

MEMORANDUM

TO: Governing Board

FROM: Warren Zwanka, P.G., Division Director, Resource Management

THRU: Steve Minnis, Deputy Executive Director, Business and Community Services

DATE: November 5, 2018

RE: Approval of a Letter Modification of Water Use Permit 2-041-215601-4, with No Change in Allocation, Authorizing a Maximum 0.2093 mgd of Groundwater for Agricultural Use at the Batson Place Project, Gilchrist County

RECOMMENDATION

Staff recommends the Governing Board approve Water Use Permit number 2-041-215601-4 with eighteen standard conditions and three special limiting conditions to Michael Wilkerson, in Gilchrist County.

BACKGROUND

This is a letter modification of an existing agricultural water use to update the project boundary and include the automated water use monitoring requirement. The notice of receipt was published in the Gilchrist County Journal on October 25, 2018. On November 5, 2018 the District received an objection letter alleging the soils at this project are unsuitable for irrigation therefore requiring the permit to be reviewed by the Governing Board.

The project consists of approximately 150 controlled and 135 irrigated acres and is located approximately six miles west of Trenton in Gilchrist County. Groundwater from one well is used to irrigate corn, melons, peanuts, and rye through center pivots or drip irrigation. Groundwater from one livestock well is used to provide the livestock watering requirements of approximately 30 head of beef cattle. Approximately 5 controlled acres were included in the project boundary in this letter modification, and the 0.2093 mgd 1-in-10-year drought allocation was not changed.

All wells 8-inches in diameter or greater (1 of 2) are monitored though electrical consumption. There have been no reports of interference or observed harm to water resources associated with previous withdrawals at this project; no lower quality water sources are available for use.

Staff has determined the proposed withdrawals are in accordance with Minimum Flows and Minimum Water Levels (MFLs) and MFL recovery strategies pursuant to Chapters 62-42, 40B-8, and Emergency Rule 40BER17-01, Florida Administrative Code (F.A.C.). The application is complete and satisfies the conditions for issuance in Chapter 40B-2, F.A.C.

SW/tm

WATER USE TECHNICAL STAFF REPORT
29-Oct-2018
APPLICATION #: 2-041-215601-4

Owner: Michael Wilkerson
7599 SE SR 47
Trenton, FL 32693
(352) 221-0382

Applicant: Michael Wilkerson
7599 SE SR 47
Trenton, FL 32693
(352) 221-0382

Agent: Not Applicable

Compliance Contact: BJ Wilkerson
7599 SE SR 47
Trenton, FL 32693
(352) 221-0382

Project Name: Batson Place
County: Gilchrist

Located in WRCA: No
Objectors: No

Authorization Statement:
The permittee is authorized to withdraw a maximum of 0.2093 mgd of groundwater for agricultural use.

Recommendation: Approval
Reviewers: Stefani Weeks; Matthew Cantrell; Warren Zwanka

WATER USE SUMMARY:

Allocation Summary		
Average Daily Rate (Million Gallons Per Day)	Freeze Protection (Million Gallons Per Year)	Allocation Change (Million Gallons Per Day)
0.2093	0.0000	0.0000

Recommended Permit Duration and Compliance Reporting: Permit to expire April 19, 2031

USE STATUS: This is a letter modification of an existing agricultural use to update the project area with no change in irrigated acres.

PROJECT DESCRIPTION:

This project is located one mile west of CR-341 on SW 70th Street, approximately six miles west of Trenton in Gilchrist County; and consists of 150 controlled and 135 irrigated acres. Groundwater from one well is used to irrigate corn, peanuts, oats, and pasture through center pivots; and melons through drip irrigation. Groundwater from one livestock well is used to provide the watering requirements of approximately 30 head of beef cattle.

The permittee has elected to provide SRWMD electrical consumption to comply with the water use reporting requirements of special condition 18.

WATER USE CALCULATIONS:

The water demand calculations were based on crop irrigation needs provided in the previous permit sequence.

PERMIT APPLICATION REVIEW:

Section 373.223, Florida Statutes (F.S.), and Section 40B-2.301, Florida Administrative Code (F.A.C.), require an applicant to establish that the proposed use of water:

- (a) is a reasonable-beneficial use;
- (b) will not interfere with any presently existing legal use of water; and
- (c) is consistent with the public interest.

In addition, the above requirements are detailed further in the District's Water Use Permitting Applicant's Handbook ("A.H."). District staff has reviewed the water use permit application pursuant to the above-described requirements and have determined that the application meets the conditions for issuance of this permit. Highlights of the staff review are provided below.

Is this a reasonable–beneficial use?

[ref. 40B-2.301(1)(a)]

Yes. Based on the evaluation of criteria listed in 40B-2.301(2)(a)-40B-2.301(2)(k), F.A.C.

Will this use interfere with any presently existing legal use of water?

[ref. 40B-2.301(1)(b)]

Interference with legal uses of water was not analyzed as part of the review of this letter modification.

Will this use be consistent with the public interest?

[ref. 40B-2.301(1)(c)]

Yes. Use of groundwater for agricultural uses is consistent with the public interest.

