon Dynamics of the Greater Everglades Watershed and Implications of Climate Change
- Graduate Research Assistant** January, 2011 - December, 2015
University of Central Florida, Department of Biology
Supervisor: Dr. C. Ross Hinkle
Measuring CO₂ flux in native and urban ecosystems using the eddy covariance method
- Graduate Research Assistant** May, 2010 - June, 2011
University of Central Florida, Department of Biology
Supervisor: Dr. C. Ross Hinkle
Urban Forest Effects Model for Orlando, FL
- Research Assistant** July, 2009 - August, 2009
University of Florida, Department of Botany
Supervisor: Dr. Michelle C. Mack
Anatuvuk River Fire Project
- Research Assistant** January, 2009 - July, 2009
University of Florida, Department of Botany
Supervisor: Dr. Edward A.G. Schuur

Research Assistant January, 2009 - July, 2009
University of Florida, School of Forest Resources and Conservation
Forest Biology Research Cooperative
Supervisors: Dr. Timothy A. Martin, Dr. Eric J. Jokela and Dr. Jason G. Vogel
Intensive Management Practices Assessment Center Project

Undergraduate Independent Study August, 2008 - April, 2009
University of Florida, Department of Botany
Sponsors: Dr. Edward A.G. Schuur and Dr. Hanna Lee
Carbon and nitrogen stable isotope analysis of Alaskan permafrost soils

Teaching Experience

Graduate Teaching Associate, University of Central Florida, Ecology Laboratory August, 2010 - December, 2010

Graduate Teaching Assistant, University of Central Florida, Biology Laboratory 1 August, 2009 - April, 2010

Grants and Honors

UCF College of Graduate Studies Travel Fellowship 2011, 2012, 2013

Elsie Quarterman-Catherine Keever Award (Best Ecological Poster Presented by a Student) 2011
Ecological Society of America, Southeastern Chapter

National Garden Club Scholarship 2010 - 2011

Florida Medallion Scholarship 2002 - 2008

National SMART Grant 2008

Publications

Peer Reviewed Publications

Articles

Ekpe, E.K., K.E. Becker, J. Lab, C.R. Hinkle, and F. Escobedo. 2012. Orlando, Florida's Urban and Community Forests and Their Ecosystem Services. University of Florida- IFAS, EDIS FR290.

Conference Proceedings

Becker, K.E. and C.R. Hinkle. 2017. Urban NEE Drivers and Patterns in the Headwaters of the Everglades. *Greater Everglades Ecosystem Restoration (GEER) Meeting*. Coral Springs, FL.

Becker, K.E. and C.R. Hinkle. 2016. Carbon dynamics of a longleaf pine flatwoods ecosystem managed with prescribed fire. *Florida Native Plant Society 36th Annual Conference*. Daytona Beach, FL.

C.R. Hinkle, **K.E. Becker**, B. Benscoter, X. Comas, M. McClellan, M. Budny, D. Harshbarger, S. Graham. 2016. Carbon Dynamics of the Greater Everglades Watershed and Implications of Climate Change. *2016 Environmental System Science (ESS) PI Meeting*. Potomac, MD.

Becker, K.E. and C.R. Hinkle. 2013. Assessing the impact of urban land cover composition on CO₂ flux. *American Geophysical Union 45th annual Fall Meeting*. San Francisco, CA.

Becker, K.E. and C.R. Hinkle. 2012. Measuring the impact of prescribed fire management on the carbon balance of a flatwoods ecosystem in Kissimmee, Florida. *American Geophysical Union 45th annual Fall Meeting*. San Francisco, CA.

Ekpe, E.K., **K.E. Becker**, J. Lab, C.R. Hinkle and F. Escabedo. 2011. An Assessment of the Structure and Environmental Benefits of Urban Forests in Orlando, Florida. *Florida Academy of Sciences 75th Annual Meeting*. Melbourne, FL

Becker, K.E., J.M. Anderson and C.R. Hinkle. 2011. Variability of Aboveground and Belowground Carbon Stocks in Florida Flatwoods Ecosystems Undergoing Restoration and Management. *Ecological Society of America 96th Annual Meeting*. Austin, TX. Poster also presented to *Association of Southeastern Biologists 2011*. Huntsville, AL.

Becker, K.E., E.A.G. Schuur and H. Lee. 2009. Carbon and Nitrogen Isotope Distribution and Abundance in Alaskan Permafrost Soils. *Biology Undergraduate Research Symposium*. Department of Biology, University of Florida, Gainesville, FL.

Technical Reports

Sumner, D.M., C.R. Hinkle and **K.E. Becker**. 2017. Evapotranspiration (ET) at University of Central Florida urban site, daily data, Orange County, Florida, January 29, 2009 - September 27, 2012: U. S. Geological Survey data release, <https://doi.org/10.5066/F7JS9NZB>.

Becker, K.E. and C.R. Hinkle. 2014. Assessing the Carbon Flux Dynamics of a Central Florida Longleaf Pine Flatwoods Landscape Undergoing Prescribed Fire Management. Technical report to: The Nature Conservancy.

Hinkle, C.R., D. Sumner and **K.E. Becker**. 2012. Measurement and Modeling of Evapotranspiration in a Central Florida Urban Setting. Technical report to: Southwest Florida Water Management District.

Ekpe, E.K., **K.E. Becker**, J. Lab, C.R. Hinkle and F. Escabedo. 2010. An Assessment of the Structure and Environmental Benefits of Urban Forests in Orlando, Florida. Technical report to: Orlando Parks Division, Families, Parks and Recreation Department, City of Orlando, Florida.

Other Presentations

Becker, K.E. 2013. Carbon Flux Dynamics of a Subtropical Landscape: The Impact of Land Use, Land Use Change, and Land Management. *Invited Speaker*. University of Central Florida Department of Biology.

Becker, K.E. 2013. Effects of Florida Flatwoods Restoration and Management on Ecosystem Carbon Storage and Sequestration. *Invited Speaker*. The Nature Conservancy, Kissimmee, FL.

Professional Development

Training on Community Earth System Model (CESM): Community Land Model
Pacific Northwest National Laboratory

February, 2014
Richland, WA

Ethics/Responsible Conduct of Research Workshops October, 2011
University of Central Florida Orlando, FL

Summer Course in Flux Measurements and Advanced Modeling July, 2011
University of Colorado Mountain Research Station Nederland, CO

Collaborative Workshop: Developing a Carbon Budget for the Greater Everglades Ecosystem July, 2011
Participating organizations: FAU, US Geological Survey, UCF, FSU, FIU, South Florida Water Management District, Everglades National Park, and Florida Center for Environmental Studies Davie, FL

Affiliations and Service

Professional Society Memberships

American Geophysical Union July, 2012 - Present

Ecological Society of America, Biogeosciences Section May, 2010 - Present

Departmental

University of Central Florida Biology Graduate Student Association August, 2009 - Present
Faculty Liaison May, 2010 – May, 2012

Mentor to Undergraduate Research Volunteers May, 2010 - August, 2012
University of Central Florida, Department of Biology

Other

Women in Environmental Careers Luncheon with LEAF Interns September, 2016
The Nature Conservancy's Disney Wilderness Preserve Kissimmee, FL