

Questions

- Can voluntary resident action significantly impact P reduction?
- What level of participation is needed?
- What will it take and how do we measure it?
- Is it replicable and scalable?
- Is it cost-effective?

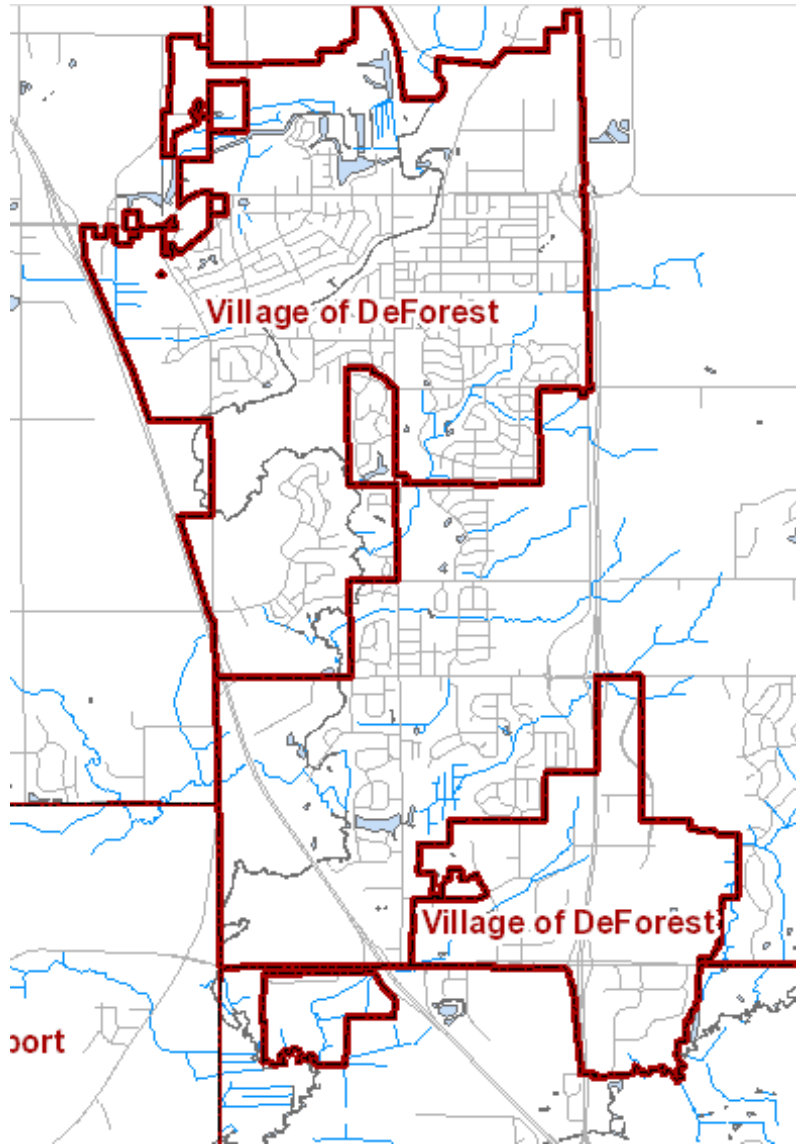










Table 1: Explanation of individual goals

| GOAL | DESCRIPTION |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Leaf-free street gutters* | Leaves are largely absent from the street within up to five (5) feet of the curb |
| Participation | Evidence inferring homeowner action (i.e., pledging, yard sign display, and/or evidence of street raking) |
| Attitude change | Homeowners accept responsibility for removing leaves from the street in front of their properties, and they feel empowered to make a difference |
| Awareness | Residents understand the connection between leaves in the street and phosphorus reaching and harming the lakes. They are also aware of leaf-management options available to them. |
| Communication | Homeowners talk to their neighbors about the issue and importance of taking action, and/or seek out additional information. |

* The “gold standard” among the identified goals and evaluative metrics.



-  Control A
-  Control B
-  Area 1: High-touch
-  Area 1: Med-touch
-  Area 1: Low-touch
-  Area 2: Low-touch
-  Area 2: Med-touch
-  Area 2: High-touch