WITHDRAWAL POINT INFORMATION:

Site Name: Batson Place

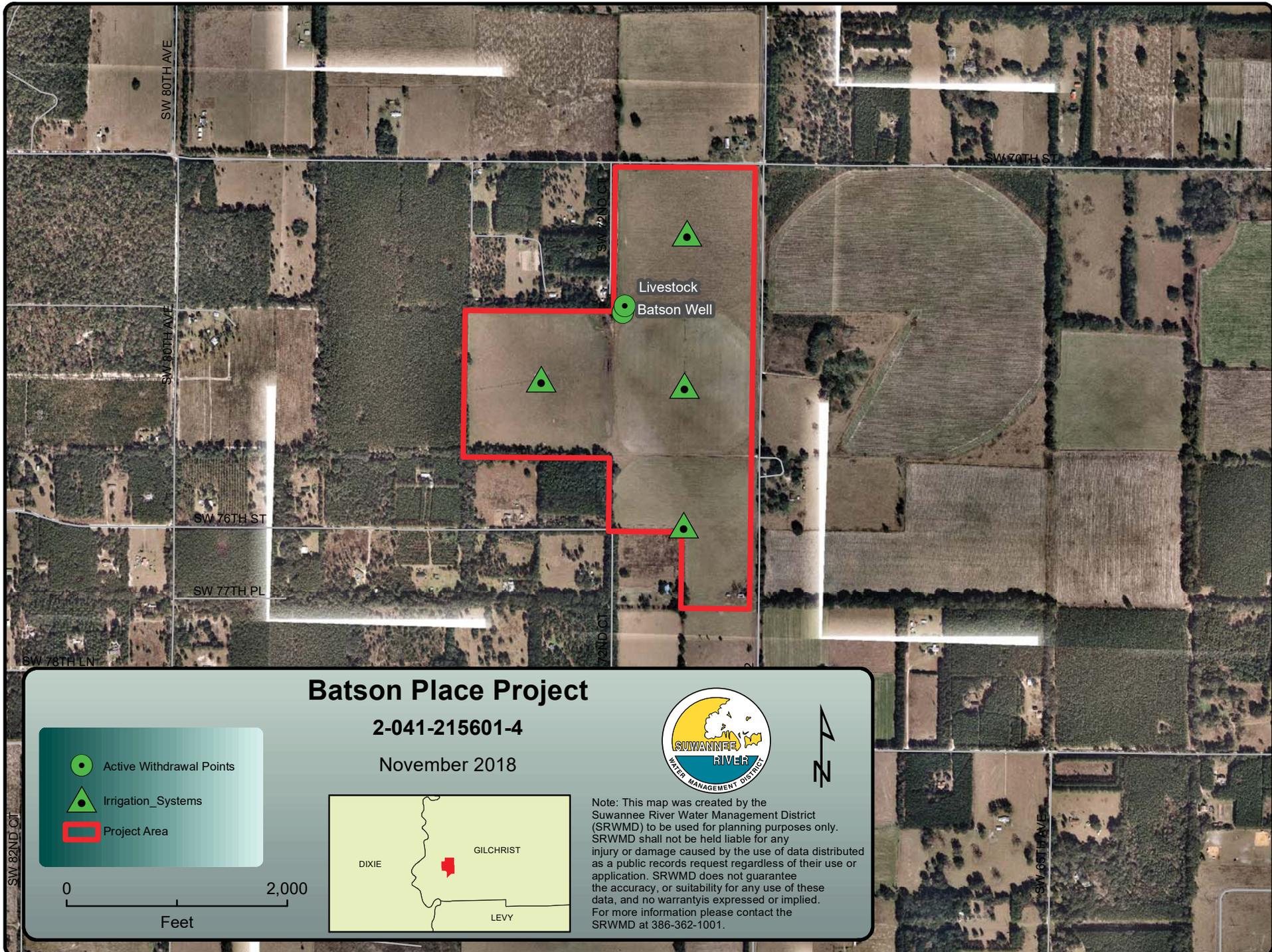
Wells Detail						
District ID	Station Name	Casing Diameter (inches)	Capacity (GPM)	Source Name	Status	Use Type
119752	Batson Well	10	1000	FAS - Upper Floridan Aquifer	Active	Agricultural
120150	Livestock	2	10	FAS - Upper Floridan Aquifer	Active	Agricultural

Conditions

1. This permit shall expire on **4/19/2031**. The permittee must submit the appropriate application form incorporated by reference in subsection 40B-2.041(2), Florida Administrative Code (F.A.C.), and the required fee to the District pursuant to section 40B-2.361, F.A.C., prior to this expiration date in order to continue the use of water.
2. The permittee may apply for a permit modification at any time in accordance with section 40B-2.331, F.A.C.
3. Primary Water Use classification(s): Irrigation, Livestock
4. Source classification(s): Groundwater
5. In the event of a District-declared water shortage, the permittee must immediately comply with any restriction or requirements ordered in accordance with the District's Water Shortage Plan chapter 40B-21, F.A.C.
6. The permitted water withdrawal facilities consist of the items in the Withdrawal Point Information table on page 1.
7. Permittee must mitigate interference with existing legal uses caused in whole or in part by the permittee's withdrawals, consistent with a District-approved mitigation plan. As necessary to offset such interference, mitigation may include but is not limited to, reducing pumpage, replacing the existing legal user's withdrawal equipment, relocating wells, changing withdrawal source, supplying water to existing legal users, or other means needed to mitigate the impacts.

8. Permittee must mitigate harm to existing off-site land uses caused by the permittee's withdrawals. When harm occurs, or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
9. Permittee must mitigate harm to the natural resources caused by the permittee's withdrawals. When harm occurs, or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
10. If any condition of the permit is violated, the permittee shall be subject to enforcement action pursuant to chapter 373, F.S.
11. Authorized representatives of the District, upon reasonable notice to the permittee, shall be permitted to enter and inspect the permitted water use to determine compliance with the permit conditions.
12. This permit does not relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.
13. This permit does not convey to the permittee any property rights or privileges other than those specified herein.
14. Permittee must notify the District in writing within 90 days of any sale, conveyance, or other transfer of ownership or control of the real property on which the permitted water use activities are located. All water use permit transfers are subject to the requirements of section 40B-2.301, F.A.C.
15. The permittee must notify the District in writing prior to implementing any changes in the water use that may alter the permit allocations. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, water treatment method, or entry into one or more large water use agreements. In the event a proposed change will alter the allocation, permittee must first obtain a permit modification.
16. All correspondence sent to the District regarding this permit must include the permit number **2-041-215601-4**.
17. When the District provides a permanent identification tag, the tag shall be prominently displayed at the withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility. If the permit covers several facilities such as a well field, a tag shall be affixed to each facility. Failure to display a tag as prescribed herein shall constitute a violation of the permit. The permittee shall be allowed ten (10) days after the notice of violation of this section to obtain a replacement tag.

