LAKE REDSTONE PROTECTION DISTRICT ANNUAL MEETING

AUGUST 5, 2023



Please silence your cellphone



AGENDA

| 5 | MITTELSTADT |
|----|---|
| 5 | MITTELSTADT |
| 5 | KEEGSTRA |
| 5 | KEEGSTRA |
| 5 | BURKE |
| 10 | BURKE |
| | 55555 |



AGENDA (CONTINUED)

| LAKE MANAGEMENT PLAN | 40 | |
|-----------------------------|----|-------------|
| HIGH LEVEL OVERVIEW | 10 | MITTELSTADT |
| EDUCATION AND OUTREACH | 10 | HORNER |
| SEDIMENT CONTROL ACTIVITIES | 10 | SULLIVAN |
| WATER QUALITY ISSUES | 10 | KEEGSTRA |
| INTRODUCE NEW COMMISSIONERS | 5 | MITTELSTADT |
| QUESTION AND ANSWERS | 15 | LRPD BOARD |



ELECTION OF 2 COMMISSIONERS

MIKE MITTELSTADT



LRPD BOARD

MIKE MITTELSTADT(2024) - CHAIRMAN; PLAN INTEGRATION COMMITTEE CHAIR

PAUL BURKE(2023) - TREASURER; FINANCE COMMITTEE CHAIR

BRAD HORNER(2023) - EDUCATION AND OUTREACH CHAIR

KEN KEEGSTRA(2025) - SECRETARY; WATER QUALITY COMMITTEE CHAIR

PAT SULLIVAN(2025) - ASSISTANT TREASURER; SEDIMENT CONTROL COMMITTEE CHAIR

RAY DEMANSKI - TOWN OF LA VALLE REPRESENTATIVE

PETER KINSMAN - SAUK COUNTY REPRESENTATIVE



2023 CANDIDATES FOR LRPD COMMISSIONER

BRAD HORNER

I have been heavily involved in Lake Redstone matters since moving full time from Madison with my wife Kim to Lake Redstone in 2012.

I have served three years on the LRPD Board. