

FUNDING OPPORTUNITY # F23AS00231

United States Department of the Interior
United States Fish and Wildlife Service
Ecological Services & Wildlife and Sport Fish Restoration
Cooperative Endangered Species Conservation Fund (Region 4)
Endangered Species Act,
Sect. 6 “Traditional” Conservation Grants

APPLICATION FOR FEDERAL ASSISTANCE- BUDGET NARRATIVE 2023-2024, SEGMENT E-9-32

FLORIDA DEPARTMENT OF AGRICULTURE AND
CONSUMER SERVICES

FLORIDA FOREST SERVICE

FLORIDA STATEWIDE ENDANGERED AND THREATENED
PLANT CONSERVATION PROGRAM

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**FLORIDA STATEWIDE ENDANGERED AND THREATENED PLANT
CONSERVATION PROGRAM, BUDGET NARRATIVE 2023-2024
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FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES
APPLICATION FOR FEDERAL ASSISTANCE
BUDGET NARRATIVE 2023-24
OCTOBER 1, 2023 THROUGH DECEMBER 31, 2024

Summary of Financial Management and Eligibility: The Florida Department of Agriculture and Consumer Services (FDACS) administers the Florida Statewide Endangered and Threatened Plant Conservation Program (the Program) in accordance with federal 2 CFR § 200.302 financial management requirements through FDACS Administrative Policies and Procedures (No. 4-29 *Federal Financial Assistance Subrecipient Agreement and Monitoring*) and the State of Florida Statutes (Section 215.971 *Agreements funded with federal or state assistance*). A *Full Authorities Cooperative Agreement* is currently in place (signed April 13, 2018) and FDACS renews this Cooperative Agreement on an annual basis. The Program ensures all Subrecipients conducting rare plant projects have Unique Entity Identifiers and are registered in the SAM.gov database. SAM.gov registration expiration dates are monitored through the Program’s application process and throughout the entire project term. All projects are conducted within the United States of America and mostly within the State of Florida, sometimes in cooperation with another state.

The Program administers subrecipient projects as per FDACS Administrative Policies and Procedures (No. 4-29 *Federal Financial Assistance Subrecipient Agreement and Monitoring*) and provides the following guidelines. The Indirect Cost maximum is 10% on the federal portion and 15% on the matching portion. Fringe benefits are a maximum of 35% unless approved. Travel costs are the following maximum level (some scenarios may require higher travel funding, but appropriate documentation and approval must be made): mileage \$0.445/mile, breakfast \$6; lunch \$11; dinner \$19; and, per diem \$80; or, if more, then costs (same as above) + hotel expense (\$175 max.). Salary charge per hour from rare plant conservation staff and volunteers are reflected as a footnote in each Cost Schedule for each project within this Budget Narrative, in the following pages. If partial funding is awarded to the Program, Tasks and Cost Schedule are provided in the Project Narratives portion of this Application for Federal Assistance, to assist the Program or subrecipients and how to conduct the project with less funds than allocated, as per Task.

1. Florida Plant Conservation Program Administration, Management, and Research (Florida Forest Service - “State” Match as per AFA form 424). The objectives of this project are to: administer the Florida Plant Conservation Program (the Program) through the timely completion and submission of both federal and state documents; administer plant conservation projects conducted by various organizations and provide access to online list of report titles; and, conduct *in situ* mapping, management, and monitoring of known rare plant populations and restoration of their habitat, if needed.

Federal	\$ 68,936
State Match	\$ 24,000 (25%)
Total	\$ 92,936

APPLICATION FOR FEDERAL ASSISTANCE 2023-24 BUDGET NARRATIVE/WORK PLAN (cont.)

This is a full-time salary position within the Florida Department of Agriculture and Consumer Services (FDACS). The position is housed within the Florida Forest Service (FFS), a division of FDACS and is stationed in Tallahassee, Florida. The salary per hour for this full-time staff position is \$22/hour (40% Fringe Benefits). FDACS Negotiated Indirect Cost Rate is 16.3% (exp. June 30, 2024). \$1,000 is requested for travel throughout the State of Florida, \$500 is requested for supplies and includes herbicide, uniforms, field supplies, electronic devices such as GPS, cameras, etc., and other items needed for fieldwork and travel throughout the State of Florida. If expenses are not used, they are provided to the State Natural Heritage Program to upload federally listed and at-risk plant species GIS data from LWRSF into the Natural Heritage Program database (Job 7) and hire contract work that benefits targeted populations of rare plants.