18. The District reserves the right to open this permit, following notice to the permittee, to include a permit condition prohibiting withdrawals for resource protection.
19. The permittee shall ensure that the irrigation systems will water target areas only under field operations. Irrigation of non-target areas (roads, woods, structures, etc.) is prohibited.
20. The permittee shall implement automated monitoring of groundwater withdrawals, at permittee's expense, upon commencement of withdrawals. The monitoring and reporting shall include reporting daily volume pumped by each well of inside diameter eight inches or greater at land surface and shall be delivered by 12:00 pm local time the following day via approved telemetry consistent with District data formats. The permittee may opt for a standardized SRWMD automated monitoring system to fulfill this requirement.
21. The permittee shall implement and/or maintain the conservation practices selected in the Water Conservation Plan submitted to the District. Any new practices selected shall be implemented within one year from the date of permit issuance. Practices that involve scheduling methods or maintenance shall be documented. Documentation for implementation and/or maintenance shall be maintained on all practices and available upon request.



Batson Place Project

2-041-215601-4

November 2018



-  Active Withdrawal Points
-  Irrigation Systems
-  Project Area



Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.

MEMORANDUM

TO: Governing Board

FROM: Warren Zwanka, P.G., Division Director, Resource Management

THRU: Steve Minnis, Deputy Executive Director, Business and Community Services

DATE: November 5, 2018

RE: Approval of Water Use Permit 2-041-232812-1, Authorizing a Maximum 0.0790 mgd of Groundwater for Agricultural Use at the 341 Farm Project, Gilchrist County

RECOMMENDATION

Staff recommends the Governing Board approve Water Use Permit number 2-041-232812-1 with seventeen standard conditions and nine special limiting conditions to Scott Welch, in Gilchrist County.

BACKGROUND

This is a new agricultural water use that received an objection and therefore must be approved by the Governing Board. The notice of receipt was published in the Gilchrist County Journal on October 25, 2018. On November 5, 2018 the District received an objection letter alleging the soils at this project are unsuitable for irrigation therefore requiring the permit to be reviewed by the Governing Board.

The project consists of approximately 60 controlled and irrigated acres and is located approximately four miles southwest of Bell in Gilchrist County. Groundwater from one well will be used to irrigate approximately 55 acres of corn, peanuts, or rye through center pivots or 60 acres of watermelons through drip irrigation. Groundwater from the same well will be used to provide the livestock watering requirements of approximately 50 head of beef cattle. Supplemental irrigation models were used to determine the 0.0790 mgd 1-in-10-year drought allocation.

The single 8-inch diameter irrigation well will be monitored through electrical consumption. Groundwater withdrawals at this project are not expected to interfere with any presently existing legal uses of water; no lower quality water sources are available for use.

Staff has determined the proposed withdrawals are in accordance with Minimum Flows and Minimum Water Levels (MFLs) and MFL recovery strategies pursuant to Chapters 62-42, 40B-8, and Emergency Rule 40BER17-01, Florida Administrative Code (F.A.C.). The application is complete and satisfies the conditions for issuance in Chapter 40B-2, F.A.C.

SW/tm

WATER USE TECHNICAL STAFF REPORT
08-Aug-2018
APPLICATION #: 2-041-232812-1

Owner: Scott Welch
4496 Wash Davis Rd
Perry, FL 32347
(386) 362-1001

Applicant: Scott Welch
4496 Wash Davis Rd
Perry, FL 32347
(386) 362-1001

Agent: Michael Wilkerson
PO Box 212
Trenton, FL 32693
(352) 221-0382

Compliance Contact: BJ Wilkerson
PO Box 212
Trenton, FL 32693
(352) 221-0382

Project Name: 341 Farm
County: Gilchrist

Located in WRCA: No
Objectors: No

Authorization Statement:

The permittee is authorized to withdraw a maximum of 0.0782 mgd of groundwater for supplemental irrigation of corn/rye, a maximum of 0.0595 mgd for supplemental irrigation for melons/rye, or a maximum of 0.0375 mgd for supplemental irrigation of peanuts/rye. The permittee is also authorized to withdraw a maximum of 0.0008 mgd for livestock use.

Recommendation: Approval

Reviewers: Stefani Weeks; Matthew Cantrell; Warren Zwanka

WATER USE SUMMARY:

Allocation Summary		
Average Daily Rate (Million Gallons Per Day)	Freeze Protection (Million Gallons Per Year)	Allocation Change (Million Gallons Per Day)
0.0790	0.0000	0.0790

Recommended Permit Duration and Compliance Reporting: Twenty-year permit duration.

USE STATUS: This is a new permit for agricultural use.

PROJECT DESCRIPTION:

This project is located at the intersection of CR-341 and SW 10th Street, approximately four miles southwest of Bell in Gilchrist County; and consists of 60 controlled and irrigated acres. Groundwater from one well will be used to irrigate corn, peanuts, and rye through a traveling gun irrigation system; and melons through a drip irrigation system. Groundwater will also be used to provide the water requirements of approximately 50 head of beef cattle.

The permittee has elected to provide SRWMD electrical consumption to comply with the water use reporting requirement of special condition 18.

