



## **FINAL & Quarter Report 2020**

### **Save Maumee Riparian Buffer Initiative (RBI) III**

**Reporting Period:** July 1, 2020 through December 31, 2020

**INCLUDES INFORMATION FROM:** January 1, 2019 THROUGH December 31, 2020

**Report Submitted:** January 25, 2021

#### **Recipient Contact & Cooperator:**

Save Maumee Grassroots Organization, Inc.

1901 Niagara Dr.

Fort Wayne, IN 46805-3522

Phone: 260-417-2500

*Prepared by:* **Riparian Buffer Initiative Manager, Abigail King**

#### **General Information of Riparian Buffer Initiative III & SIGNAGE:**

<https://savemaumee.org/rbiii>

*Specific information for 3 site locations:*

#### **BULLERMAN DITCH (HUC12 041000050103)**

Rose Ave. Project October 2020, Bullerman Ditch: <https://savemaumee.org/earth-days-2020/>

#### **TRIER DITCH (HUC12 041000050101)**

Meyer Rd. Project April 2019: <https://savemaumee.org/paul-trier-ditch/>

Ellenwood Project October 2019: [https://savemaumee.org/end-of-ellenwood-drive\\_new-haven/](https://savemaumee.org/end-of-ellenwood-drive_new-haven/)

All projects are successful and completed within parameters of budget and expectations.

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## **TOTAL EXPECTED RESULTS**

A total of 3 riparian buffer location sites equating to >3,600 linear feet, by at least 25' wide and maximum of 64' wide installing / yielding over 2.2 acres of buffer and removal of invasive species, while keeping native established growth in-tact. These are the expected results of those efforts:

- 2.2 acres of healthy addition of buffers increased
- >3 acres of total invasive species acreage removed
- 1,634 native trees installed trees, median average of 5 gallon size pots (75% trees / 25% shrubs)
- 82,010 gallons of stormwater runoff reduced/year
- 10,450.5 tons of sediment reduced/year
- 33.6 pounds of phosphorus reduced/year
- 56.6 pounds of nitrogen reduced/year

## **Metrics of 2 Riparian Buffer Initiative Projects 2019 (Year 1 of 2)**

- Total trees added: 1,084
- Total linear feet along stream: 2,250LF
- Total acreage of invasive species removed: >1.7 acres (74,250 square feet) approx.
- Gallons of runoff reduced: 63,956 gallons (1,084 trees x 59 gallons / tree)
- RBI volunteer hours alone for 2019: 1,883.05 hours logged by over 250 people

**April 2019) “Meyer Road Site” Full Specification Information & Maps:**

<https://savemaumee.org/paul-trier-ditch/>

**October 2019) “Ellenwood Site” Full Specification Information & Maps:**

[https://savemaumee.org/end-of-ellenwood-drive\\_new-haven/](https://savemaumee.org/end-of-ellenwood-drive_new-haven/)

## **Metrics of final Riparian Buffer Initiative Project 2020 (Year 2 of 2)**

- Total trees added: 550
- Total linear feet along stream: 1,400 LF X 64' wide
- Total acreage of invasive species removed: >1.65 acres (89,600 square feet) approx.
- Gallons of runoff reduced: 32,450 gallons (550 trees x 59 gallons / tree)
- RBI volunteer hours alone for 2020: 1,541.25 hours logged by 160 people

**October 2020) “Rose Avenue Site” Full Specification Information & Maps:**

<https://savemaumee.org/earth-days-2020/>

## **Final Update & Work Performance**

### **July 1, 2020 through December 1, 2020**

**Trier Ditch (HUC12) maintenance along 2 sites planted in 2019 (Ellenwood & Meyer)**  
**Bullerman Ditch (HUC12) legalities/preparation/tree planting (Rose Ave.)**

#### **Site 1 ~Maintenance completed on “Meyer Road Site” (completed planting April 2019)**

- Trees are doing well, less than 10% loss
- Area mowed in April and October 2020
- Broadleaf herbicide application through Crowe Forest Management June and October 2020
- Private property site which there is no public traffic to erect signage, but signage available on website.
- This report corresponds with SF425 and SF270 and detailed invoice:  
USDA INVOICE 10

#### **Site 2 ~Maintenance completed on “Ellenwood Site” (completed planting Oct. 2019)**

- Trees are in good condition currently. > 25 trees (of 482) are doing poorly due to being planted incorrectly, soil type or animal browse.
- Area mowed in April and October 2020
- Broadleaf herbicide application through Crowe Forest Management June and October 2020
- Private property site which there is no public traffic to erect signage, but signage available on website.
- This report corresponds with SF425 and SF270 and detailed invoice:  
USDA INVOICE 11

#### **Site 3 (of 3) ~Rose Ave. aka. M&M Landfill Legalities/Preparation/Tree Planting (completed planting October 2020)**

- Legalities of City of New Haven Floodplain Ordinance through the City of New Haven Indiana Planning Dept., the IDNR and IDEM.
- Invasive species removal, dead large trees dropped and pathway created to the tree planting area
- All work within <6% any one budget category. Personnel and Contractual help was heavier due to volunteer concern regarding safety of working with people during a pandemic
- Due to COVID-19, we were unable to plant trees at our scheduled April public event, therefore 550 trees were planted in October 2020 completing this grant
- Site sign was erected on this land January 21, 2021
- This report corresponds with SF425 and SF270 and detailed invoices: USDA INVOICE #12 & #14

