SPRINGS /AWS Project Submittal

Springs and AWS Cost Share Project Submittal Form

Detailed Guidance for completing the Application Form can be found at the link below:

2021 SRWMD Springs Application Guidance

Please refer to this Guidance for important information to assist in completing the form. Due to the combination of Springs and AWS some items may have been deleted or revised.

Detailed Guidance on completing Sections I through VIII can be found at FDEP's website :

Springs-Funding-Guidance

This will open a new window.

Guidance for AWS projects can be found at:

AWS Guidance (PDF)

This will open in a new window

I. Contact Information

A-1 Name of Entity/Organization*

Wetland Solutions, Inc.

A-2 Primary Contact Person:*

Scott Knight

If primary contact is a consultant for the entity please provide an agents form.

A-2 Title

Water Resources Engineer

A-2 Email*

sknight@wetlandsolutionsinc.com

A-2 Address1*

5302 NW 156th Ave

A-2 Address2

A-2 City*

Gainesville

A-2 State

FL

A-2 Zip*

32653

A-2 Office Phone

386-462-9286

A-2 Mobile Phone

352-514-4766

Contractual authority of Primary Contact

- ○ Can sign Agreements
- ○ Cannot sign Agreements
- ◉ I am a consultant

Select one

Designation of Authorized agent

Agents form

Download Authorization form

Agents form

LC.pdf

A-3 Contact for entering into contractual agreement

Stephen Witt

If same as above, do not complete this section

A-3 Street Address

205 N Marion Ave

A-3 City, State, Zip

Lake City, FL 32055

A-3 Phone

386-719-5756

A-3 Email Address

witts@lcfla.com

II. Spring Information - Water body information

B-1 Spring, Waterbody or Aquifer

Ichetucknee Priority Focus Area

Enter Name of Spring (s) , surface waterbody or aquifer affected. If aquifer, provide also a local waterbody

B-2 Impairment

BMAP or RAP

Does the Spring or waterbody have an Impairment, Basin Management Action Plan (BMAP) or a Reasonable Assurance Plan (RAP)? Select one.

B-3 MFL

MFL Recovery

Does the Spring or waterbody have an MFL, and if so, is it in recovery or prevention? Select one.

III. Project Information

C-1 Project Name:*

Lake City Recharge Wetland - South

If the Project is included in a BMAP, BMAP Annual report, or MFL Recovery/Prevention Strategy please use the name listed in the document for ease of cross reference.

C-2 In which County(ies) is this project physically located?: (check all that apply)*

☐ District-wide	☑ Columbia	☐ Jefferson	☐ Putnam
☐ Alachua	☐ Dixie	☐ Lafayette	☐ Suwannee
☐ Baker	☐ Gilchrist	☐ Levy	☐ Taylor
☐ Bradford	☐ Hamilton	☐ Madison	☐ Union

Project location

Enter Latitude / Longitude in decimal degrees of actual work area below (ie not just the center of the municipality). Use centroid for large areas. This will be used to detemine benefits to the NFRWSP, BMAP, PFA, TMDL, and MFL Recovery/Prevention Strategy.

C- 3 Latitude*

30.11581

Decimal degrees
i.e. 30.27523

C-4 Longitude*

82.68421

Decimal degrees i.e.
-83.5555

C-5 Project Type*

Water Quality

Select one category

C-6 Project Description (Scoring Criteria 1)*

This project proposes to further expand on the City's existing recharge wetland through conversion of the City's third sprayfield to a groundwater recharge wetland with the addition of approximately 80 acres of treatment and recharge area. This conversion is being designed to reduce nitrogen in treated water and to increase recharge on the parcel. This project is located within the Ichetucknee Priority Focus Area and reduced nitrate concentrations will provide lower nutrient water to the spring. Furthermore, reduced evapotranspiration losses will benefit the spring through increased flows.