WATER USE CALCULATIONS:

The livestock watering requirements were calculated based on the industry standard 15 gallons per cow per day for the cattle populations provided.

The District's WUPAR model was used to determine the 15.61 inches/ year supplemental irrigation requirement for corn. The GIS-Based Water Resources and Agricultural Permitting and Planning System (GWRAPPS) was used to determine the following supplemental irrigation demands:

Melons grown from March 1 to July 1: 11.42 inches/year

Peanuts grown from April 1 to September 15: 6.50 inches/year

Rye/oats grown from November 1 to February 28: 1.90 inches/year

PERMIT APPLICATION REVIEW:

Section 373.223, Florida Statutes (F.S.), and Section 40B-2.301, Florida Administrative Code (F.A.C.), require an applicant to establish that the proposed use of water:

- (a) is a reasonable-beneficial use;
- (b) will not interfere with any presently existing legal use of water; and
- (c) is consistent with the public interest.

In addition, the above requirements are detailed further in the District's Water Use Permitting Applicant's Handbook ("A.H."). District staff has reviewed the water use permit application pursuant to the above-described requirements and have determined that the application meets the conditions for issuance of this permit. Highlights of the staff review are provided below.

Is this a reasonable–beneficial use?

[ref. 40B-2.301(1)(a)]

Yes. Based on the evaluation of criteria listed in 40B-2.301(2)(a)-40B-2.301(2)(k), F.A.C.

**Will this use interfere with any presently existing legal use of water?
[ref. 40B-2.301(1)(b)]**

No. Project withdrawals were modeled and showed a simulated Upper Floridan aquifer drawdown of less than 0.5 foot at the project boundary. Therefore, groundwater withdrawals at this project are not expected to interfere with any presently existing legal uses of water.

**Will this use be consistent with the public interest?
[ref. 40B-2.301(1)(c)]**

Yes. The use of water for agricultural purposes is consistent with the public interest.

**Will this use be in such a quantity that is necessary for economic and efficient use?
[ref. 40B-2.301(2)(a)]**

Yes. Water use consistent with the aforementioned supplemental irrigation models and industry standards is economic and efficient. The permittee will implement the following water conservation measures for the agricultural uses: fixing leaks as needed, installing new drip tape yearly, efficiency testing the drip tape to ensure that a 90% distribution uniformity will be maintained, emitting water only in the crops root zone, utilizing buried pipe to reduce the risk of damage leading to leaks, employing soil moisture probes to schedule irrigation events, operating with a pump safety shutdown in the event of an irrigation system malfunction, using conservation tillage to increase soil health and soil water holding capacity, and when feasible irrigating only at night and when the wind is less than 5 mph.

**Will the source of the water be suitable for the consumptive use?
[ref. 40B-2.301(2)(c)]**

Yes. Staff determined the Upper Floridan aquifer is suitable for the consumptive use.

**Will the source of the water be capable of producing the requested amount?
[ref. 40B-2.301(2)(d)]**

Yes. Staff determined the Upper Floridan aquifer is capable of producing the requested amounts.

**Except when the use is for human food preparation and direct human consumption, is the lowest quality water source that is suitable for the purpose and is technically, environmentally, and economically feasible being utilized?
[ref. 40B-2.301(2)(e)]**

Yes. The lowest quality water source that is suitable for the purpose and that is technically, environmentally, and economically feasible is being utilized.

**Will the use harm existing offsite land uses as a result of hydrologic alterations?
[ref. 40B-2.301(2)(f)]**

No. The use is not expected to harm offsite land uses.

**Will the use cause harm to the water resources of the area that include water quality impacts to the water source resulting from the withdrawal or diversion, water quality impacts from dewatering discharge to receiving waters, saline water intrusion or harmful upconing, hydrologic alterations to natural systems, including wetlands or other surface waters, or other harmful hydrologic alterations to the water resources of the area?
[ref. 40B-2.301(2)(g)]**

No. Project withdrawals were modeled and showed a simulated Upper Floridan aquifer drawdown of less than 0.5 foot at the project's boundaries. There are no wetlands on or proximate to the project, therefore, staff determined the continued use will not cause harm to the water resources of the area.

**Is the use in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.?
[ref. 40B-2.301(2)(h)]**

Yes. The proposed withdrawals are in accordance with MFLs and MFL recovery strategies pursuant to Chapters 62-42 and 40B-8, F.A.C.; and Emergency Rule 40BER17-01. Additionally, cumulative reductions in flow from the reduced allocation were evaluated at the Outstanding Florida Springs (OFS) and no measurable reductions were recorded. No OFS has an estimated cumulative flow decline of 9.9%.

**Will the project use water reserved pursuant to subsection 373.223(4), F.S.?
[ref. 40B-2.301(2)(i)]**

No. The project will not use water reserved by the Governing Board pursuant to subsection 373.223(4), F.S.

WITHDRAWAL POINT INFORMATION:

Site Name: 341 Farm

Wells Detail						
District ID	Station Name	Casing Diameter (inches)	Capacity (GPM)	Source Name	Status	Use Type
134453	341 Well	10	--	FAS - Upper Floridan Aquifer	Proposed	Agricultural

Conditions

1. All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to sections 373.136 or 373.243, F.S., unless a permit modification has been obtained. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.
2. This permit does not convey to the permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.
3. The permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and / or related facilities from which the permitted water use is made. Where the permittee's control of the land subject to the permit was demonstrated through a lease, the permittee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system / project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of section 40B-2.351, F.A.C. Alternatively, the permittee may surrender the water use permit to the District, thereby relinquishing the right to conduct any activities under the permit.
4. Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to chapter 373, F.S. In the event of a declared water shortage, the permittee must adhere to the water shortage restrictions, as specified by the District. The permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order.