\* volunteers are the success story of Save Maumee projects

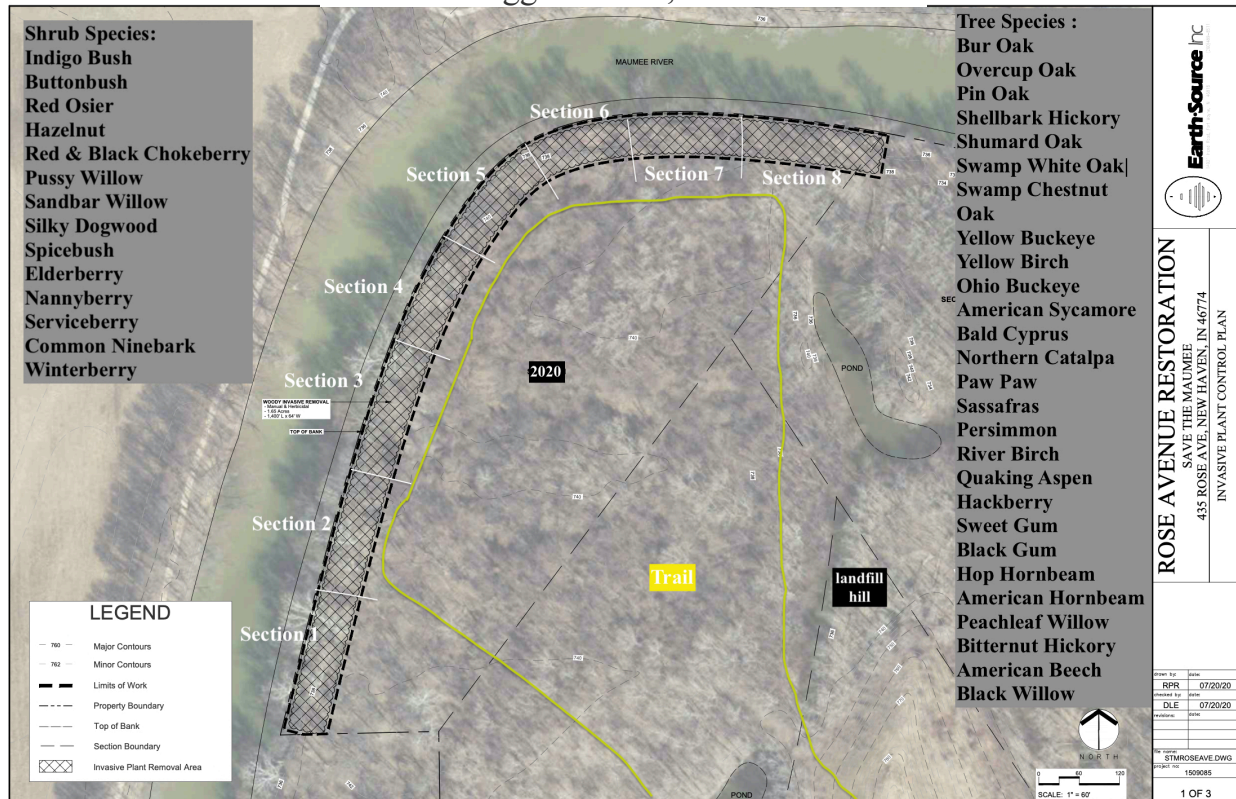
\* all receipts and volunteer signature sheets are available



### RBI III FINAL REPORT 01/01/2019 through 12/31/2020

<b>RIPARIAN BUFFER INITIATIVE III</b>	
Total Federal Funds Available	\$99,357.90
Total Required Other Resources nonfederal match:	\$43,032.40
Required Projected Project Total Value	\$142,390.30
Actual Other Resources nonfederal match:	\$86,058.97
OVERALL TOTAL VALUE OF COMPLETED PROJECTS 2019-2020	\$185,416.87
<b>2019 TOTAL VALUE OF PROJECTS Jan-Dec</b> (year 1 of 2)	\$99,827.45
<b>2020 TOTAL VALUE OF PROJECTS Jan-Dec.</b> (year 2 of 2)	\$85,589.42
<b>FEDERAL REIMBURSEMENT: 2019 TOTAL</b>	\$53,165.08
<b>FEDERAL REIMBURSEMENT: 2020 TOTAL</b>	\$46,192.82
<b>Other Resources NONFEDERAL match 2019</b>	\$46,662.37
<b>Other Resources NONFEDERAL match 2020</b>	\$39,396.60
<i>Itemized</i>	
CORRESPONDS WITH: Itemized breakdown: Save Maumee USDA Invoice #10, #11 #12 and #14 and four related SF-425 and SF-270	

**Specifics of Rose Ave Site**  
**October 18, 2020 Completed planting over 3 days**  
**Bullerman Ditch Subwatershed (HUC12 041000050102)**  
**Includes addition of 550 trees (25% shrubs & 75% trees)**  
**Yielding 1,400 linear feet by 64 feet wide of riparian buffer & invasive**  
**removal >1.65 acres (89,600 square feet) approx.**  
**2,000lbs of historic rubbish removed**  
 Physical Address: 501 Rose Ave. a.k.a. 435 Rose Ave. New Haven, IN 46774  
 Estimated gallons of runoff reduced = 35,513 gallons/year  
 Volunteers logged over 1,355 hours in 2020



This site is along the Maumee River, within the Bullerman Ditch Subwatershed. The land surrounding this 58 acre plat, spans over 7 Allen County Indiana parcels. Historically known as M&M Landfill Inc., Construction/Demolition: IDEM SW Site Permit #FP 02-10. There was a signed 3-year agreement with owner, Gerald Martin. The tree plantings are no closer than 5' from top of bank outward along the main stem of the Maumee River, upon legal specification maps prepared in July 2020, by Dan Ernst at Earth Source.

