

# Vilas County 2020 Healthy Lakes Report



**Grant Number:** LPT65920

**Grant Sponsor:** Vilas County Land & Water Conservation

**Were all projects completed as proposed?**

Yes  No

**If no, explain the reasons for the change:** Enter explanation

**Make sure you have completed the following requirements and keep them for your records, 10 years:**

- A signed 10-year contract with each land owner
- Design specifications and location of each best practice

**Optional: Tell us your story. We'd love to hear what worked, what didn't work, unique fish and wildlife observation, and your specific suggestions how we can improve Healthy Lakes & Rivers.**

Vilas County Land & Water Conservation worked with four landowners to install 11 Healthy Lakes best practices through our grant. We are glad to see so much interest!

Charlie (now deceased) and Donna Coventry had recently built their home on Upper Buckatabon Lake in Conover and wanted to manage erosion issues that were developing. A driveway they use for golf cart access to the lake was eroding, and they were concerned that their gutter outlets from their roof were creating too much erosion near the lake. We recommended a 2 broad-based dips in the driveway and a rain garden near the gutter outlets. They partnered with us for grant funds and used a local contractor to install the best practices. Donna is pleased with the project results and is hoping to extend one broad-based dip in 2021 to catch a bit more runoff.

The Plum Lake Golf Club has members that sit on the Lakes Committee for the Town of Plum Lake, and are involved in the town-wide lake management planning effort. One of the implementation items in the lake management plan was for the golf course to consider increasing its shoreland buffer zone – it was golf course turf down to the Plum Lake's shore. In cooperation with the golf course maintenance team, the site was prepped and volunteers installed three 350 sq. ft. native plantings along the shoreline of Plum Lake. Our vision is to continue to work with the Golf Club as the plants grow in, to ensure they have needed support to keep make this into a beautiful photo-worthy site. In a few years when the deer fencing can be removed, they would like to use this area as backdrop in wedding photos for the many couples get married at the Plum Lake Golf Club each year. They it also hope it helps them with their goose problems.

Joe Heitz was concerned that too much sediment was washing down from his lawn area to Ballard Lake during large rain events. While he had deep shoreland buffer, his access area was timber-framed steps and during large rain events he would notice a pile of debris at the edge of his dock. We recommended he create infiltration pits within the frames of the steps to his lake access. Joe did all the work himself

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and did a perfect job! He documented his progress along the way. He no longer notices the pile of debris at the edge of his dock after it rains.

Jake Moelk has worked with the county's cost share program for curbing runoff before, but he wanted some additional attention paid to his driveway. The road and his sloping driveway angled runoff towards the narrow path around his house and in the direction of Boulder Lake. He worked with a contractor to install 2 conveyor belt diversions in his driveway to move the runoff away from reaching the lake.

Jim Naylor was concerned about runoff from his garage. The area just down hill of the garage was showing signs of some erosion, and was roughly 60 feet from Boulder Lake. There are no gutters on his buildings - this is common in our area due to ice and snow often damaging gutter systems. He worked with a contractor to install a rain garden to manage runoff from along the length of the garage roof.

Trout Lake Station was concerned about the runoff from their dorm building. The area downhill of the dorm initially had roughly a 20% slope and headed towards the lake. The staff worked to create a more level area with rock bordered tiers for the rain garden. Native plants were used in the rain garden.

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## **Donna Coventry Trust**

### **☒ Rain Garden: 1**

Dimensions: 200 sq. ft.

Drainage Area Captured: 1,838 sq. ft.

### **☒ Diversion (Transitional or Upland): 2**

Drainage Area Diverted: 1,075 sq. ft.

Drainage Area Captured: Number. If uncertain: Choose an item.

## **Before Pictures**



Photo 1: Aug 9, 2019. Driveway around home had ruts from use and erosion.



Photo 2: Oct 4, 2019. Gutters directed roof runoff and was creating some erosion issues.



Photo 3: Aug 9, 2019. Home is at the 75 ft. setback, so erosion concerns were close to the lake.

## **After Pictures (at least 1)**



Photo 4: Sep 9, 2020. Two broad-based dips were installed and seeded along driveway.



Photo 5: Sep 3, 2020 Rain garden installed near 2 of gutter outlets.



Photo 6: Sep 3, 2020. Rain garden installed.

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## **Plum Lake Golf Club**

### **☒ Native Planting: 3**

#### **Lakeshore Edge**

Surface Area: 1,250 sq. ft.

Length of lakeshore restored: 50 ft.

### **Before Pictures**



Photo 7: Aug 5, 2019. The golf course club house overlooks Plum Lake.

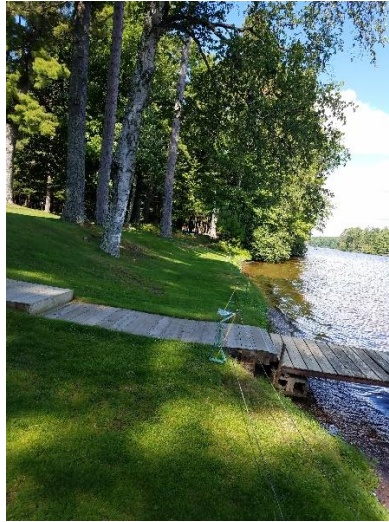


Photo 8: Aug 5, 2019. The golf course's sloped lawn was mowed to the lake's edge.