5. With advance notice to the permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The permittee shall either accompany District staff onto the property or make provision for access onto the property.
6. A permittee may seek modification of any term of an unexpired permit. The permittee is advised that section 373.239, F.S., and section 40B-2.331, F.A.C., are applicable to permit modifications.
7. This permit shall expire on **8/8/2038**. The permittee must submit the appropriate application form incorporated and the required fee to the District pursuant to section 40B-2.361, F.A.C., up to one year prior to this expiration date in order to continue the use of water.
8. Use classification is **Agricultural**.
9. Source classification is **Groundwater**.
10. The permitted water withdrawal facilities consist of the stations in the Withdrawal Point Information table(s).
11. The permittee must mitigate interference with existing legal uses caused in whole or in part by the permittee's withdrawals, consistent with a District-approved mitigation plan. As necessary to offset such interference, mitigation may include, but is not limited to, reducing pumpage, replacing the existing legal user's withdrawal equipment, relocating wells, changing withdrawal source, supplying water to existing legal user, or other means needed to mitigate the impacts.
12. The permittee must mitigate harm to existing off-site land uses caused by the permittee's withdrawals. When harm occurs, or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
13. The permittee must mitigate harm to the natural resources caused by the permittee's withdrawals. When harm occurs or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
14. If any condition of the permit is violated, the permittee shall be subject to enforcement action pursuant to chapter 373, F.S.

15. The permittee must notify the District in writing prior to implementing any changes in the water use that may alter the permit allocations. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, water treatment method, or entry into one or more large water use agreements. In the event a proposed change will alter the allocation, permittee must first obtain a permit modification.
16. All correspondence sent to the District regarding this permit must include the permit number (**2-041-232812-1**).
17. The District reserves the right to open this permit, following notice to the permittee, to include a permit condition prohibiting withdrawals for resource protection.
18. The permittee shall implement automated monitoring of groundwater withdrawals, at permittee's expense, upon commencement of withdrawals. The monitoring and reporting shall include reporting daily volume pumped by each well of inside diameter eight inches or greater at land surface and shall be delivered by 12:00 pm local time the following day via approved telemetry consistent with District data formats. The permittee may opt for a standardized SRWMD automated monitoring system to fulfill this requirement.
19. The permittee shall implement and/or maintain the conservation practices selected in the Water Conservation Plan submitted to the District. Any new practices selected shall be implemented within one year from the date of permit issuance. Practices that involve scheduling methods or maintenance shall be documented. Documentation for implementation and/or maintenance shall be maintained on all practices and available upon request.
20. The permittee's water use shall be consistent with the MFL prevention or recovery strategy developed for any water body from which this permitted water use directly or indirectly withdraws or diverts water, pursuant to subsection 40B-2.301(2)(h), F.A.C.
21. The permittee shall ensure that the irrigation systems will water target areas only under field operations. Irrigation of non-target areas (roads, woods, structures, etc.) is prohibited.
22. The permittee agrees to participate in a Mobile Irrigation Lab (MIL) program and allow access to the Project Site for the purpose of conducting a MIL evaluation at least once every five years.

23. Following the effective date of the re-evaluated Minimum Flows and Levels adopted pursuant to Rule 62-42.300(1)(e), F.A.C., this permit is subject to modification during the term of the permit, upon reasonable notice by the District to the permittee, to achieve compliance with any approved MFL recovery or prevention strategy for the Lower Santa Fe River, Ichetucknee River, and Associated Priority Springs. Nothing herein shall be construed to alter the District's authority to modify a permit under circumstances not addressed in this condition.
24. The permittee shall install and maintain no less than one backflow prevention device when fertigating and no less than two backflow prevention devices when chemigating on all wells or surface water pumps connected to the irrigation system. The backflow prevention device(s) shall be installed between the water source and the injection point.
25. The permittee is authorized to withdraw a maximum of 0.0782 mgd of groundwater for supplemental irrigation of corn/rye, a maximum of 0.0595 mgd for supplemental irrigation for melons/rye, or a maximum of 0.0375 mgd for supplemental irrigation of peanuts/rye. Daily allocations are calculated on an average annual basis and the maximum allocation is only authorized in 1-in-10 year drought conditions.
26. The permittee is authorized to withdraw a maximum of 0.0008 mgd of groundwater for livestock use. Daily allocations are calculated on an average annual basis.



341 Farm Project

2-041-232812-1

November 2018



-  Proposed Withdrawal Points
-  Irrigation Systems
-  Project Area



Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.

MEMORANDUM

TO: Governing Board

FROM: Warren Zwanka, P.G., Division Director, Resource Management

THRU: Steve Minnis, Deputy Executive Director, Business and Community Services

DATE: November 5, 2018

RE: Approval of Water Use Permit 2-041-233330-1, Authorizing a Maximum 0.0899 mgd of Groundwater for Agricultural Use at the Trenton Field Project, Gilchrist County

RECOMMENDATION

Staff recommends the Governing Board approve Water Use Permit number 2-041-233330-1 with seventeen standard conditions and nine special limiting conditions to Michael Wilkerson, in Gilchrist County.

BACKGROUND

This is a new agricultural water use that received an objection and therefore must be approved by the Governing Board. The notice of receipt was published in the Gilchrist County Journal on October 25, 2018. On November 5, 2018 the District received an objection letter alleging the soils at this project are unsuitable for irrigation therefore requiring the permit to be reviewed by the Governing Board.

The project consists of approximately 80 controlled and 65 irrigated acres and is located approximately two miles south of Trenton in Gilchrist County. Groundwater from one well will be used to irrigate corn, peanuts, rye, or watermelons through center pivots or drip irrigation. Groundwater from the same well will be used to provide the livestock watering requirements of approximately 60 head of beef cattle. Supplemental irrigation models were used to determine the 0.0899 mgd 1-in-10-year drought allocation.