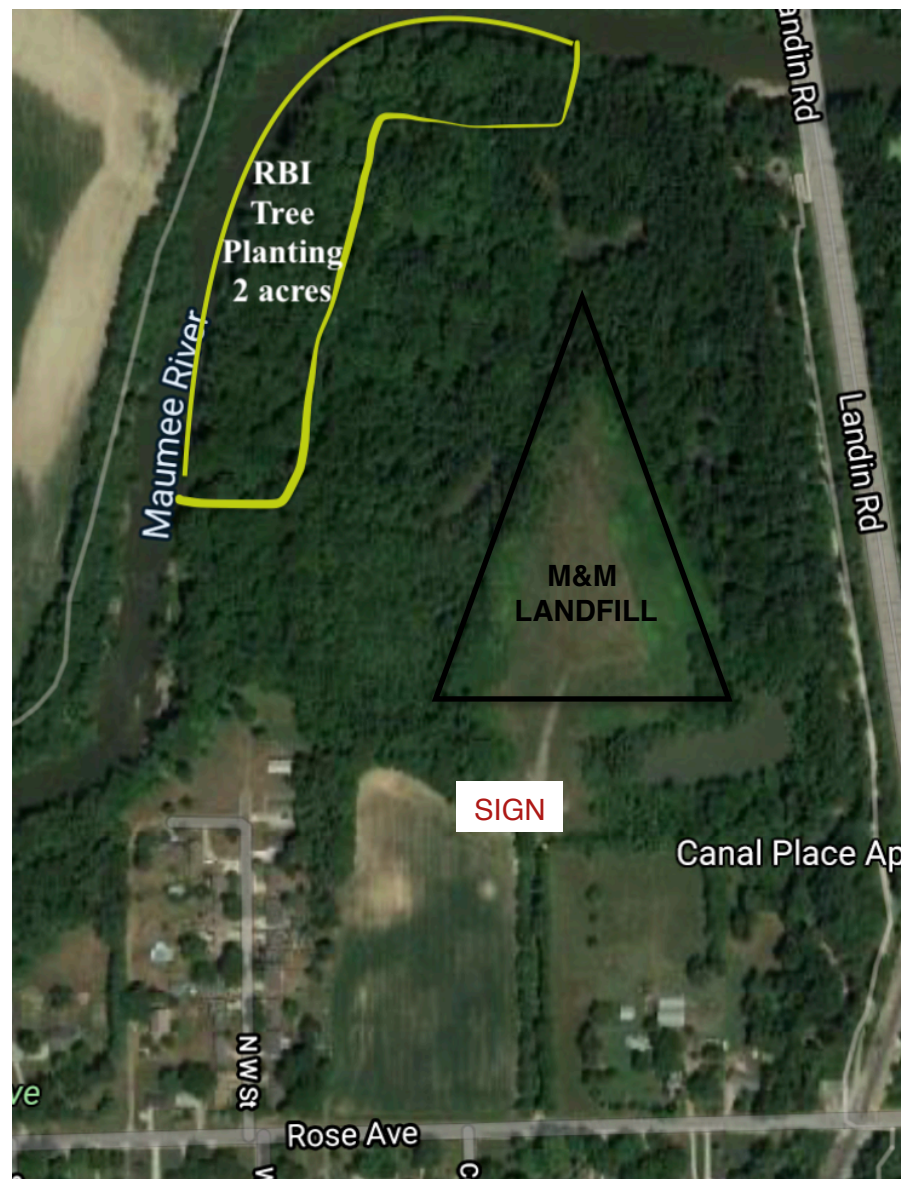
Planting of 550 trees (42 species) took place at the 3-day public event October 16, 17, 18, 2020. Project received a Floodplain Development Permit on June 22, 2020 by the New Haven Indiana Planning Office.

Due to the location of the tree planting, we needed to do an extensive approval process through IDEM and the DNR. Approximately 8.16 acres is a freshwater forested wetland, and all of the planting area lies within a floodway. 11 (of the 57 acres) is a capped landfill hill, and the reason that IDEM is involved. \*see page 18 of this report for approvals sought and information outside of the scope of this grant.

Volunteers removed approximately 2,000lbs of historic trash from this site in 2020. Overgrowth was dense. Sign was placed in the most visible place near the parking lot, on the way to the planting. \*See signage on the last page of this report.

This landfill property of 58 acres was donated to Save Maumee Grassroots Organization Inc. on December 21, 2020 by M&M Landfill Inc., Jerry Martin. No previous relationship was present with this person. Save Maumee contacted him in 2019 from County Survey aerial maps, asking about his ownership of the Ellenwood site planting location.

The project was exemplary for restoration and community involvement, reclaiming land to aid in water quality health, and will be protected forever.





## Specifics of Meyer Road Site Site Completed June 30, 2019

**Includes addition of 602 bare root trees and 2 large Sycamore (7 species),  
1,050 linear feet by 25 feet wide of invasive removal (26,250 square feet)  
& large trash removal of historic rubbish**

Physical Address: behind Gunsaulus Industrial Services 4325 Meyer Rd. Fort Wayne, IN 46806

90 Volunteers logged 813.8 hours at this site in 2019  
Estimated gallons of runoff reduced = 35,513 gallons/year



The entire project area for Upper Paul-Trier Ditch is over 1,055 linear feet (requirement of 1,000 linear feet) by at least 20 feet wide. Majority of the site is over 30 feet wide, which added approximately, 21,100 square feet of riparian buffer, yielding .05 acre of additional forested corridor along the Trier Ditch. There appears to be a historic reservoir, underground storage tank, on site that has been capped. This historical zoned “industrial” area had a strip next to the stream that retained 20 years of growth. Asian bush honeysuckle, callery pear and other invasive species were removed previous to tree plantings. Our project selectively retained many of the Cottonwood trees, Box Elder, Dogwood, Willows (*Salix exigua* *exigua* or *S. exigua* *interior*), and Sumac (*Rhus typhina*) at this “Industrial Zoned” site.

Volunteers removed over 2,000lbs (>1 ton) of historic trash from the site owned by Jerome Henry (Hartzell Realty). This private property has a long-term rental agreement with Gunsaulus Industrial Services who currently runs a business adjacent to this ditch.

Save Maumee Riparian Buffer Initiative ordered & installed 602 bare root trees (requirement of 380 trees) in April and May of 2019, with invasive removal spanning April through June 2019. Plantings were (on average) 1 every 6 feet or so. These trees are estimated to reduce stormwater, by 35,518 gallons per year, to the adjacent stream. Our calculations of stormwater retention comes from the Environmental Protection Agency (EPA) using current standard of 59 gallons/tree/year for the amount of average runoff reduced per tree. [https:// www.epa.gov/soakuptherain/soak-rain-trees-help-reduce-runoff](https://www.epa.gov/soakuptherain/soak-rain-trees-help-reduce-runoff).

Previous to the plantings, the tree line was almost non-existent, with approximately 60 native full-grown trees on the entire lot. The site is zoned “heavy industrial” and included gravel and fill dirt. This site needed smaller trees (bare root) due to the industrial site having so much asphalt and gravel. Since 1-5 gallon potted trees were not used, we predicted a higher fatality rate of the smaller bare root trees, so we intentionally increased the odds of retaining the total sum planted through adding quantity. Donna Foster approved the change from potted trees to bare root trees in April due to timing of award letter and industrial soil with extensive gravel present.

Trees at all sites will continue to receive maintenance until at least 2023.