Base map

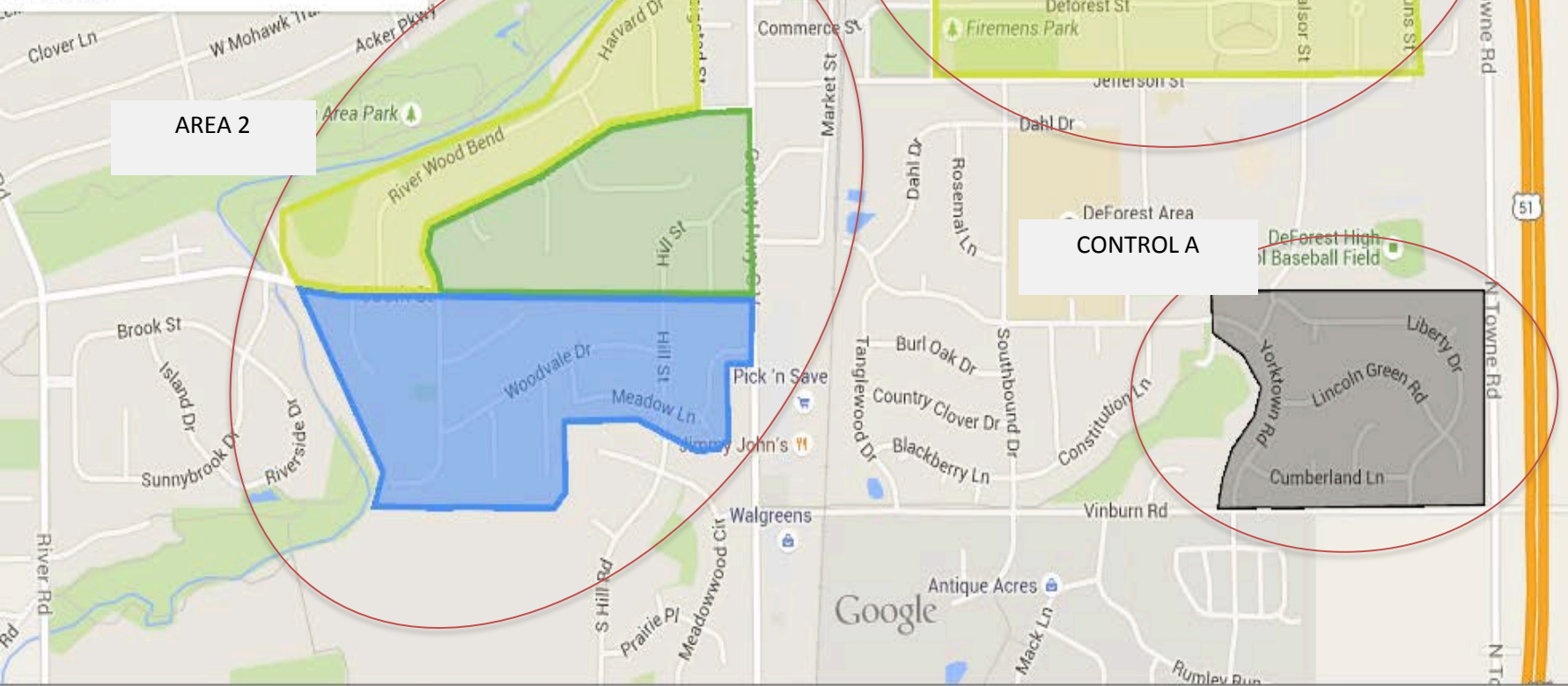


Table 2: Outreach descriptions by zone

| Outreach | Zone 1 (Low touch) * | Zone 2 (Med touch)* | Zone 3 (High touch)* | Purpose |
|------------------------------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------------------------|
| Letter with action request | ✓ | ✓ | ✓ | Encourage commitment |
| Pledge-for-prizes invite | | ✓ | ✓ | Encourage commitment |
| Email reminders, tips and prize announcements | | ✓ | ✓ | Provide prompt to act |
| Yard sign (optional) | | ✓ | ✓ | Provide prompt to act |
| Leaflet reminder to pledge | | ✓ | ✓ | Provide prompt to act |
| Personal visit | | | ✓ | Encourage commitment |
| Raking assistance (optional) | | | ✓ | Establish convenience |
| Exit survey (delivered and online) | ✓ | ✓ | ✓ | Evaluate incentives and barriers to participation |
| Leaflet reminder to complete survey | ✓ | ✓ | ✓ | Provide prompt to act |

* Households are split into three groups: low-touch, medium-touch and high-touch. Low-touch households receive the least amount of encouragement and contact, and high-touch households receive the most.