The single 8-inch diameter irrigation well will be monitored through electrical consumption. Groundwater withdrawals at this project are not expected to interfere with any presently existing legal uses of water; and there are no lower quality water sources available for use.

Staff has determined the proposed withdrawals are in accordance with Minimum Flows and Minimum Water Levels (MFLs) and MFL recovery strategies pursuant to Chapters 62-42, 40B-8, and Emergency Rule 40BER17-01, Florida Administrative Code (F.A.C.). The application is complete and satisfies the conditions for issuance in Chapter 40B-2, F.A.C.

SW/tm

WATER USE TECHNICAL STAFF REPORT
 25-Oct-2018
 APPLICATION #: 2-041-233330-1

Owner: Michael Wilkerson
 7599 SE SR 47
 Trenton, FL 32693
 (352) 221-0382

Applicant: Michael Wilkerson
 7599 SE SR 47
 Trenton, FL 32693
 (352) 221-0382

Agent: Not Applicable

Compliance Contact: BJ Wilkerson
 7599 SE SR 47
 Trenton, FL 32693
 (352) 507-1378

Project Name: Trenton Field
County: Gilchrist

Located in WRCA: No
Objectors: No

Authorization Statement:

The permittee is authorized to withdraw a maximum of 0.0890 mgd of groundwater for supplemental irrigation of corn/rye, a maximum of 0.0585 mgd of groundwater for supplemental irrigation for melons/rye, or a maximum of 0.0560 mgd of groundwater for supplemental irrigation of peanuts/rye. The permittee is also authorized to withdraw a maximum of 0.0009 mgd of groundwater for livestock use.

Recommendation: Approval

Reviewers: Stefani Weeks; Matthew Cantrell; Warren Zwanka

WATER USE SUMMARY:

Allocation Summary		
Average Daily Rate (Million Gallons Per Day)	Freeze Protection (Million Gallons Per Year)	Allocation Change (Million Gallons Per Day)
0.0899	0.0000	0.0899

Recommended Permit Duration and Compliance Reporting: Twenty-year permit duration.

USE STATUS: This is a new permit for agricultural use.

PROJECT DESCRIPTION:

This project is located approximately one-half mile west of US-129 on CR-143 and two miles south of Trenton in Gilchrist County; and consists of 80 controlled and 65 irrigated acres. Groundwater from one well will be used to irrigate corn, peanuts, and rye through a center pivot; and melons through a drip irrigation system. Groundwater will also be used to provide the water requirements of approximately 60 head of beef cattle.

The permittee has elected to provide SRWMD electrical consumption to comply with the water use reporting requirement of special condition 18.

WATER USE CALCULATIONS:

The livestock watering requirements were calculated based on the industry standard 15 gallons per cow per day for the cattle populations provided.

The District's WUPAR model was used to determine the 15.61 inches/ year supplemental irrigation requirement for corn.

The GIS-Based Water Resources and Agricultural Permitting and Planning System (GWRAPPS) was used to determine the following supplemental irrigation demands:

- Melons grown from March 1 to July 15: 9.29 inches/year
- Peanuts grown from April 1 to September 1: 8.79 inches/year
- Rye/oats grown from November 1 to March 1: 2.80 inches/year

PERMIT APPLICATION REVIEW:

Section 373.223, Florida Statutes (F.S.), and Section 40B-2.301, Florida Administrative Code (F.A.C.), require an applicant to establish that the proposed use of water:

- (a) is a reasonable-beneficial use;
- (b) will not interfere with any presently existing legal use of water; and
- (c) is consistent with the public interest.

In addition, the above requirements are detailed further in the District's Water Use Permitting Applicant's Handbook ("A.H."). District staff has reviewed the water use permit application pursuant to the above-described requirements and have determined that the application meets the conditions for issuance of this permit. Highlights of the staff review are provided below.

Is this a reasonable–beneficial use?

[ref. 40B-2.301(1)(a)]

Yes. Based on the evaluation of criteria listed in 40B-2.301(2)(a)-40B-2.301(2)(k), F.A.C.

**Will this use interfere with any presently existing legal use of water?
[ref. 40B-2.301(1)(b)]**

No. Project withdrawals were modeled and showed a simulated Upper Floridan aquifer drawdown of less than 0.5 foot at the project boundary. Therefore, groundwater withdrawals at this project are not expected to interfere with any presently existing legal uses of water.

**Will this use be consistent with the public interest?
[ref. 40B-2.301(1)(c)]**

Yes. The use of water for agricultural purposes is consistent with the public interest.

**Will this use be in such a quantity that is necessary for economic and efficient use?
[ref. 40B-2.301(2)(a)]**

Yes. Water use consistent with the aforementioned supplemental irrigation models and industry standards is economic and efficient. The permittee will implement the following water conservation measures for the agricultural uses: fixing leaks as needed, installing new drip tape yearly, efficiency testing the drip tape to ensure that a 90% distribution uniformity will be maintained, emitting water only in the crops root zone, using new or retrofitted pivot irrigation system and efficiency testing that system every five years to maintain an 80% distribution uniformity, utilizing buried pipe to reduce the risk of damage leading to leaks, employing soil moisture probes to schedule irrigation events, operating with a pump safety shutdown in the event of an irrigation system malfunction, using conservation tillage and cover crops to increase soil health and soil water holding capacity, and when feasible irrigating only at night and when the wind is less than 5 mph.

**Will the source of the water be suitable for the consumptive use?
[ref. 40B-2.301(2)(c)]**

Yes. Staff determined the Upper Floridan aquifer is suitable for the consumptive use.

**Will the source of the water be capable of producing the requested amount?
[ref. 40B-2.301(2)(d)]**

Yes. Staff determined the Upper Floridan aquifer is capable of producing the requested amounts.