## Ellenwood Site

Completed October 30, 2019

Includes addition of 482 Trees (28 species) along 1,200 linear feet by 40 feet wide  
(approx 1.25 acres) of invasive removal

Location: South of Ellenwood Drive, West of Meyer Rd Fort Wayne, IN 46806

95 Volunteers logged 1,069.25 hours at this site in 2019

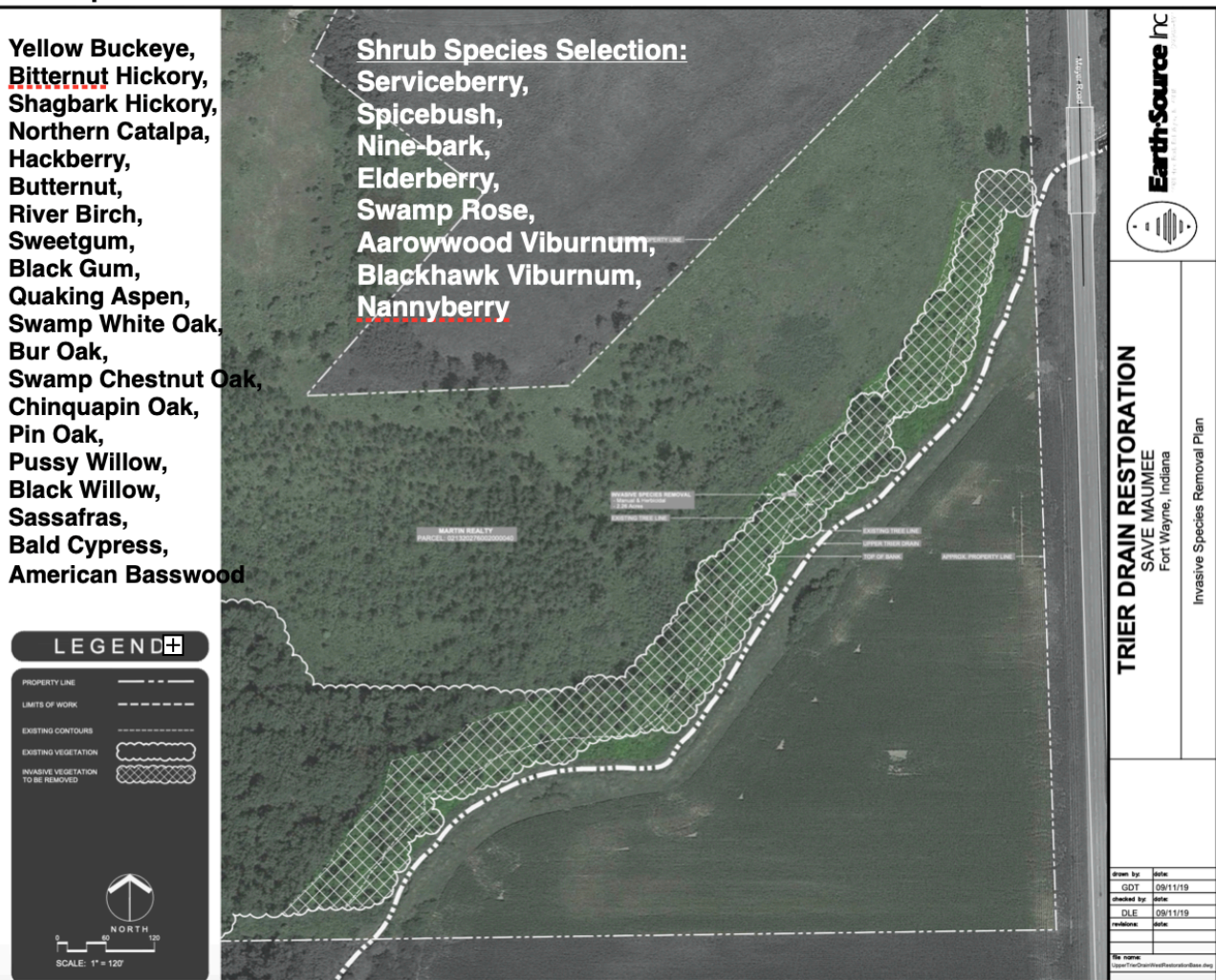
Estimated gallons of runoff reduced = 35,513 gallons/year average

### Tree Species Selection:

Yellow Buckeye,  
Bitternut Hickory,  
Shagbark Hickory,  
Northern Catalpa,  
Hackberry,  
Butternut,  
River Birch,  
Sweetgum,  
Black Gum,  
Quaking Aspen,  
Swamp White Oak,  
Bur Oak,  
Swamp Chestnut Oak,  
Chinquapin Oak,  
Pin Oak,  
Pussy Willow,  
Black Willow,  
Sassafras,  
Bald Cypress,  
American Basswood

### Shrub Species Selection:

Serviceberry,  
Spicebush,  
Nine-bark,  
Elderberry,  
Swamp Rose,  
Arrowwood Viburnum,  
Blackhawk Viburnum,  
Nannyberry



Selective removal allowed project site to retain many of the Cottonwood trees, Box Elder, Dogwood, Willows (*Salix exigua exigua* or *S. exigua interior*), Sumac (*Rhus typhina*)

Save Maumee Riparian Buffer Initiative ordered & installed all 482 trees at Save Maumee's 2-Day Planting on October 25 & 26, 2019 (requirement of 460 trees). Twenty-two additional trees were purchased and planted due to perfect seasonal weather and space. The entire project area completed for this site along the Upper Trier Ditch is 1,200 linear feet of riparian buffer by a width of about 45 feet throughout. This area now yielding >1.25 acres of added native forest along one of the most critical areas of the Upper Maumee River's sub-watersheds.

The location is adjacent to zoned "heavy industrial" complexes, but the soils were healthy enough for large trees to be installed. The 482 trees were planted (on average) 1 tree every 7-10 feet or so. Larger diameter of trees were selected, available and within budget.