Clearly describe the project, e.g. what is being constructed and why. What is the program to be implemented? (1000 char. max.)

C-7 Measure of Success (Scoring Criteria 1)*

This project is an expansion of the existing groundwater recharge wetland constructed on one of the City's existing sprayfields to the north. The original recharge wetland has been monitored and has consistently demonstrated significant reductions of nitrogen in water recharged to the aquifer. This project proposes treatment of 1.6 MGD of flow with an expected inflow total nitrogen concentration of 9.84 mg/L. Based on the combination of modeling and data from the similar system to the north, total nitrogen is expected to be reduced by 85% to approximately 1.50 mg/L on average recharging the aquifer. The net increase in recharge and improved water quality will be directly measured through construction of a site water and nutrient budget following the collection of operational data after startup. A 2-year operational period will be used to demonstrate project effectiveness.

How will you measure the effectiveness of the Project? (Example, pre and post water or pre and post nitrogen reduction audit; monitoring program)

BMAP project numbers

BMAP Projects for SRWMD

Review this link to find related BMAP project

C-8 Is the project listed in a BMAP (or Annual Update)?*

No

C-10 Primary WBID

3522

Enter Primary Water Body ID number that this project benefits if known.

IV. Water Quality

Refer to Springs Funding Guidance Appendix C and AWS Guidance

D-1 Does the Project have Water Quality Benefits?*

Yes

D-2 Nitrogen Reduced (lbs/yr)

12895

Using attenuation and recharge factors as applicable. Upload copy of calculations below.

D-3 Sediment Reduced (lbs/yr)

0

Refer to Springs Funding Guidance for EPA Spreadsheet tool for the estimation of pollution load (STEPL).

V. Water Quantity

Refer to Springs Funding Guidance Appendix D and AWS Guidance

E-1 Does the Project have Water Quantity Benefits?*

Yes

E-2 Quantity of Water Made Available (MGD)

0.629

Enter number only.

VI. Land Acquisition

F-1 Acres to be Acquired

0

Enter number only, leave "0" if NA

VII. Project Time and Cost

G-7 Is this a Multiyear Project?*

Yes

Multi-year refers to projects that will request funding over multiple funding cycles, typically for phases. It does not refer to projects that take more than one year to complete.

G-7a Year 1 DEP

1,000,000

Funds requested in Year 1. This should match amount listed in "State Funding Requested".

G-7b Year 2 DEP

4,500,000

Funds to be requested in Year 2

G-7c Year 3 DEP

5,650,000

Funds to be requested for Year 3

G-7d Year 4 DEP

75,000

Funds to be requested for Year 4

G-7e Year 5 DEP

75,000

Funds to be requested in Year 5

G-2 Local Match Amount

Leave blank if NA

G-2a Local Match type*

NA

Refer to Springs Guidance III.B

G-3 Third Party Match

Cash Contribution amount, leave blank if NA

G-4 Total Project Cost*

11,300,000

Include capital, construction, land acquisition, planning, permitting & design costs.

G-5 Anticipated Start Date*

12/1/2023

G-6 Anticipated End Date*

9/30/2028

Reimbursement*

- [x] Yes
- [ ] No

If awarded, the Applicant has committed or will commit funds in their budget for this project.

VIII. Other

Provide additional supporting information below. FIle uploads are available at the end of the form.

H-1 Additional information beneficial to evaluating the project

Limit 1000 characters

Scoring Criteria 2 through 5- Supporting Information

Detailed information in the section below will be used in the evaluation of the Project benefits, readiness to proceed and cost effectiveness.

Project Benefits Criteria 2

1-30 points for Primary Benefit. 0-10 points for Secondary benefit. Refer to SRWMD Springs Application Guidance.

J-1 Primary Benefit

Water Quality

Select only one

J1a: Describe the Project Benefit in detail

The existing Lake City Wetland has provided substantially improved water quality to the Ichetucknee Springshed. This project has been a success for the City, SRWMD, and FDEP. This project is a logical extension of previously-funded projects to further increase recharge and provide for increases in the City's disposal needs through increased beneficial recharge of high-quality water with low nitrate.