Except when the use is for human food preparation and direct human consumption, is the lowest quality water source that is suitable for the purpose and is technically, environmentally, and economically feasible being utilized?
[ref. 40B-2.301(2)(e)]

Yes. The lowest quality water source that is suitable for the purpose and that is technically, environmentally, and economically feasible is being utilized.

Will the use harm existing offsite land uses as a result of hydrologic alterations?
[ref. 40B-2.301(2)(f)]

No. The use is not expected to harm offsite land uses.

Will the use cause harm to the water resources of the area that include water quality impacts to the water source resulting from the withdrawal or diversion, water quality impacts from dewatering discharge to receiving waters, saline water intrusion or harmful upconing, hydrologic alterations to natural systems, including wetlands or other surface waters, or other harmful hydrologic alterations to the water resources of the area?
[ref. 40B-2.301(2)(g)]

No. Project withdrawals were modeled and showed a simulated Upper Floridan aquifer drawdown of less than 0.5 foot at the project's boundaries. There are no wetlands on or proximate to the project, therefore, staff determined the water use will not cause harm to the water resources of the area.

Is the use in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.?
[ref. 40B-2.301(2)(h)]

Yes. The proposed withdrawals are in accordance with MFLs and MFL recovery strategies pursuant to Chapters 62-42 and 40B-8, F.A.C.; and Emergency Rule 40BER17-01. Additionally, cumulative reductions in flow from the reduced allocation were evaluated at the Outstanding Florida Springs (OFS) and no measurable reductions were recorded. No OFS has an estimated cumulative flow decline of 9.9%.

Will the project use water reserved pursuant to subsection 373.223(4), F.S.?
[ref. 40B-2.301(2)(i)]

No. The project will not use water reserved by the Governing Board pursuant to subsection 373.223(4), F.S.

WITHDRAWAL POINT INFORMATION:

Site Name: Trenton Field

Wells Detail						
District ID	Station Name	Casing Diameter (inches)	Capacity (GPM)	Source Name	Status	Use Type
134972	Trenton Field Well	12	--	FAS - Upper Floridan Aquifer	Proposed	Agricultural

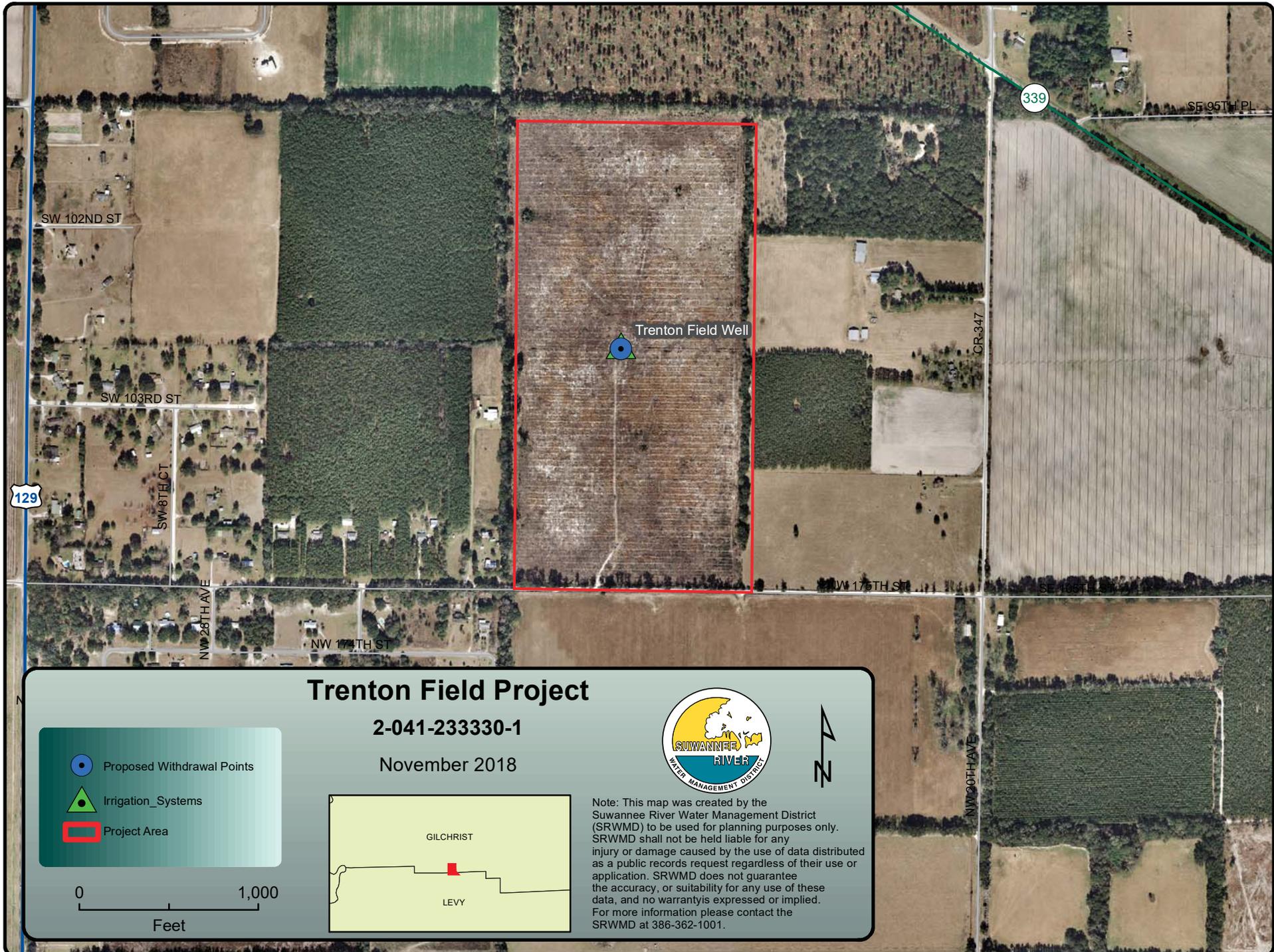
Conditions

1. All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to sections 373.136 or 373.243, F.S., unless a permit modification has been obtained. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.
2. This permit does not convey to the permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.
3. The permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and / or related facilities from which the permitted water use is made. Where the permittee's control of the land subject to the permit was demonstrated through a lease, the permittee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system / project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of rule 40B-2.351, F.A.C. Alternatively, the permittee may surrender the water use permit to the District, thereby relinquishing the right to conduct any activities under the permit.
4. Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to chapter 373, F.S. In the event of a declared water shortage, the permittee must adhere to the water shortage restrictions, as specified by the District. The permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order.

5. With advance notice to the permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The permittee shall either accompany District staff onto the property or make provision for access onto the property.
6. A permittee may seek modification of any term of an unexpired permit. The permittee is advised that section 373.239, F.S. and rule 40B-2.331, F.A.C., are applicable to permit modifications.
7. This permit shall expire on **10/25/2038**. The permittee must submit the appropriate application form incorporated and the required fee to the District pursuant to rule 40B-2.361, F.A.C., up to one year prior to this expiration date in order to continue the use of water.
8. Use classification is **Agricultural**.
9. Source classification is **Groundwater**.
10. The permitted water withdrawal facilities consist of the stations in the Withdrawal Point Information table(s).
11. The permittee must mitigate interference with existing legal uses caused in whole or in part by the permittee's withdrawals, consistent with a District-approved mitigation plan. As necessary to offset such interference, mitigation may include, but is not limited to, reducing pumpage, replacing the existing legal user's withdrawal equipment, relocating wells, changing withdrawal source, supplying water to existing legal user, or other means needed to mitigate the impacts.
12. The permittee must mitigate harm to existing off-site land uses caused by the permittee's withdrawals. When harm occurs, or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
13. The permittee must mitigate harm to the natural resources caused by the permittee's withdrawals. When harm occurs or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
14. If any condition of the permit is violated, the permittee shall be subject to enforcement action pursuant to chapter 373, F.S.

15. The permittee must notify the District in writing prior to implementing any changes in the water use that may alter the permit allocations. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, water treatment method, or entry into one or more large water use agreements. In the event a proposed change will alter the allocation, permittee must first obtain a permit modification.
16. All correspondence sent to the District regarding this permit must include the permit number (**2-041-233330-1**).
17. The District reserves the right to open this permit, following notice to the permittee, to include a permit condition prohibiting withdrawals for resource protection.
18. The permittee shall implement automated monitoring of groundwater withdrawals, at permittee's expense, upon commencement of withdrawals. The monitoring and reporting shall include reporting daily volume pumped by each well of inside diameter eight inches or greater at land surface and shall be delivered by 12:00 pm local time the following day via approved telemetry consistent with District data formats. The permittee may opt for a standardized SRWMD automated monitoring system to fulfill this requirement.
19. The permittee shall implement and/or maintain the conservation practices selected in the Water Conservation Plan submitted to the District. Any new practices selected shall be implemented within one year from the date of permit issuance. Practices that involve scheduling methods or maintenance shall be documented. Documentation for implementation and/or maintenance shall be maintained on all practices and available upon request.
20. The permittee's water use shall be consistent with the MFL prevention or recovery strategy developed for any water body from which this permitted water use directly or indirectly withdraws or diverts water, pursuant to subsection 40B-2.301(2)(h), F.A.C.
21. The permittee shall ensure that the irrigation systems will water target areas only under field operations. Irrigation of non-target areas (roads, woods, structures, etc.) is prohibited.
22. The permittee agrees to participate in a Mobile Irrigation Lab (MIL) program and allow access to the Project Site for the purpose of conducting a MIL evaluation at least once every five years.

23. Following the effective date of the re-evaluated Minimum Flows and Levels adopted pursuant to subsection 62-42.300(1)(e), F.A.C., this permit is subject to modification during the term of the permit, upon reasonable notice by the District to the permittee, to achieve compliance with any approved MFL recovery or prevention strategy for the Lower Santa Fe River, Ichetucknee River, and Associated Priority Springs. Nothing herein shall be construed to alter the District's authority to modify a permit under circumstances not addressed in this condition.
24. The permittee shall install and maintain no less than one backflow prevention device when fertigating and no less than two backflow prevention devices when chemigating on all wells or surface water pumps connected to the irrigation system. The backflow prevention device(s) shall be installed between the water source and the injection point.
25. The permittee is authorized to withdraw a maximum of 0.0890 mgd of groundwater for supplemental irrigation of corn/rye, a maximum of 0.0585 mgd of groundwater for supplemental irrigation for melons/rye, or a maximum of 0.0560 mgd of groundwater for supplemental irrigation of peanuts/rye. Daily allocations are calculated on an average annual basis and the maximum allocation is only authorized in 1-in-10 year drought conditions.
26. The permittee is authorized to withdraw a maximum of 0.0009 mgd of groundwater for livestock use. Daily allocations are calculated on an average annual basis.



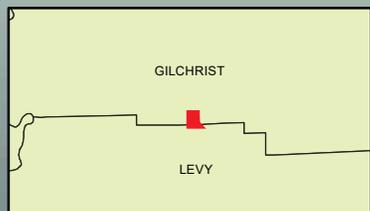
Trenton Field Project

2-041-233330-1

November 2018



-  Proposed Withdrawal Points
-  Irrigation Systems
-  Project Area



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