Matching funds are generated by FDACS FFS staff (including work from the Program's Coordinator) working in the FDACS Conner Bldg. Office Complex in Tallahassee, helping to administer the Program and Federal Financial Aid Subrecipient Agreements. State forest staff also produce matching funds at work with rare plant conservation on their state forests and this work includes annual, targeted surveys for federally listed plants, guiding groups of plant enthusiasts and researchers, and generally working with federally listed and at-risk plant populations. Volunteer work is valued at \$10/hr. and organized on several state forests with the Program's biologist to remove invasive plants from around rare plants and to conduct rare plant surveys. Additionally, matching funds include state vehicle use, maintenance, and repair and fuel.

2. Lake Wales Ridge Scrub Plant Monitoring and Management Plan Development (Florida Forest Service - "State" Match as per AFA form 424). The objectives of this project are to: continue monitoring programs for 16 federally listed scrub species on public lands; determine population trends, survival, growth, fecundity, and recruitment for selected species using Level 2 and 3 monitoring; plan and implement habitat management in locations where these species occur or where there is potential of occurrence; and, to evaluate and research the effects of management activities on selected federally listed plant and lichen populations on at least three sites.

Federal	\$ 58,000
State Match	\$ 19,350 (25%)
Total	\$ 77,350

Equipment purchased in 2017 with Endangered Species Act, Sect. 6 "Traditional Funds" (CFDA #15-615, USFWS Service Award FL E-F17AP00801 (Segment E-9-26 of the Program): Ford truck, four-wheel drive, ½ ton, V-6, Crew Cab \$29,425.50. Status: In use and working very well for this project.

This is a full-time salary position within the FDACS FFS at Lake Wales Ridge State Forest (LWRSF) in Frostproof, Florida. The salary per hour for this full-time staff position is \$17/hour (40% Fringe Benefits). FDACS Indirect Cost Rate is 16.3% (exp. June 30, 2024). \$200 is requested for travel and \$1,400 is requested for supplies, as this project requires purchase of field gear re-

APPLICATION FOR FEDERAL ASSISTANCE 2023-24 BUDGET NARRATIVE (cont.)

quired to conduct intense qualitative and quantitative monitoring. If expenses are not used, they are provided to the State Natural Heritage Program to upload federally listed and at-risk plant species GIS data from LWRSF into the Natural Heritage Program database (Job 7) and to hire contract work that benefits targeted populations of rare plants at LWRSF.

Matching funds are generated by FDACS FFS staff (including work from the Program's Coordinator) working in the FDACS FFS Headquarters at LWRSF, helping to administer the Program and mapping, managing, and monitoring the 16 federally listed plant and lichen species. Volunteers assist in many ways and on many levels at LWRSF, requiring different skills. Generally their work is valued between \$10/hr. and \$30/hr. Additionally, matching funds include maintenance, repair, and fuel for the Program's 4-wheel drive vehicle (described above).

3. Conservation Research of the Recovery of Florida *Ziziphus* (*Ziziphus celata*)

(Archbold Biological Station - "Other" Match as per AFA form 424). The objectives of this project are to: conduct demographic monitoring and analysis of most wild, translocated, and captive Florida ziziphus populations; conduct analysis on long-term demographic data, carry out adaptive management on translocated populations to improve microhabitat conditions for survival and growth; collaborate with molecular geneticists to document genetic diversity among wild multi-clonal populations; assess parentage of plant material to be used in future translocations; explore additional genetic factors that may lead to introduction success; assist in cultivating propagules of underrepresented genotypes through tissue culture, root cuttings, and seed for future Florida ziziphus translocations; perform GIS analysis to identify new search areas and coordinate searches for undiscovered populations of Florida ziziphus; and, organize and host the Ad hoc Florida Ziziphus Recovery Team Meeting.