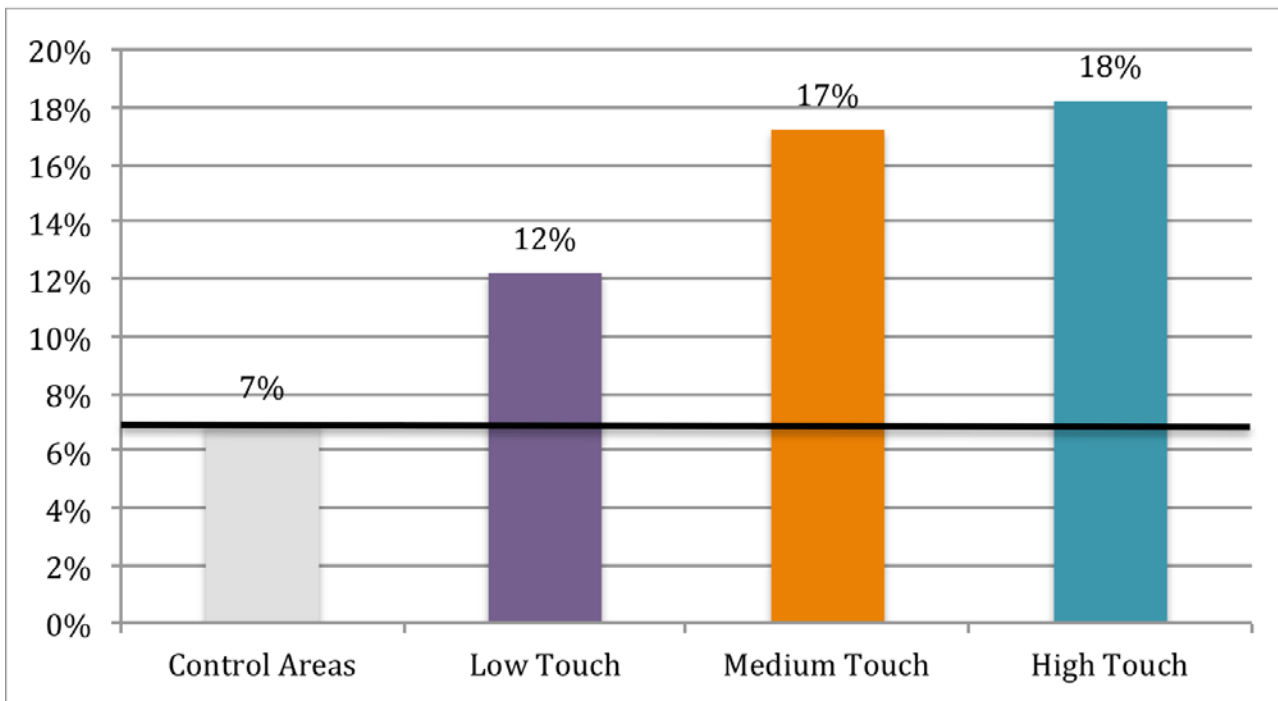


Table 6: Leaves removed and phosphorus diverted by area

| Area | Overall, Averaged Participation ¹ | Leaves Removed ² (lbs.) | Leached P diverted* (lbs.) ³ | Potential leaves removed if 100% Participation (lbs.) | Potential leached P diverted if 100% Participation (lbs.) |
|--------------|----------------------------------------------|------------------------------------|-----------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|
| Controls | 7% | 1,171 | 0.20 | 14,085 | 2.55 |
| High Touch | 18% | 3,406 | 0.78 | 21,567 | 4.96 |
| Medium Touch | 17% | 2,444 | 0.56 | 15,404 | 3.54 |
| Low Touch | 12% | 1,475 | 0.34 | 16,219 | 3.73 |
| H+M+L | 16% | 7,326 | 1.68 | 53,190 | 10.43 |

Table 7: Potential impacts and costs if results are extrapolated to other villages and cities draining to the Yahara lakes

| Municipality ¹ | Assumed total curb lenth (ft.) ² | Assumed weight of leaves per ft. of curb (lbs.) ³ | P diverted from 8 rakings at 100% particip. (lbs.) ⁴ | P diverted from 8 rakings at 20% particip. (lbs.) | Total 20-yr present worth cost based on 20% particip. ⁵ |
|-----------------------------------|---------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------|
| Village of DeForest | 340,000 | 0.126 | 72 | 14 | \$77,280 |
| City of Madison | 7,688,700 | 0.126 | 1,608 | 322 | \$1,777,440 |
| | | 0.200 | 2,544 | 509 | \$2,809,680 |
| | | 0.400 | 5,088 | 1,018 | \$5,619,360 |
| City of Middleton | 602,775 | 0.126 | 128 | 26 | \$143,520 |
| | | 0.200 | 200 | 40 | \$220,800 |
| | | 0.400 | 400 | 80 | \$441,600 |
| City of Fitchburg (3/4) | 560,400 | 0.126 | 117 | 23 | \$126,960 |
| | | 0.200 | 186 | 37 | \$204,240 |
| | | 0.400 | 372 | 74 | \$408,480 |
| City of Monona | 292,350 | 0.126 | 64 | 13 | \$71,760 |
| | | 0.200 | 96 | 19 | \$104,880 |
| | | 0.400 | 192 | 38 | \$209,760 |
| Village of Waunakee | 335,400 | 0.126 | 72 | 14 | \$77,280 |
| | | 0.200 | 112 | 22 | \$121,440 |
| | | 0.400 | 224 | 44 | \$242,880 |
| City of Stoughton | 400,125 | 0.126 | 80 | 16 | \$88,320 |
| | | 0.200 | 136 | 27 | \$149,040 |
| | | 0.400 | 272 | 54 | \$298,080 |
| City of McFarland | 238,500 | 0.126 | 48 | 10 | \$55,200 |
| | | 0.200 | 80 | 16 | \$88,320 |
| | | 0.400 | 160 | 32 | \$176,640 |
| Village of Maple Bluff | 44,400 | 0.126 | 8 | 2 | \$11,040 |
| | | 0.200 | 16 | 3 | \$16,560 |
| | | 0.400 | 32 | 6 | \$33,120 |
| Village of Shorewood Hills | 46,500 | 0.126 | 8 | 2 | \$11,040 |
| | | 0.200 | 16 | 3 | \$16,560 |
| | | 0.400 | 32 | 6 | \$33,120 |
| City of Sun Prairie (1/3) | 290,625 | 0.126 | 61 | 12 | \$66,240 |
| | | 0.200 | 96 | 19 | \$104,880 |
| | | 0.400 | 193 | 39 | \$215,280 |
| Village of Cottage Grove (3/4) | 124,350 | 0.126 | 26 | 5 | \$27,600 |
| | | 0.200 | 41 | 8 | \$44,160 |
| | | 0.400 | 82 | 16 | \$88,320 |
| Above Communities Combined | 10,879,125 | 0.126 | 2,270 | 454 | \$2,506,080 |
| | | 0.200 | 3,603 | 721 | \$3,979,920 |
| | | 0.400 | 7,206 | 1,441 | \$7,954,320 |

