



Tennessee Department of Environment and Conservation

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243  
(615) 532-0625

**Municipal Separate Storm Sewer System (MS4) Annual Report**

**1. MS4 INFORMATION**

Name of MS4 MS4 Permit Number

Name of Contact Person Email Address

Telephone (including area code)

Mailing Address

City State ZIP code

What is the current population of your MS4?

What is the reporting period for this annual report? From to 6/30/16

**2. WATER QUALITY PRIORITIES (SECTION 3.1)**

- A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool? If yes, please attach a list all impaired waters within your jurisdictional area. ☐ Yes ☐ No
- B. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list. ☐ Yes ☐ No
- C. What specific sources of these pollutants of concern are you targeting? \_\_\_\_\_
- D. Do you have discharges to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list. ☒ Yes ☐ No
- E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your juris ☒ Yes ☐ No educational outreach to Country Club and Landscape Companies

**3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)**

- A. Are there any state or federally listed species within the MS4's jurisdiction? ☒ Yes ☐ No
- B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species? ☐ Yes ☒ No
- C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species.

**4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 4.2.1 AND 4.2.2)**

- A. Is your public education program targeting specific pollutants and sources of those pollutants? ☐ Yes ☐ No
- B. Is your public education program targeting specific pollutants and sources of those pollutants, such as Hot Spots? ☒ Yes ☐ No
- C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? The City approach targets two main audiences - the development community (e.g. contractors, architects, engineers) and residents. For sediment and other construction-related potential pollution, the City educates contractors during the land disturbance permit process. The monthly City newsletter includes stormwater-related topics for residential education for 6 months per year.

## Small Municipal Separate Storm Sewer System (MS4) Annual Report

D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. All Belle Meade residents receive the monthly newsletter that includes stormwater-related topics for 6 months per year. Stream cleanup costs have been reduced over the years that the newsletter has included articles about not dumping yard waste into the streams. Fewer questions regarding stormwater. Better EPSC implementation by contractors.

E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☐ Yes ☐ No

F. How do you facilitate, advertise, and publicize public involvement and participation opportunities? The City used emails and the newsletter to announce a public stormwater education meeting on April 23, 2015 that was attended by almost 50 people including residents, contractors, engineers, architects, and other interested parties. The meeting was held to address several items related to the City's stormwater management program and alert the public to changes coming. The City's website is used to advertise public involvement opportunities such as commissioner meetings.

G. Do you have a webpage dedicated to your stormwater program? If so, what is the link/URL: http://www.citybellemeade.org/Stormwater ☒ Yes ☐ No

H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities. ☐ Yes ☐ No

### 5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3)

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No

B. Have you completed a map of all storm drain pipes of storm sewer system? ☒ Yes ☐ No

C. How many outfalls have you identified in your system? \_\_\_\_\_

D. Have any of these outfalls been screened for dry weather discharges? ☒ Yes ☐ No

E. What is your frequency for screening outfalls for illicit discharges? Once per permit cycle and then no set frequency for additional screening. However, staff have been educated on identifying illicit discharges and inspect them on a daily basis during normal activities.

F. Do you have an ordinance that effectively prohibits illicit discharges? ☒ Yes ☐ No

G. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you?) one.

H. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? one

### 6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

A. Do you have an ordinance or adopted policies stipulating:

Erosion and sediment control requirements?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Other construction waste control requirements?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Requirement to submit construction plans for review?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
MS4 enforcement authority?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? 3. In addition, the City also permitted other active construction sites of less than one acre.

C. How many of these active sites did you inspect this reporting period? All (3 with a disturbance of at least one acre).

D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)? On average, every other month.