The *Ellenwood* site is private property and does not have an address to designate this location. Signage is unnecessary for this site due to secluded location, so it is present on our website. This site lies south of Ellenwood Drive and west of Meyer Road and designation is Zoned Industrial / Floodplain (private property owned by Gerald Martin (Martin Realty)). It is in-between the City of Fort Wayne / City of New Haven municipality boundaries in Indiana, on the Upper Trier Ditch. The *Ellenwood* site lies just upstream and southwest of the *Meyer Rd.* site. The excessive, undisturbed growth added to project cost. *Ellenwood's* ditch bank is south of the historical zoned "industrial" area and retained at least 30 years of undisturbed growth. Our project selectively retained many of the Cottonwood, Box Elder, Dogwood, Willows (*Salix exigua exigua* or *S. exigua interior*), Pin Oak (*Quercus palustris*), Quaking Aspen (*Populus tremuloides*), Eastern Red Cedar (*Juniperus Virginiana*) and Smooth Sumac (*Rhus typhina*) along this "abandoned" ditch.

It took 7 weeks for volunteers and contracted workers to clear the invasive shrubs along the entire ditch. All invasives are stump treated with glyphosate brand AquaNeat the same day. Each day, after the clearing another 70 feet (or so), native seed blend is spread in bare areas and along the slope of the ditch-bank. All bare areas are always seeded with a native seed blend after bare soil is exposed due to invasive removal 1) at each days end, after the invasive species were cleared, 2) after the mulch came and trees placed.

## PARTNERSHIPS & RECOGNITION

We continue to work with easements and floodplains regulated by local and regional ordinances and agencies, to follow guidelines stated by the Indiana Drainage Handbook. According to Indiana Drainage Handbook and NRCS, trees should remain on at least one side of ditches as a riparian buffer, ideally a 75' buffer, while the other side can be designated to ditch maintenance for ease of access. Protections of wetlands and riparian areas should remain in place and our work has shown how important it is that communication occurs between County Surveyors Offices and State & Federal agencies to aid in protections of these areas.

2019 partners providing volunteers and advertising include Carriage House Mental Health Services, Manchester University and foreign exchange students from their Pharmacology Dept, Purdue University Fort Wayne (PFW) Allen County Corrections, Whitley County Corrections, Big Brothers/Big Sisters, The Nature Conservancy, Northeast Indiana Chapter Sierra Club, and a few private companies have been involved.

New Haven Parks Department and their staff has been very supportive of our work and have been partners since 2017, aiding with community outreach and volunteers as well as land granted permission for installation of trees along any of the Parks land and/or easements. The Maumee Watershed Alliance, (formerly Tri-State Watershed Alliance) and Upper Maumee Watershed Partnership share our project advertising to their entire volunteer list. Heartland Communities Inc. has provide community outreach and advertisement of the organization and events. Many private land owners along Trier and Bullerman Ditch, and adjacent to the sites are highly supportive. Seeds planted at all 3 locations were selectively harvested by Save Maumee volunteers from Eagle Marsh, Little River Wetlands Project, who are also in support of our work.

Technical assistance has been provided through selection and consult on trees and plants by; Woody Warehouse arborists and Plant Happiness, Allen County Purdue Extension Office. Management (IDEM), Indiana Dept. of Natural Resources (IDNR) and Army Corps of Engineers (ACE) had been notified about Rose Ave. property, and are supportive of our project scope at this location. Save Maumee volunteers are the success story of the Riparian Buffer Initiative and this work could not have been completed without them.

In 2019, at the Meyer Rd. site, Fort Wayne Mayor, Tom Henry made a proclamation to kick off our event and promote Earth Week. The April 2019 tree planting then kicked off Earth Week! This expansion allowed unification & engagement of our local public, private and grassroots sectors. Together we shared the message of environmental awareness with Northeast Indiana.

To provide information to all people and keeping with our Civil Rights agreements, signage was placed and translated into Burmese because there was a need for the farmers who are working adjacent

FIND SIGNAGE

HERE: <https://savemaumee.org/rbiiii/>



## **MEDIA COVERAGE**

**Earth Day becomes Earth Week in Fort Wayne. WFFT TV NEWS:** <https://www.wfft.com/content/news/Earth-Day-extends-to-a-week-long--508918811.html?fbclid=IwAR3rvdQjENElmNNgWHky-xpN11lgA2uxZquTSWCaxldu7ZFuSuyRdt8WBiM>

**Save Maumee volunteers plant trees: Journal Gazette. FW Local Metro** October 26, 2019, Photograph, Mike Moore. (date accessed 11/07/2019) [https://www.journalgazette.net/news/local/20191026/save-maumee-volunteers-plant-trees?fbclid=IwAR3iaOAALqCNYe3Wn\\_7S6xl2KVokMEKaDR4\\_85Hvj5XKF1c1soOy\\_Ixkrg](https://www.journalgazette.net/news/local/20191026/save-maumee-volunteers-plant-trees?fbclid=IwAR3iaOAALqCNYe3Wn_7S6xl2KVokMEKaDR4_85Hvj5XKF1c1soOy_Ixkrg)

**Public Invited to Help Plant Native Trees Oct. 25-26: KPC News by Emeline Rodenas for Indiana Fort Wayne Newspapers.** October 23, 2019 (accessed 11/07/2019) [https://www.kpcnews.com/article\\_f0eea4f2-50bd-5d9c-a4fe-0991cb59ecd4.html?fbclid=IwAR08g1RyPMH8uLlMOLouFDZ759fw578bgC\\_qsCGiHnH\\_nTrbb8imgKVqyfc](https://www.kpcnews.com/article_f0eea4f2-50bd-5d9c-a4fe-0991cb59ecd4.html?fbclid=IwAR08g1RyPMH8uLlMOLouFDZ759fw578bgC_qsCGiHnH_nTrbb8imgKVqyfc)

**“ Save Maumee Grassroots Organization, the local environmental group. Its work this year included planting 480 trees along water-quality ditches and removing invasive species from the banks of ditches draining into the Maumee, which flows into Lake Erie.”** November 28, 2019, **Journal Gazette Opinion.** (accessed December 20, 2019) <https://www.journalgazette.net/opinion/20191128/we-are-thankful-for194-?fbclid=IwAR3CJ5qNwci7TqVcEfoQFM9je2vAjTpoiHksnsVjVPv0VXeVrPatxs5hacw>

**“Volunteers planting Trees along the Maumee.”** October 18, 2020 written by **Jamie Duffy, Journal Gazette** (accessed January 10, 2021) <https://www.journalgazette.net/news/local/20201018/volunteers-planting-trees-along-maumee>