Refer to FY 2021 SRWMD Springs Application Guidance.

J-2 Does the Project include Septic to Sewer?*

No

J-3 Number Septics upgraded or enhanced

Advanced treatment for septic systems.

J-4 Wastewater System Project

Check all that apply

- [x] WWTF Upgrade (ex. AWT, reuse)
- [ ] New WWTF or expansion
- [ ] Infrastructure Improvements
- [ ] Transmission Extension
- [x] Change in Application Method
- [x] Recharge
- [ ] NA

Benefit calculator for wastewater projects

FDEP method for wastewater TN calculations

This can be used for TN calculations for septic to sewer, plant upgrades, package plants, and advanced systems.

J-5 Upload copy of calculations for Nutrient reductions

LCRWSouth.xlsx

Required information for Water Quality Projects.

Notes on Nutrient reductions

This will be a continuing reduction into the future.

Enter brief comments, additional information. Is this a one-time reduction?

J-7 If the Project is for Water Resource Development or Alternative Water Supply Identify Water Source

- ☐ Brackish Groundwater
- ☐ Brackish Surface Water
- ☐ Stormwater
- ☐ Other
- ☐ Reclaimed water
- ☐ NA
- ☐ Surface water

Check all that apply

J-7a Identify Waterbody or Source for "Other"

J-8 AWS Offset of Potable Water

Enter MGD if applicable

J-9 AWS for recharge

Enter MGD if applicable

Number of wells to be removed/abandoned

For water supply infrastructure

J-10 Wetlands restored /Acquired

Enter Acres

J-11 Uplands Restored/ Acquired

Enter Acres

J-12 Shoreline Restored/Enhanced /Acquired

Enter linear feet

Notes on Natural Systems

Enter comments, additional information

J-13 Optional Description of Acreage

Describe purpose for land acquistion

J-14 Secondary Benefit

Water Quantity

J-15 Describe Secondary Benefit (0-10 points)

In addition to the primary water quality benefit this project will also provide water quantity benefits by increasing the volume of water recharged on the parcel. This will be accomplished through the combination of continuous ponding (more driving head) and soil modification to increase recharge in the most downgradient cell. The combination of these changes is expected to increase recharge by 0.629 MGD.

Identify and quantify benefit (MGD, TN, Sediment, Natural System) and how success will be measured. (500 Char. max.)

Project Readiness Criteria 3 (1-20 points)

Enter Duration required to complete Task. Enter NA if Not Applicable.

K-1 Planning

2

Enter Duration in months

K-1a Planning % complete

90

Enter 0-100

K-2 Design

12

Enter Duration in months

K-2a Design % complete

0

Enter 0-100

K-3 Land Acquisition

0

Enter Duration in months

K-3a Land Acquisition % complete

100

Enter 0-100

K-4 Permit

6

Enter Duration in months

K-4a Permit % complete

0

Enter 0-100

K-5 Permit Agency/Type

FDEP/Wastewater, SRWMD/ERP

K-5a Permit Number

K-5b Expiration Date

Permit expiration date

K-6 Bidding

3

Enter Duration in months

K-6a Bidding % complete

0

Enter 0-100

K-7 Construction

18

Enter Duration in months

K-7a Construction % complete

0

Enter 0-100

K-8 Duration of Project being funded*

60

Total Duration in months to complete this project.

K-5c List any additional permits obtained or required for this project.