Photo 9: Aug 5, 2019. This is the area slated for the native planting.

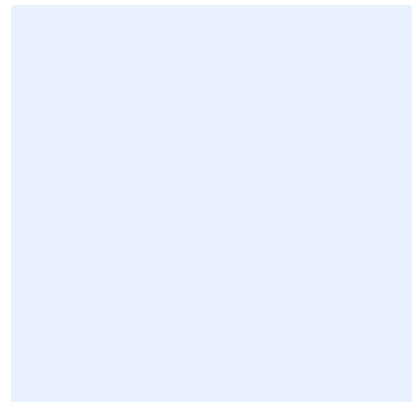
### **During Pictures (optional)**



Photo 10: Oct 6, 2020. The volunteers started installing the plants.



Photo 11: Oct 6, 2020. Lots of seedlings to be planted!



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## **After Pictures (at least 1)**



Photo 12: Oct 19, 2020. 1,250 sq. ft. native plantings fenced and installed.



Photo 13: The shoreland buffer in this area is now 50 ft. long and 25 ft. deep.



Photo 14: Native plants like kinnikinnick were used.

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## Joseph A Heitz MD Trust

### Rock Infiltration: 3

Dimensions: 24 cu. ft.; 18 cu. ft; and 18 cu. ft. = 60 cu. ft. total

Drainage Area Captured: 620 sq. ft.

### Before Pictures



Photo 15: Aug 22, 2019. The landscape naturally funnels towards the lake access path.



Photo 16: Aug 22, 2019. The access path had timber framed steps.



Photo 17: Aug 22, 2019. Deposits of sand & pine needles are evident on the steps.

### During Pictures (optional)



Photo 18: June 9, 2020. The owner dug 3 ft. deep holes for the infiltration pit in the steps.



Photo 19: June 9, 2020. Pit is lined with filter fabric on all sides and filled with rock.



Photo 20: June 9, 2020. Filter fabric folded over top of pit. Rock layer will be added on top.

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## **After Pictures (at least 1)**



Photo 21: June 11, 2020. Three infiltration pits are installed.



Photo 22: Top 2 infiltration pits.



Photo 23: June 11, 2020. Top infiltration pit with 3 inches of rock over filter fabric.

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## **Jacob Moelk Trust**

### **☒ Diversion (Transitional or Upland): 2**

Drainage Area Diverted: 1,950 sq. ft.

Drainage Area Captured: Number. If uncertain: Choose an item.

### **Before Pictures**



Photo 24: Aug 22, 2019. The driveway angles towards Boulder Lake.



Photo 25: Aug 22, 2019. Some erosion on driveway is evident.



Photo 26: Sep 21, 2019. Runoff from the driveway runs around the house and towards the lake.

### **After Pictures (at least 1)**



Photo 27: Sep 21, 2020. Two conveyor belt diversions with rock outlets installed.



Photo 28: Sep 21, 2020. Conveyor belt diversions.



Photo 29: Sep 21, 2020. Rock outlet at end of diversion.



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## Naylor Trust

### Rain Garden: 1

Dimensions: 20' x 25' = 250 sq. ft.

Drainage Area Captured: 770 sq. ft.

### Before Pictures



Photo 30: Sep 5, 2019. The very steep grassy area near the garage.



Photo 31: Sep 5, 2019. The slope goes toward the lake – the pier is visible behind the trees.



Photo 32: Aug 14, 2019. There is some erosion on the slope face near the lake.

### After Pictures (at least 1)



Photo 33: Aug 11, 2020. A rain garden and deer fencing were installed to manage stormwater from the garage.



Photo 35: Aug 11, 2020. Rain garden area is contained on flat area before slope.



Photo 36: Aug 11, 2020. Native plants were planted, and landowner is watering and weeding as needed.

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## **Board of Regents of the University of Wisconsin (Trout Lake Station)**

### **☒ Rain Garden: 1**

Dimensions: 15 ft radius ½ circle = 350 sq. ft.

Drainage Area Captured: 1,640 sq. ft.

### **Before Pictures**



Photo 37: Aug 14, 2020. While this photo shows the rain garden on the right, it shows the roof runoff, gutter, and slope of the site.



Photo 38: Oct 21, 2020. The photo shows the steep grassed area to the side of the dorm.



Photo 39: 2015 air photo. Trout Lake's shore is about 180 ft from the runoff area.

### **After Pictures (at least 1)**



Photo 40: Sep 21, 2020. A rain garden and deer fencing were installed to manage stormwater from the dorm.



Photo 41: Sep 21, 2020. Native plants were used. Terracing was used to help slow down water on the slope.



Photo 42: Sep 21, 2020. Even after several heavy rain events, the berm and outside area show no signs of runoff/erosion.

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## **Summary of education activities and/or promotion of Healthy Lakes & Rivers initiative**

An 2 hour online workshop for landowners and contractors was held on Sep 3rd – 5 people attended. The Plum Lake Golf Course plans to use their native planting as a backdrop for wedding photos, but this is in the future.

***Thank you for making Healthy Lakes & Rivers together! We appreciate your participation and feedback!***