# TREE SELECTION OF 3 SITE LOCATIONS

Save Maumee RBIII SITE TREES: 2019 through 2020	75% TREES & 25% SHRUBS	Trier Ditch planted April 2019 Bare root trees due to soils at industrial site	Trier Ditch Ellenwood Site planted October 2019	Bullerman Ditch Planted October 2020
Common Name	Scientific Description	Meyer Rd 600 trees	Ellenwood Dr. 482 trees	Rose Ave. (M&M Landfill 550 trees
American Cranberry Bush	<i>Viburnum trilobum</i>		1 large located on site (section 4)	
Arrowwood Viburnum	<i>Viburnum dentatum</i>		20 (3 gallon)	
Aspen, Quaking	<i>Populus tremuloides</i>		30 (3 gallon)	
Black Cherry	<i>Prunus serotina</i>	60		
Black Gum	<i>Nyssa sylvatica</i>		10 (7 gallon)	
Beech, American	<i>Fagus grandifolia</i>			10 (3 gallon) 5 (5 gallon)
Birch, Yellow	<i>Betula alleghaniensis</i>			20 (3 gallon)
Buckeye, Ohio	<i>Aesculus glabra</i>		15 (3 gallon)	1 (15 gallon)
Buckeye, Yellow	<i>Aesculus flava</i>		15 (3 gallon)	3 (5 gallon)
Butternut	<i>Juglans cinerea</i>		25 (3 gallon)	
Buttonbush	<i>Cephalanthus occidentalis</i>			5 (1 gallon)
Cedar, Northern White	<i>Thuja occidentalis</i>			10 (3 gallon)
Chokeberry, Black	<i>Aronia melanocarpa</i>			10 (3 gallon)
Chokeberry, Red	<i>Aronia arbutifolia</i>			5 (3 gallon)
Cyprus, Bald	<i>Taxodium distichum</i>		5 (7 gallon)	15 (3 gallon)
Dogwood, Pagoda	<i>Cornus alternifolia</i>			10 (3 gallon)
Dogwood, Silky	<i>Cornus amomum</i>			10 (1 gallon)
Elderberry, American Black	<i>Sambucus canadensis</i>		20 (3 gallon)	10 (3 gallon)
Elm, American	<i>Ulmus americana</i>			15 (3 gallon)
Hackberry, Common	<i>Celtis occidentalis</i>		15 (3 gallon)	
Hazelnut	<i>Corylus americana</i>			15 (3 gallon)
Hickory, Bitternut	<i>Cara cordiformis</i>		15 (5 gallon)	13 (3 gallon)
Hickory, Shagbark	<i>Carya ovata</i>	10	10 (7 gallon)	
Hickory, Shellbark	<i>Carya laciniosa</i>			20 (3 gallon)
Hornbeam, American	<i>Carpinus caroliniana</i>			30 (3 gallon)
Hornbeam, Hop	<i>Ostrya virginiana</i>			10 (3 gallon)
Hydrangea, Smooth	<i>Hydrangea arborescens</i>			10 (1 gallon)
Indiana Banana/ Paw Paw	<i>Asimina trilby</i>			65 (3 gallon)
Indigo Bush	<i>Amorpha fruticosa</i>			5 (3 gallon)
Nannyberry	<i>Viburnum lentago</i>		20 (3 gallon)	
Ninebark, Common	<i>Physocarpus opulifolius</i>		10 (3 gallon)	

# TREE SELECTION (CONTINUED)

Northern Catalpa	<i>Catalpa speciosa</i>		7 (7 gallon)	
Oak, Burr	<i>Quercus macrocarpa</i>	110	40 (5 gallon)	
Oak, Chinquapin	<i>Quercus muehlenbergii</i>		6 (5 gallon)	
Oak, Overcup	<i>Quercus lyrata</i>			5 (15 gallon)
Oak, Pin	<i>Quercus palustris</i>		30 (3 gallon)	10 (7 gallon)
Oak, Shumard	<i>Quercus shumardii</i>			10 (5 gallon)
Oak, Swamp Chestnut	<i>Quercus michauxii</i>	100	10 (7 gallon)	5 (7 gallon)
Oak, Swamp White	<i>Quercus bicolor</i>	100	20 (7 gallon)	12 (7 gallon)
Persimmon	<i>Diospyros virginiana</i>			10 (3 gallon)
Redbud	<i>Cercis canadensis</i>			10 (3 gallon)
Red Osier	<i>Cornus Sericea</i>			20 (3 gallon)
River Birch	<i>Betula nigra</i>		15 (7 gallon)	10 (5 gallon clump)
Sassafras	<i>Sassafras album</i>		2 (18 KB) both looked damaged	6 (3 gallon)
Serviceberry, Allegheny	<i>Amelanchier laevis</i>		15 (3 gallon)	25 (3 gallon)
Spicebush	<i>Lindera benzoin</i>		25 (3 gallon)	45 (3 gallon)
Sycamore, American	<i>Platanus occidentalis</i>	200 +2 large	15 (5 gallon)	7 (5 gallon)
Swamp Rose	<i>Rosa Palustris</i>		15 (3 gallon)	
Sweetgum	<i>Liquidamber styraciflua</i>		15 (7 gallon)	15 (3 gallon)
Tulip Poplar	<i>Liriodendron tulipifera</i>	10		
Viburnum, Blackhaw	<i>Viburnum prunifolium</i>		5 (7 gallon)	
Walnut, Black	<i>Juglans nigra</i>	10		50 pounds of walnuts (nuts/hulls)
Winterberry	<i>Llex verticillata</i>			25 (3 gallon)
Willow, Black	<i>Salix nigra</i>		32 (3 gallon)	10 (3 gallon)
Willow, Peachleaf	<i>Salix amygdaloides</i>			10 (3 gallon)
Willow, Pussy	<i>Salix discolor</i>		20 (3 gallon)	10 (3 gallon)
Willow, Sandbar	<i>Salix interior</i>			10 (3 gallon)
<b>TOTAL TREES PLANTED</b>		600 bare root & 2 large sycamore (10 years old)	482 trees installed	550 trees installed
<b>Required by grant</b>		380	460	550