FDEP/Major Wastewater Permit Modification, SRWMD/ERP

Cost Effectiveness Criteria 4 (1-30 points)

Cost effectiveness is based on the funding amount requested (does not include match or the total project cost)

Cost Effectiveness calculator

Cost Effectiveness Calculator

For Water Quality and Quantity

L-1 Identify source of match or other funds

State or Federal appropriations, grants, bonds and status of those funds. (Applied for, obtained)

L-2 Service life

50

Estimated service life of components in years

L-3 Estimated O & M cost

45000

Annual Operations and Maintenance amount

L-4 Water Supply Development

Cost per 1000 gallons made available based on funding requested (not total project cost)

L-5 Water Conservation

Cost per 1000 gallons conserved based on funding requested (not total project)

L-6 Water Quality TN

29.21

Cost per lb. TN based on funding requested (not total project)

L-8 Sediment

Cost per lb. based on funding requested (not total project)

L-9 Natural System

Cost per Acre based on funding requested (not total project)

L-10 Natural System

Cost per linear feet of shoreline based on funding requested (not total project)

L-11 Economically Disadvantaged Communities*

REDI

L-12 Attach cost effectiveness calculator*

LCRWSouth.xlsx

L-13 Upload detailed project cost schedule*

LCRWSouth.xlsx

Provide table or spreadsheet with detail project costs by task or segment of the project.

Enter Notes on Cost effectiveness if applicable

A project service life of 30 years was used based on the FDEP cost-effectiveness spreadsheet. The lifespan of this project is expected to be 50 years.

Location Criteria 5

15 points possible. Project must provide a benefit to the plan to receive points. For example, projects supporting MFLs, water supply plans, prevention/recovery strategies, conservation, or recharge must have an MGD benefit and projects supporting BMAPs or PFA must have a water quality benefit.

M-1 Location Description

This project is located in the Ichetucknee Priority Focus Area and the Santa Fe Basin Management Action Plan Area.

Provide supporting information on the location and how the location supports Natural Systems Restoration, Stormwater, Water Quantity or Water Quality in the Spring(s) or waterbody.

M-2 Upload Map *

LC.jpg
Map should include affected MFL, TMDL, BMAP or impaired waterbodies, wetlands, or springs.

Aerial map*

LC.jpg
Provide aerial map showing geographical location with nearest city or town

Supporting Information

Suporting information and upload for documents not listed above.

N-1 Upload detailed schedule*

LCRWSouth_Funding Schedule.xlsx
Required

N-2 Upload Photos

Browse... No file selected.
Optional

N-3 Upload Conceptual Plans

Browse... No file selected.
Optional

N-4 Upload other information

Browse... No file selected.
Optional

N-5 Other supporting Documents

LCRWSouth.docx
Optional

N-6 Local Government Support

Does this project have the approval and/or support of the appropriate governing bodies (e.g. county or city commissions, water supply authorities, etc.)?

☑ Yes ☐ No ☐ Not Applicable

N-7 Local Government/Public Support

The City Commission and City Staff have been supportive of the existing recharge wetland project. This project has not yet been submitted to the City Commission for consideration because funding is not yet in place.

Describe the public support for this Project (meetings, workshops, presentations, notifications, etc). If this Project requires participation from certain communities or owners, provide method used to ensure participation.

N-8 Partner(s)/Cooperator(s):

Please identify any other entity involved with the project, including those contributing funds and in-kind contributions. Please identify how they are contributing to the project.

N-9 Applicant has identified all required permits necessary for Project construction and has indicated whether any property needed is under it's ownership or control.

SK

Initial here:

Checklist

- [x] All required fields (marked with an *) must be filled in to submit
- [x] A detailed schedule has been uploaded
- [x] Project phasing information is provided (if applicable)
- [x] Detailed Project cost breakdown has been uploaded
- [x] Calculations for Quantification of project benefits has been uploaded
- [x] Copy of Cost effectiveness calculator has been uploaded
- [x] Applilcant has identified all required permits necessary for Project Construction
- [x] Application is digitally signed and dated below

I certify that all information on this form and the attached documents, if applicable is true and correct.

First Name

Scott

Last Name

Knight

Title

Water Resources Engineer

Date Submitted

12/16/202