Federal	\$ 20,000
Other Match	\$ 6,667 (25%)
Total	\$ 26,667

The salaries for staff and internship positions per hour to conduct this project are \$40 for the Program Director and \$25 for research assistant (35% Fringe Benefits) for an estimated 287 hours of federal funds expended and 80 hours estimated for matching funds. \$682 are proposed for supplies from federal funds and \$1,000 from matching funds. Archbold Biological Station has been approved for a higher rate of mileage (\$0.625/mile) because of the extremely challenging landscape and resulting damage to vehicles. Mileage requested on the federal match is \$100 and \$1,314 on the matching side. \$2,000 is requested from the federal side to fund Missouri Botanical Garden to conduct conservation genetic research and \$2,000 is requested from the federal side to fund the Cincinnati Zoo and Botanical Gardens to propagate plants using a variety of tissue-culture techniques at the Center for Conservation and Research of Endangered Wildlife. The Indirect Cost rate is 10% of Total Direct Costs.

APPLICATION FOR FEDERAL ASSISTANCE
2023-24 BUDGET NARRATIVE/WORK PLAN (cont.)

4. Conservation and Research Supporting Blushing Scrub Balm (*Dicerandra modesta*) and Longspurred Mint (*Dicerandra cornutissima*) (Florida Native Plant Society - “Other” Match as per AFA form 424). The objectives of the proposed study are: to annually census blushing scrub balm and longspurred mint individuals to determine if populations are growing or shrinking over time (+/- 20%); document recruitment patterns and survival across a range of management zones and disturbance regimes; and, share data and analysis with land managers and assist them in their management of important publicly owned properties.

Federal	\$ 13,104
Other Match	\$ 4,400 (25%)
Total	\$ 17,504

The salaries for staff and internship positions per hour to conduct this project are \$41.82 and \$27.40 per hour for an estimated 363 hours (no Fringe Benefits proposed) for the federal match and \$27.40 per hour for match funding for at least 139 hrs. \$1,184 are proposed for supplies from the federal match portion and none from matching funds. Volunteer estimated cost is federal minimum wage or near cost per hour of salary of staff doing similar work. No mileage (travel) funding is requested from the federal portion but \$552 is proposed to be expended with matching funds. The Indirect Cost rate is less than 10% of Total Direct Charges.

5. Management of *Macbridea alba* and *Pinguicula ionantha* on the Apalachicola Lowland Preserve - “Other” Match as per AFA form 424). The objectives of this project are to: utilize prescribed fire on a privately owned preserve in a way that mimics the natural ecological fire regime and benefits *in situ* *M. alba* and *P. ionantha*; implement quantitative rare plant surveys and plant monitoring; remove select woody shrubs and trees that outcompete rare plants on the preserve; and, to become a recipient site for imperiled plant reintroduction, introduction, or augmentation for all four targeted species.

Federal	\$ 10,777
Other Match	\$ 5,510 (33%)
Total	\$ 16,287

The salaries for staff to conduct this project are \$25 per hour for an estimated 250 hours (35% Fringe Benefits) from the federal portion and \$25 per hour for an estimated 141 hours (35% Fringe Benefits) from the matching portion. Volunteer estimated cost is federal minimum wage or near cost per hour of salary of staff doing similar work. \$810 in gas and mileage is proposed (for day trips only) from the federal portion and \$960 are proposed from the matching portion. \$556 is proposed for supplies from the federal portion and \$150 from the matching portion. The Indirect Cost rate is 10% of Total Direct Charges.

APPLICATION FOR FEDERAL ASSISTANCE
2023-24 BUDGET NARRATIVE/WORK PLAN (cont.)

6. Conservation and Research Supporting Florida Torreya (Florida Native Plant Society - “Other” Match as per AFA form 424). The objectives of this project are to: seek out property owners within the predicted range of the species; conduct surveys for Florida torreya trees once landowner permission has been obtained; collect genetic material; set up and monitor seed trials on private lands; and, advise private landowners on best management practices.