## Planted Spring/Fall 2020

### Grasses, Sedges, Rushes & Forbs

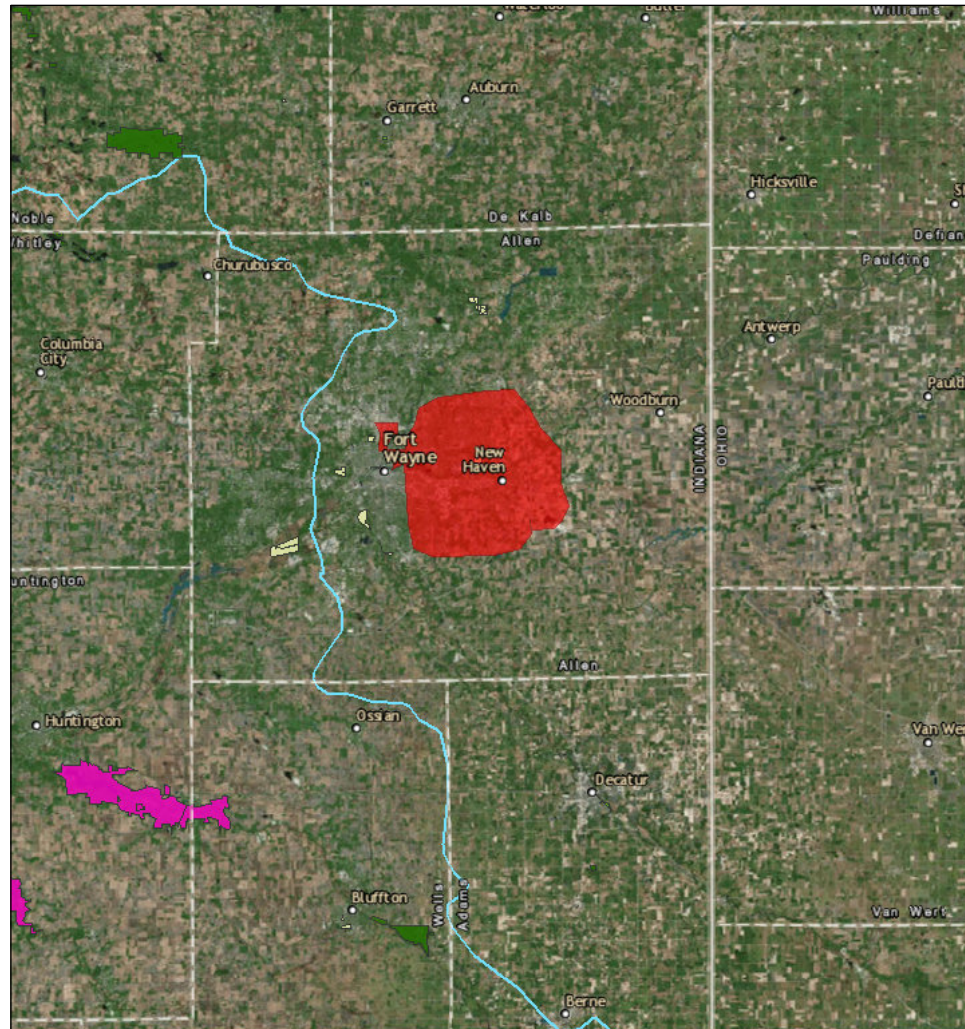
BLEND: approx. 2.6 acres of coverage: Andropogon gerardi Big Bluestem, Carex bicknellii Bicknell's Sedge, Elymus canadensis Canada Wild Rye, Panicum virgatum Swtich Grass, Schizachyrium scoparium Little Bluestem, Sorghastrum nutans, Indian Grass, Sporobolus heterolepis Prairie Dropseed, Scripus cyperinus Wool Grass Asclepias tuberosa Butterfly Milkweed, Aster laevis Smooth Blue Aster, Aster novae angliae New England Aster, Baptisia leucantha White Wild Indigo, Coreopsis lanceolata Sand Coreopsis, Coreopsis tripteris Tall Coreopsis, Echinacea pallida Pale Purple Coneflower, Echinacea purpurea Purple Coneflower, Eryngium yuccifolium Rattlesnake Master, Gentiana andrewsii Fringe-top Bottle Gentian, Helianthus mollis Downy Sunflower, Heliopsis helianthoides False Sunflower, Liatris scariosa nieuwlandii Savanna Blazingstar, Liatris spicata, Spiked Gayfeather, Monarda fistulosa Wild Bergamot, Parthenium integrifolium Wild Quinine, Penstemon digitalis Foxglove Beard Tongue, Pycnanthemum virginianum Mountain Mint, Ratibida pinnata Yellow Coneflower, Rudbeckia hirta Black-eyed Susan, Senna hebecarpa Wild Senna, Silphium integrifolium Rosin Weed, Silphium laciniatum Compass Plant, Silphium terebinthinaceum Prairie Dock, Solidago nemoralis Gray Goldenrod, Solidago rigida Stiff Goldenrod, Tradescantia ohiensis Ohio Spiderwort, Verbena stricta Hoary Vervain, Vernonia gigantea Tall Ironweed, Veronicastrum virginicum Culver's Root, Zizia aurea, Panax ginseng, Agastache scrophulariifolia Purple Giant Hyssop