E. Do you prioritize certain construction sites for more frequent inspections? ☒ Yes ☐ No  
If yes, based on what criteria? Sites adjacent to streams inspected monthly

### 7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

A. Do you have an ordinance or other mechanism to require:

Site plan reviews of all new and redevelopment projects?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Maintenance of stormwater management controls?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Retrofitting of existing BMPs with green infrastructure BMPs?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

## Small Municipal Separate Storm Sewer System (MS4) Annual Report

- B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc). 10,000 ft<sup>2</sup> of disturbance, adjacent to stream, or as deemed necessary by Building Official
- C. Have you implemented and enforced performance standards for permanent stormwater controls? ☒ Yes ☐ No
- D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that predevelopment hydrology be met for:
- |                      |   |  |
|----------------------|---|--|
| Flow volumes         | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Peak discharge rates | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            |
| Discharge frequency  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Flow duration        | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
- E. Please provide the URL/reference where all permanent stormwater management standards can be found . <http://www.citybellemead.org/Stormwater>
- F. How many development and redevelopment project plans were reviewed for this reporting period? 12
- G. How many development and redevelopment project plans were approved? 12
- H. How many permanent stormwater management practices/facilities were inspected? 1
- I. How many were found to have inadequate maintenance? 0
- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify.) N/A
- K. How many enforcement actions were taken that address inadequate maintenance? N/A
- L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No
- M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☒ Yes ☐ No
- N. Has the MS4 developed a program to allow for incentive standards for this redeveloped sites? ☐ Yes ☒ No
- O. How many maintenance agreements has the MS4 approved during the reporting period? 9

### 8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

- A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ☐ Yes ☒ No  
Previously submitted
- B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. See attached.

### 9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6)

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
- |  |   |  |
|--|---|--|
| All parks, ball fields and other recreational facilities (N/A for City)            | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            |
| All municipal turf grass/landscape management activities                           | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities (N/A for City) | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            |
| All municipal maintenance yards (N/A for City)                                     | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            |
| All municipal waste handling and disposal areas                                    | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
- B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No  
If yes, at what frequency are inspections conducted? Monthly
- C. Have standard operating procedures or BMP's been developed for all MS4 field activities? (e.g, road repairs, catch basin cleaning, landscape management, etc). ☐ Yes ☒ No
- D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? ☒ Yes ☐ No
- E. On average, how frequently are catch basins and other inline treatment systems inspected? No set frequency for inspections: staff inspect features during normal work activities.

## Small Municipal Separate Storm Sewer System (MS4) Annual Report

- F. On average, how frequently are catch basins and other inline treatment system cleaned out/maintained? Maintenance is performed on an as-needed basis with no set frequency.
- G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? ☒ Yes ☐ No
- H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No  
 If so, how frequently and/or under what circumstances? \_\_\_\_\_  
Training at biannual program meetings

### 10 STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

- A. Describe any changes to the MS4 program during the reporting period including but not limited to:  
 Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a). None
- Changes to replace an ineffective or unfeasible BMP (Section 4.4.2b). None
- Information (eg. additional acreage, outfalls, BMP's) on program area expansion based on annexation or newly urbanized areas. None - annexation is not applicable for the City due to Metro Nashville charter
- Changes to the program as required by the division (Section 4.4.3). N/A

### 11. EVALUATING/MEASURING PROGRESS

- A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc?

Indicator	Began Tracking (year)	Frequency	Number of Locations
Example: E. coli	2003	Weekly April–September	20
Visual Stream Assessment	2009	Once/permit term	One Stream in 2009, One stream in 2012
E. coli	2012	Once/permit term	Six locations in 2012
Complaint tracking	2003	Ongoing	City-wide
Benthic macroinvertebrate sampling	2015	Once/permit term	Three locations

- B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater None completed

## Small Municipal Separate Storm Sewer System (MS4) Annual Report

### 12. ENFORCEMENT

- A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative fines	# _____	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Stop Work Orders	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Civil penalties	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Criminal actions	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative orders	# _____	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Other _____	# _____	# _____	# _____		

- B. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions in your jurisdiction? ☒ Yes ☐ No

- C. What are the 3 most common types of violations documented during this reporting period? \_\_\_\_\_  
NA

### 13. PROGRAM RESOURCES (OPTIONAL)

- A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period? \_\_\_\_\_

- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP? \_\_\_\_\_

- C. Do you have an independent financing mechanism for your stormwater program? ☒ Yes ☐ No

- D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Source: \_\_\_\_\_ Amount \$

Source: \_\_\_\_\_ Amount \$

- E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? 0; City Manager & Building Official implement the program among other duties.