P-Diversion Formula

(Curb length of properties
participating)

x

(avg. lbs. leaves/curb ft.)

x

(0.00023 leachable-P factor)

x

(0.9 lake-delivery factor)

<<FirstName>> <<LastName>>
<<AddressLine1>>
<<AddressLine2>>
<<City>>, <<State>> <<ZipCode>>

September 3, 2015

Dear <<FirstName>>,<<LastName>>

Your neighborhood was selected to participate in a fall pilot project to keep leaves out of the street (see map on reverse). The Village of DeForest, Friends of Yahara River Headwaters and the Clean Lakes Alliance ask that you demonstrate your commitment to cleaner rivers and lakes by joining our *Rake-for-the-Lake Challenge*. **Please join our community challenge by keeping leaves out of the street gutter in front of your home!**

Did you know that leaves in the street are a big problem for our Yahara River and lakes? Wet, decaying leaves clog our storm sewers and release a phosphorus "tea" that feeds algae blooms that can close beaches. The Village of DeForest uses a street sweeper to collect leaves, but the sweeper is limited in its capacity to keep up with the timing and quantity of leaves that accumulate.



How you can help:

1. PLEDGE to maintain leaf-free street gutters this fall. This can be done online (www.cleanlakesalliance.com/leaf-pledge) or by returning the enclosed, postage-paid card. Pledge by September 21st for your chance to win lots of great prizes.
2. DISPLAY an optional "Love Your Lakes, Don't Leaf Them" yard sign (while supplies last). See pledge card.
3. REMOVE all leaves from within 5 feet of the street gutter throughout the season.

What can I do with my leaves?

- o Compost leaves in your backyard
- o Use as groundcover to suppress weeds and retain moisture around plantings
- o Mulch them into your lawn using a mower to replenish nutrients
- o Drop off leaves at the yard waste collection site on North Stevenson Street (Mon: 5-7pm, Tue: 8-10am & 5-7 pm, Thur: 5-7pm, Sat: 8am-5pm)

Thank you for participating, and we hope you encourage others to do the same! For more information, please call (608)255-1000 or email info@cleanlakesalliance.com. Also, be sure to thank our hard-working volunteers and student interns as they make their way through your neighborhood answering questions, polling opinions, and tracking community participation.

In Partnership,

Handwritten signature of James Tye in black ink.

James Tye
Executive Director
Clean Lakes Alliance



Handwritten signature of Deane Baker in black ink.

Deane Baker
Director of Public Services
Village of DeForest



Handwritten signature of Vicky Porter in black ink.

Vicky Porter
President
Friends of Yahara River Headwaters





Join our *Rake-for-the-Lake Challenge!*

YES!

I pledge to keep leaves out of the street gutter in front of my home. By pledging, I will be entered into a drawing for fun prizes, and will receive periodic leaf-management tips and program announcements.

Additional Options:

I want to demonstrate my commitment with a free “Love Your Lakes, Don’t Leaf Them” yard sign (pictured).**

I would like help connecting with a community-service volunteer or paid provider who can assist with the work.

I want to volunteer to help with this effort!



Name: _____

Email*: _____

*Contact information will only be used for communication related to this fall’s pilot and will not be released to any other party. You may remove yourself from the email list at any time.

**Available while supplies last. Signs will be delivered.