**ACRES: 2.2600**

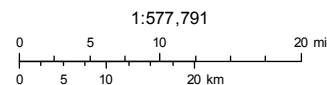
Weight/mix	Weight/acre	Species		Seeds/LB	Seeds/Acre	% Seed	Wetland Indicator Status*
	Cover Crop						
18.0800	8.0000 LB	Avena sativa	Seed Oat	13,000	104,000	100.00%	UPL
	Totals						
18.0800	8.0000 LB				104,000	100.00%	
	Grasses/Sedges/Rushes						
0.0355	0.0157 LB	Carex crinita	Fringed Sedge	2,040,449	32,035	9.53%	OBL
0.0707	0.0313 LB	Carex frankii	Frank's Sedge	302,000	9,453	2.81%	OBL
0.0707	0.0313 LB	Carex granularis	Meadow Sedge	299,000	9,359	2.78%	FACW
0.0355	0.0157 LB	Carex grayi	Gray's Sedge	19,000	298	0.09%	FACW
0.0707	0.0313 LB	Carex lupulina	Hop Sedge	192,000	6,010	1.79%	OBL
0.0707	0.0313 LB	Carex lurida	Shallow Sedge	211,114	6,608	1.97%	OBL
0.0707	0.0313 LB	Carex muskingumensis	Muskingum Sedge	997,802	31,231	9.29%	OBL
0.0355	0.0157 LB	Carex normalis	Larger Straw Sedge	1,854,000	29,108	8.66%	FACW
0.0355	0.0157 LB	Carex shortiana	Short's Sedge	548,308	8,608	2.56%	FACW
0.0707	0.0313 LB	Cinna arundinacea	Stout Wood Reedgrass	907,000	28,389	8.45%	FACW
4.5200	2.0000 LB	Elymus virginicus	Virginia Wild Rye	68,000	136,000	40.47%	FACW
0.0355	0.0157 LB	Glyceria striata	Fowl Manna Grass	2,481,000	38,952	11.59%	OBL
	Totals						
5.1218	2.2663 LB				336,050	100.00%	
	Forbs						
0.0707	0.0313 LB	Doellingeria umbellata	Flat-Top White Aster	604,125	18,909	2.79%	FACW
0.0707	0.0313 LB	Eutrochium purpureum	Purple Joe Pye Weed	732,000	22,912	3.38%	FAC
0.0707	0.0313 LB	Helenium autumnale	Common Sneezeweed	2,174,000	68,046	10.03%	FACW
0.2825	0.1250 LB	Iris virginica	Blue Flag Iris	17,000	2,125	0.31%	OBL
0.0176	0.0078 LB	Lobelia cardinalis	Cardinal Flower	6,757,000	52,705	7.77%	OBL
0.0179	0.0079 LB	Lobelia siphilitica	Great Blue Lobelia	8,197,000	64,756	9.55%	OBL
0.0355	0.0157 LB	Lycopus americanus	American Bugleweed	2,080,000	32,718	4.82%	OBL
0.0179	0.0079 LB	Mimulus ringens	Alleghany Monkey Flower	27,472,000	217,029	32.00%	OBL
0.0707	0.0313 LB	Rudbeckia laciniata	Cut-Leaf Coneflower	249,000	7,794	1.15%	FACW
0.2119	0.0938 LB	Verbesina alternifolia	Wingstem	144,000	13,500	1.99%	FACW
0.0707	0.0313 LB	Vernonia gigantea	Tall Ironweed	416,000	13,021	1.92%	FAC
0.0355	0.0157 LB	Veronicastrum virginicum	Culver's Root	9,781,000	153,562	22.64%	FAC
0.1413	0.0625 LB	Zizia aurea	Golden Alexander	177,000	11,063	1.63%	FAC
	Totals						
1.1137	0.4928 LB				678,139	100.00%	
	Grand Totals						
24.3155	10.7591 LB				1,118,189		



# Allen County, Indiana - RBI III Project Locations



June 18, 2016



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community  
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Earthstar Geographics | U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov | Esri, HERE, DeLorme |

- \* **Site1 physical address 4325 Meyer Rd. Fort Wayne, IN 46806, behind Gunsallus Industrial Service, east of Meyer Rd. owned by Hartzell Realty, Jerome Henry TRIER DITCH HUC 12**
- \* **Site 2 physical address 4615 Ellenwood Dr. Fort Wayne, IN 46806, South of Ellenwood Dr, west of Meyer Rd., south of Ellenwood Dr., owned by Martin Realty, Gerald Martin TRIER DITCH HUC 12**
- \* **Site 3 physical address 501 Rose Ave., Rose Ave. New Haven, IN 46774, West of Hartzel Road and south of Rose Ave. M&M Landfill was donated to Save Maumee by Gerald Martin on December 21, 2020. 11 of the 58 acres donated is a capped and closed landfill. BULLERMAN DITCH HUC 12**

A personal note,

It is important note that the removal of invasive species removal will continue to add costs to all our projects and remain a problem in all areas. Unwanted growth continues to be the #1 cost and time consuming portion of our land management techniques. Future grant cycles should provide increases in paid services for selective invasive removal and more oversight of volunteers. Teaching others about invasive species is key.

Drainage and Survey Office officials need more accountability when understanding and regulating drainage regarding riparian areas. Communication should be required when Construction Permits are issued in wetlands, floodplains and floodways. The link between healthy riparian areas to help reduce flooding should be implicitly stated by agencies. State and federal laws should be in place to protect riparian areas and wetlands.

For full disclosure purposes, I have included links to two IDEM reports regarding Rose Ave. These details DO NOT fall within the scope of this grant, but I thought was important to share. Please find these reports here:

\* **IDEM 2020 September Update** includes other agency approval notices and groundwater sampling: <https://savemaumee.org/wp-content/uploads/2021/01/IDEM-update-Sept-1-2020-.pdf>

\* **IDEM 2020 December Update** includes detailed maps & landfill pictures: [https://savemaumee.org/wp-content/uploads/2021/01/IDEM-update-2020-December\\_FINAL\\_reduced.pdf](https://savemaumee.org/wp-content/uploads/2021/01/IDEM-update-2020-December_FINAL_reduced.pdf)

Promotion of sanitation and suggesting social distancing and mask-wearing is important. Please continue to guide the general public on how to keep themselves protected. Some, I fear, are missing the message. It is important to note that sanitation education should be included in programs nationally.

Thank you for your time in assessing and funding our project! Save Maumee is very grateful for your support and proud of our accomplishments with your assistance. All the information in this report is accurate to my knowledge. Should you need any more information, please do not hesitate to contact me.

Respectfully submitted by,

Abigail King  
Save Maumee Grassroots Organization Founder  
Save Maumee Riparian Buffer Initiative Manager

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**SIGNAGE INSTALLED 01/21/2021**  
**DETAILS OF SIGN CAN BE FOUND HERE:**  
**[HTTPS://SAVEMAUMEE.ORG/WP-CONTENT/UPLOADS/2021/01/MEDIUM-RIPARIAN-SIGN-III-FINAL-2-SCALED.JPG](https://savemaumee.org/wp-content/uploads/2021/01/MEDIUM-RIPARIAN-SIGN-III-FINAL-2-SCALED.JPG)**

This research was conducted in cooperation with the USDA Forest Service. Grant recipients of The USDA Forest Service and EPA have responsibilities to conduct their programs according to USDA's nondiscrimination policy. Save Maumee, the USDA and the EPA are equal opportunity providers, employers and lenders. Full Civil Rights Disclosure here: <http://savemaumee.org/civil-rights-nondiscriminatory-policy/>