- F. Do you share program implementation responsibilities with any other entities? ☐ Yes ☒ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism

- G. Please attach a copy of your Organizational Chart

## Small Municipal Separate Storm Sewer System (MS4) Annual Report

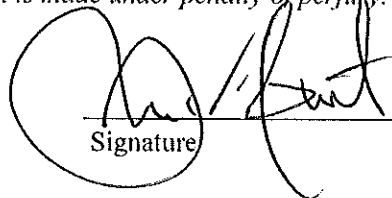
### 14. CERTIFICATION

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

*"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."*

James V. Hunt, Sr., Mayor

Printed Name and Title

  
Signature

Sept. 28, 2016

Date

Annual reports must be submitted in accordance with the requirements of subpart 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by January 31 of each calendar year, as shown in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	1301 Riverfront Parkway, Ste 206	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000

City of Belle Meade, TN  
Municipal Separate Storm Sewer System (MS4) Annual Report  
Report Addendum

**Section 2.A. - List of Impaired Waters in Jurisdiction Based on TDEC Viewer as of August 2016**

Waterbody Name	Waterbody Description	Waterbody I.D. #	Cause(s)	Source Name(s)
Richland Creek	Briley Parkway to Jocelyn Hollow Branch	TN05130202314-2000	<i>Escherichia coli</i>	Sanitary Sewer Overflows (Collection System Failures)
			Other anthropogenic substrate alterations	Municipal (Urbanized High Density Area)
			Phosphorus (Total)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Nitrate/Nitrite (Nitrite + Nitrate as N)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
Richland Creek	Jocelyn Hollow Branch to headwaters	TN05130202314-3000	Other anthropogenic substrate alterations	Municipal (Urbanized High Density Area)
			Phosphorus (Total)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Nitrate/Nitrite (Nitrite + Nitrate as N)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			<i>Escherichia coli</i>	Discharges from Municipal Separate Storm Sewer Systems (MS4)
Jocelyn Hollow Branch	Richland Creek to headwaters	TN05130202314-0800	<i>Escherichia coli</i>	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Nitrate/Nitrite (Nitrite + Nitrate as N)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Phosphorus (Total)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
Sugartree Creek	Richland Creek to headwaters	TN05130202314-0400	<i>Escherichia coli</i>	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Other Anthropogenic Substrate Alterations	Municipal (Urbanized High Density Area)
			Nitrate/Nitrite (Nitrite + Nitrate as N)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Phosphorus (Total)	Discharges from Municipal Separate Storm Sewer Systems (MS4)
			Oxygen, Dissolved	Discharges from Municipal Separate Storm Sewer Systems (MS4)

City of Belle Meade, TN  
Municipal Separate Storm Sewer System (MS4) Annual Report  
Report Addendum

**Section 2.D. - List of Exceptional Tennessee Waters (ETWs) in Jurisdiction Based on TDEC Exceptional Tennessee Waters list and data viewer as of September 2016**

<b>Waterbody Name</b>	<b>Waterbody Description</b>	<b>HUC</b>	<b>Basis for Inclusion</b>
Unnamed Tributary to Richland Creek	Headwater tributary of Richland Creek from mouth to origin	05130202	State threatened Water Stitchwort
Richland Creek	From just D/S "The temple" to upstream boundary of Belle Meade Mansion State Historic Area	05130202	Belle Meade Mansion State Historic Area and state threatened Water Stitchwort
Jocelyn Hollow Branch	Portion in Belle Meade Mansion State Historic Area	05130202	Belle Meade Mansion State Historic Area



City of Belle Meade, TN  
Municipal Separate Storm Sewer System (MS4) Annual Report  
Report Addendum

**Section 3.C. State or Federally Listed Species Information.**

See attached letter request to U. S. Fish and Wildlife Service (USFWS) regarding federally listed species information.  
The response from USFWS will be submitted after it is received from USFWS.

See attached species habitat review by Civil & Environmental Consultants, Inc.

August 31, 2016

Ms. Mary Jennings  
U.S. Department of Interior  
Fish and Wildlife Service  
446 Neal Street  
Cookeville, TN 38501

Dear Ms. Jennings:

RE: Threatened or Endangered Species Evaluation for the City of Belle Meade, TN  
CEC Project 163-320

The City of Belle Meade, TN is permitted as a small municipal separate storm sewer system (MS4) under General NPDES Permit No. TNS075159. Section 3.2 of the permit requires annual review of whether or not stormwater discharges, allowable non-stormwater discharges, and discharge-related activities are likely to jeopardize the continued existence of any state or federally listed species that are listed as endangered or threatened (“listed”) under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA (“critical habitat”). CEC is under contract to assist the City in complying with the terms of their NPDES permit.

Last year we requested a list of threatened or endangered species that may be present within the corporate boundary of the City of Belle Meade. Since the City is required to perform this evaluation annually, we request that you consult your records from last year’s request and inform us of any changes. A copy of the response letter we received last year is included with this letter. A location map is also attached for your reference. This request for a species list is in compliance with the Fish and Wildlife Coordination Act of 1958, and the Endangered Species Act of 1973 (amended).

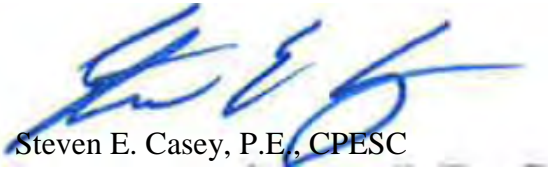
We request that you include in your reply letter the entire project description listed in the subject line of this letter. Your assistance is appreciated.

Ms. Jennings – U.S. Department of Interior  
CEC Project 163-320  
Page 2  
August 31, 2016

If you have any questions or need any additional information, please feel free to call me at (615) 333-7797.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.



Steven E. Casey, P.E., CPESC  
Principal

Enclosures: 2015 USFWS Response Letter  
City of Belle Meade, TN Location Map



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Tennessee ES Office  
446 Neal Street  
Cookeville, Tennessee 38501

August 31, 2015

Mr. Steven E. Casey  
Project Manager  
Civil & Environmental Consultants, Inc.  
405 Duke Drive, Suite 270  
Franklin, Tennessee 37067

Re: CEC Project No. 151-772/FWS #15-EC-0065

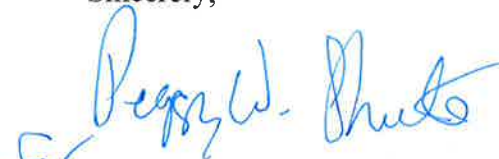
Dear Mr. Casey:

Thank you for your correspondence received August 3, 2015, regarding compliance with the Tennessee Department of Environment and Conservation (TDEC) Notice of Coverage annual reporting requirements for the City of Belle Meade's MS4 permit (TNS075159) and stormwater management program in Davidson County, Tennessee. U.S. Fish and Wildlife Service (Service) personnel have reviewed your request for technical assistance and offer the following comments.

Review of our endangered species database indicates that no federally listed or proposed endangered or threatened species occur within the jurisdictional boundaries of the City of Belle Meade's stormwater management program. In view of this, we believe that adverse effects to federally listed species from activities carried out under that program are not anticipated.

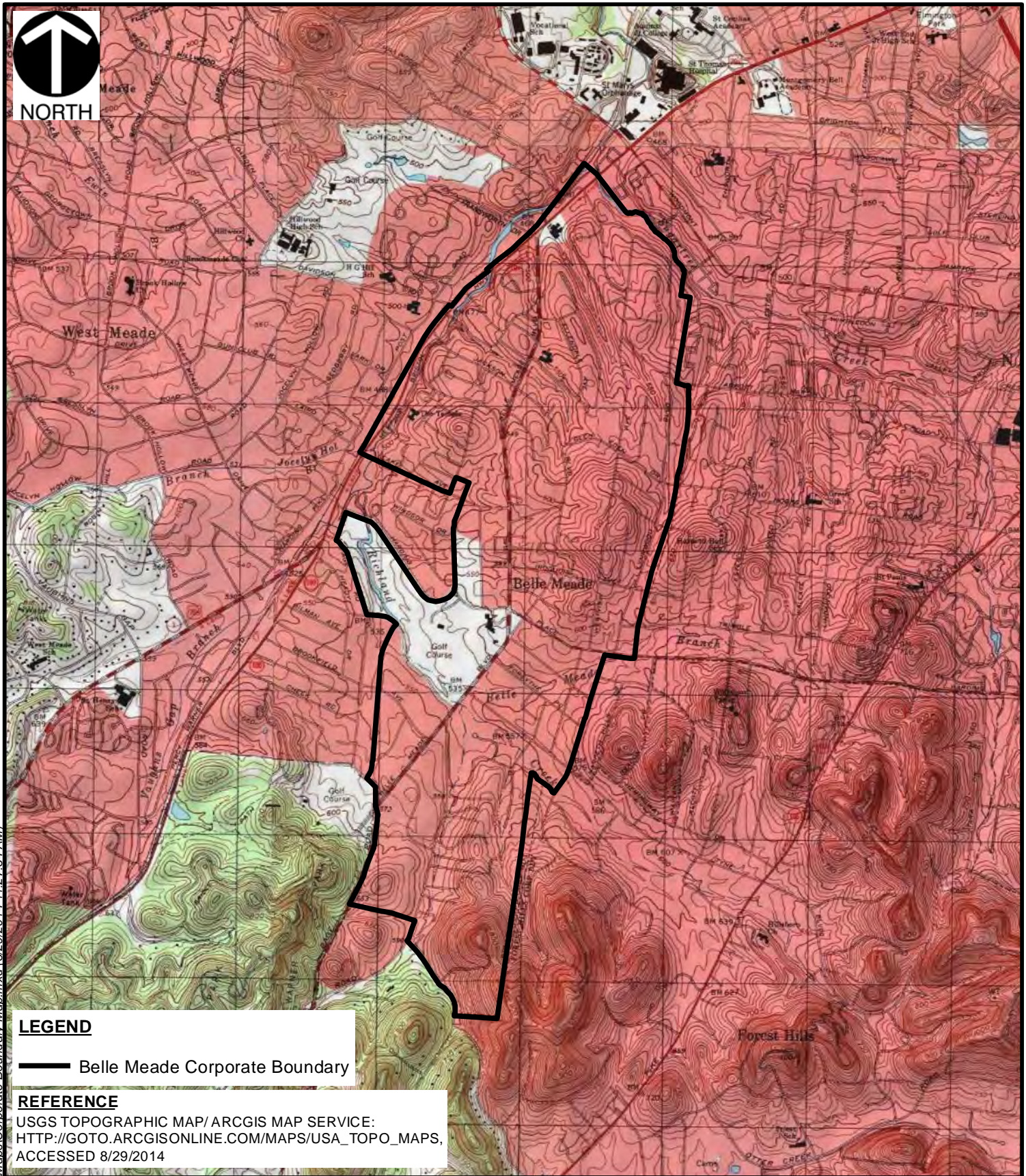
Thank you for the opportunity to comment. If you have any questions, please contact Steve Alexander of my staff at 931/528-6481, ext. 210, or via e-mail at [steven\\_alexander@fws.gov](mailto:steven_alexander@fws.gov).

Sincerely,

  
for Mary E. Jennings  
Field Supervisor

xc: Robert Karesh, TDEC Central Office, Nashville  
Ann Morbitt, TDEC-EAC, Nashville





**LEGEND**

— Belle Meade Corporate Boundary

**REFERENCE**  
USGS TOPOGRAPHIC MAP/ ARCGIS MAP SERVICE:  
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA\\_TOPO\\_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),  
ACCESSED 8/29/2014



**Civil & Environmental Consultants, Inc.**  
325 Seaboard Lane, Suite 170 Franklin, Tennessee  
615-333-7797 \*800-763-2326  
[www.ccecinc.com](http://www.ccecinc.com)

CITY OF BELLE MEADE  
USGS OAK HILL QUAD  
308 SE

CORPORATE BOUNDARY

DRAWN BY:	JMB	CHECKED BY:	SEC	APPROVED BY:	SEC*	FIGURE NO:	1
DATE:	8/29/2014	SCALE:	1" = 3,000'	PROJECT NO:	142-768	* Hand signature on file	

ISVR-NASHVILLE-2014142-768-GIS\Maps\Corporate Boundary Map.mxd (8/29/2014 11:27:34 AM)



## Letter from Fish and Wildlife

## Species Review

Project: City of Belle Meade      Project Number: 163-320

2016

Completed by: Civil & Environmental Consultants, Inc.

### Species reported within 1-mile radius of Belle Meade:

1.	2.	3.	4.	5.	6.	7.
Species  Scientific and common names, followed by (A) for animal or (P) for plant	Status	Species is potentially present in Project Boundary because:  (A) it is listed by TDEC within Project Boundary (B) habitat is present (C) observed during site visit (D) critical habitat present within Project	Species is considered likely NOT present in Project Boundary because: (A) Present habitat unsuitable (B) Not observed during site visit (C) Original record questionable (D) Considered extinct/extirpated	Accommodations to minimize impacts: (A) BMPs are sufficient to protect species (B) Special Notes are included on project plans (C) Individuals will be impacted. (D) Accommodations not practical due to broad habitat description or mobility of species	Habitat (include blooming, breeding or other information)	Notes
	Fed   TN					
<i>Lilium michiganense</i> , Michigan Lily (P)	--   T		A, B		Moist Prairies, Open Riparian forests.	This is a historical listing and was last seen in the Belle Meade area: 1949-06-11.
<i>Stellaria fontinalis</i> , Water Stitchwort (P)	--   S		A, B		Open to partially shaded wet areas with thin limestone soil where natural disturbances keep woody and weedy competition to a minimum. Inhabits stream banks, washouts, moss-covered cliffs overlooking streams, and calcareous seeps in glade woods (Natureserve.org).	Last Observed in three different locations: 1993-04-15. Also historically observed: 1940-05-16.
<i>Tyto alba</i> , Barn Owl (A)	--   D	B		D	<b>Palustrine Habitat(s):</b> HERBACEOUS WETLAND, Riparian <b>Terrestrial Habitat(s):</b> Cliff, Cropland/hedgerow, Grassland/herbaceous, Savanna, Suburban/orchard, Urban/edificarian (Natureserve.org).	This is a historical listing and was last seen in the Belle Meade area: 1943-06-19.

# Belle Meade One Mile List 9.13.2016

SCIENTIFIC_NAME	COMMON_NAME	FED_PROTECTION	ST_PROTECTION	LAST_OBS_DATE
Stellaria fontinalis	Water Stitchwort	--	S	1993-04-15
Tyto alba	Barn Owl	--	D	1943-06-19
Lilium michiganense	Michigan Lily	--	T	1949-06-11
Stellaria fontinalis	Water Stitchwort	--	S	1993-04-15
Stellaria fontinalis	Water Stitchwort	--	S	1940-05-16
Stellaria fontinalis	Water Stitchwort	--	S	1993-04-15





Photo 1. View of Richland Creek looking downstream (west) in residential tract located off Chancery Ln.



Photo 2. View of Richland Creek looking upstream (east) in residential tract located off Chancery Ln.





Photo 3. View of Chickering Branch looking upstream (south) located off Chickering Ln.



Photo 4. View of Chickering Branch looking downstream (north) located off Chickering Ln.





Photo 5. View of vacant lots looking northeast located off Jackson Blvd. Habitat is moderately disturbed and surrounded by residential properties on all sides.



Photo 6. Alternate view of vacant lots looking southeast located off Jackson Blvd.





Photo 7. View of Richland Creek looking downstream (north) located on the northern border of Belle Meade off of Harding Pk.



Photo 8. View of Richland Creek looking upstream (south) located on the northern border of Belle Meade off of Harding Pk.





Photo 9. View of Richland Creek looking upstream (south) as it crosses Jackson Blvd.



Photo 10. View of Richland Creek looking downstream (north) at Jackson Blvd.

#### Section 4.H. Summary of Public Education, Outreach, Involvement and Participation Activities

BMP Ref.	Activity Name	Summary Information
SWMP 1.A., 2.C PIE Plan I.A.	Stormwater Articles in Residential Newsletter	<ul style="list-style-type: none"> <li>• Oct 2015 – “Fall Reminders” (Creek cleanup and yard maintenance information)</li> <li>• November 2015 – “Do You Need Flood Insurance?” (Standard homeowner insurance does not cover flooding)</li> <li>• Feb 2016 – “Weed Wrangle” (Removal of harmful plant species)</li> <li>• April 2016 – “Ecological Impacts of Invasive Plants” (Negative environmental effects of invasive plants)</li> <li>• May 2016 – “New Enterprise Fund for Sewer Utility” (5-year sustainable sewer rate)</li> <li>• June 2016 – “Stormwater Pollution Prevention” (Precautionary practices for homeowners)</li> </ul>
SWMP 1.A., PIE Plan I.A., I.B.	Website	The City’s Stormwater website includes stormwater-related information such as the previous year’s MS4 permit annual report. It also includes information on sewer grinder pump maintenance to help prevent sewer problems.
SWMP 1.B.	Complaint Log	There were no complaints received.
SWMP 1.C.	Stormwater Ordinance Input	There were no stormwater ordinance changes due to TDEC extension that was granted.
SWMP 1.D.	Develop and Implement at Least One Educational Effort Focused Toward Gaining Public Involvement During Permit Cycle	09/16/2015 - Public meeting regarding MS4 permit Year 5 annual report
PIE Plan I.B.	Website Directions for Residential Property Sewer System Grinder Pump Maintenance	The City’s website includes information on sewer grinder pump maintenance to help prevent sewer problems.
PIE Plan I.C., VI.B.	Brochure Distribution	<p>The City distributed stormwater brochures at these events:</p> <ul style="list-style-type: none"> <li>• Bike Safety (Fall 2015) - 25 brochures distributed</li> <li>• Stormwater pollution prevention handouts at pre-land disturbance permit application meetings</li> </ul>
PIE Plan I.E.	“Hot Spot” Landuse Evaluations	<p>Grease managed under Fats Oil &amp; Grease (FOG) program.</p> <p>City dumpsters’ inlet filter regularly cleaned.</p>
PIE Plan I.G	Citizen Survey available via link on City’s website	In 2015, there were 41 responses to the citizen survey that gauged public understanding of stormwater issues in Belle Meade.
PIE Plan II.A.	Maintained Current List of Home Owner Associations and Other Permanent BMP Operators.	Maintaining list per PIE Plan.
PIE Plan II.C.	Contact Permanent BMP Operators Regarding BMP Maintenance	The City received one permanent stormwater BMP inspection report.

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<b>BMP Ref.</b>	<b>Activity Name</b>	<b>Summary Information</b>
	Activities	
PIE Plan III.A., VII.A.	Contractor Education in Pre-Permit Meetings During Land Disturbance Permit Process	2015 – 2016 – Contractor education was conducted on an ongoing basis during the pre-permit meetings. The City reviewed plans for 12 sites where a Land Disturbance Permit was issued. The City also conducted 12 pre-permit application meetings.
PIE Plan IV.B.	Develop a Listing of Businesses Doing Business with the City with Professional Chemical Applicators (i.e., Pest Control, Landscaping Companies, etc.).	This listing is being maintained.
PIE Plan V.B.	Develop a Listing of Businesses Doing Business with the City with Professional Chemical Applicators Who Work With Oil and Other Automotive Fluids (i.e., Automotive Service and Repair, Car Rental Businesses, etc.)	This listing is being maintained.
PIE Plan VI.A., VIII.A.	Use Employee Staff meetings for Municipal Employee Education Regarding Identifying and Reporting Illicit Connections/Discharges, Sanitary Sewer Seepage, Spills, Etc.	City staff in process of viewing a stormwater management video for employee education as their schedules allow. Majority of employees have already seen it. Each employee who needs to watch the video will have seen it by September 30, 2016.

**Section 8.B. Status of Implementation of Code, Ordinance and/or Policy Revisions  
Associated with Permanent Stormwater Management**

The plan set forth in the NOI is being followed except that the passage of the revised stormwater ordinance was delayed per the TDEC extension that was granted. A revised stormwater ordinance was passed in February 2016. The Water Quality Scorecard was completed in Year 2 of the permit, and was submitted with the Year 2 annual report.



**Section 13.G. Organizational Chart**