Federal	\$ 12,560
Other Match	\$ 4,190 (25%)
Total	\$ 16,750

The federal portion of this project is only made up of salaries for staff and internship positions per hour and are \$41.82, \$24.99, and \$21 per hour, for 38, 306, and 110 hours respectively. Salaries for the matching portion are \$27.68 for staff and volunteers for at least 176 hours. Volunteer estimated cost is federal minimum wage or near cost per hour of salary of staff doing similar work. Fringe Benefits are \$0. Matching portion funds are a proposed \$1,000 for travel and \$717 are proposed for supplies. The Indirect Cost rate is less than 10% of Total Direct Charges.

7. Potential Pollinator and Post-hurricane Surveys for *Silene polypetala* in North Florida and Georgia (Florida State University/Florida Natural Areas Inventory - “State” Match as per AFA form 424). The objectives of this project include: observe potential pollinators on fringed campion throughout its bloom season and record behavior at three sites in Florida and three sites in Georgia; assess the impact of Hurricane Michael on all populations visited during the pollination study sites in Florida and southwest Georgia; and, update the Florida Natural Heritage database with spatial data of known occurrences and share data with Georgia Department of Natural Resources (GADNR) and Mercer University botanists for inclusion into their databases.

Federal	\$ 21,141
State Match	2,349 (10% of Total, in a two-state Matching Ratio)
Total	\$ 23,490

This project only requires 10% match as it is being conducted in two cooperating states: Florida and Georgia. The salaries for staff positions per hour to conduct this project are \$27 per hour for 458 hours for the federal portion and \$27 per hour for 54 hours for the matching portion (40% Fringe Benefits). \$150 is proposed for supplies from the federal portion. \$1,747 is proposed for rent from the federal portion. Volunteer estimated cost is federal minimum wage or near cost per hour of staff salary doing similar work. The Indirect Cost rate is 10% of Total Direct Charges on the federal portion and 13% of matching portion.

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2023-24 BUDGET NARRATIVE/WORK PLAN (cont.)

8. Demographic Monitoring of *Asimina tetramera* Four-petal Pawpaw Post Management at Jonathan Dickinson State Park (Ecolo-G, Inc. - “Other” Match as per AFA form 424). The objectives of this project are to: continue demographic research/monitoring to determine the status of four-petal pawpaws in two main population sites; and, promote partnerships between county, state, and federal agencies and continue utilizing volunteer assistance to meet the Outreach/Collaborative Activities listed in the Four-petal Pawpaw 5-Year Review.

Federal	\$ 10,800
State Match	4,000 (27% of Total)
Total	\$ 14,800

The salaries for staff and internship positions per hour to conduct this project are \$30 and \$25 per hour (0% Fringe Benefits) for an estimated 128 hours from the federal portion. The salary costs for the matching portion are \$15/hr for 288 hours. Volunteer estimated cost is federal minimum wage or near cost per hour of staff salary doing similar work. \$75 in matching funds is proposed to be expended for \$0.445/mile mileage. \$3,600 in supplies are proposed from the federal portion, including a high-accuracy GPS unit that will be donated to the land managers responsible for future monitoring of this species. \$2,800 are proposed from the federal portion for several contractual work efforts at an estimated \$25 per hour, including data entry, data compilation and analysis, GPS and GIS mapping, and report writing and review. The Indirect Cost rate from the federal portion is 6% of Total Direct Charges.

9. Continuing to Recover and Safeguard *Schwalbea americana* in Florida (Jeff Glitzenstein, Ph.D. - “Other” Match as per AFA form 424). The objectives of this project are to: introduce a new *Schwalbea americana* population to private, well-managed conservation lands; augment a small population of *Schwalbea americana*; and, introduce a new *Schwalbea americana* population towards the southern end of this species’ range.

Federal	\$ 4,305
Other Match	\$ 3,000 (41%)
Total	\$ 7,305

The salary for staff to conduct this project is \$45 per hour (0% Fringe Benefits) for 56 hours from the federal portion. On the matching portion, salary is proposed at \$45 per hour for at least 30 hours and \$31.30 per hour for at least 75 hours. Proposed supplies cost \$1,031 from the federal portion. Travel/mileage is proposed to be \$780 from the federal portion, and is \$0.445 per mile (all day trips, no overnight trips). Travel/fuel is proposed for \$276 from the matching portion. No other costs are proposed.

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10. Analysis of fungal and endophyte associations and tissue culture propagation to support recovery efforts for *Deeringothamnus rugelii* (Missouri Botanical Garden - “Other” Match as per AFA form 424). The objectives of this project are: 1) to characterize the fungal soil microbiome of *D. rugelii* and assess its relevance for propagation and reintroduction efforts; 2) to characterize endophytes in the leaves of *D. rugelii* to assess their potential influence on plant growth and resilience; and, 3) to conduct tissue culture propagation to produce individuals of *D. rugelii* for reintroductions.

Federal	\$ 30,851
Other Match	10,300 (25%)
Total	\$ 41,151

The salaries for staff and internship positions to conduct this project are \$25.50, \$25, and \$30 per hour (28% Fringe Benefits) for an estimated 790 hours from the federal portion. The salary costs for the matching portion are \$29.95 and \$25 per hour for 262 hours. Volunteer estimated cost is federal minimum wage or near cost per hour of salary of staff doing similar work. \$3,381 for supplies is proposed from the federal portion and \$200 is proposed to be expended from the matching portion. \$2,100 from the federal portion is proposed for contractual work with Duke University and their genetics lab. The Indirect Cost rate from the federal portion is less than 6% of Total Direct Charges and less than 15% for the matching portion.

APPLICATION FOR FEDERAL ASSISTANCE
2023-24 BUDGET NARRATIVE/WORK PLAN (cont.)

FLORIDA STATEWIDE ENDANGERED AND THREATENED PLANT CONSERVATION PROGRAM BUDGET NARRATIVE TABLE OF PROPOSED 2023-2024 (SEGMENT E-9-32) PROJECTS, OCTOBER 1, 2023 THROUGH DECEMBER 31, 2024 FEDERAL (75% or less), MATCH (25+%), AND TOTAL COST AMOUNTS					
Proposed Projects, Organization	Federal Match	State Match	Local Match	Other Match	Total
1. <i>Florida Plant Conservation Program...</i> Florida Forest Service.	\$68,936	\$24,000	\$0	\$0	\$92,936
2. <i>Lake Wales Ridge Scrub Plant Monitoring...</i> Florida Forest Service.	\$58,000	\$19,350	\$0	\$0	\$77,350
3. <i>Conservation Research of the Recovery ...</i> Archbold Biological Research Station.	\$20,000	\$0	\$0	\$6,667	\$26,667
4. <i>Conservation and research supporting Dicerandra...</i> Florida Native Plant Society.	\$13,104	\$0	\$0	\$4,400	\$17,504
5. <i>Management of Macbridea alba and ...</i> Coastal Plains Institute, Inc.	\$10,777	\$0	\$0	\$5,510	\$16,287
6. <i>Conservation and research supporting Florida Torreya...</i> Florida Native Plant Society.	\$12,560	\$0	\$0	\$4,190	\$16,750
7. <i>Potential Pollinator and Post-hurricane Surveys for Silene polypetala...</i> Florida State University, Florida Natural Areas Inventory.	\$21,141	\$2,349	\$0	\$0	\$23,490
8. <i>Demographic Monitoring of Asimina tetramera ...</i> Ecolo-G, Inc.	\$10,800	\$0	\$0	\$4,000	\$14,800
9. <i>Continuing to Recover and Safeguard Schwalbea americana in Florida...</i> Jeff Glitzenstein, Ph.D.	\$4,305	\$0	\$0	\$3,000	\$7,305
10. <i>Analysis of fungal and endophyte associations and tissue culture propagation ...</i> Missouri Botanical Garden	\$30,851	\$0	\$0	\$10,300	\$41,151
Total Federal, State, Local, and Other Match, Total Funding 2023-24	\$250,474	\$45,699	\$0	\$38,067	\$334,240
Total Federal Match, Non-federal Match, Total Funding 2023-24	\$250,474	\$83,766			\$334,240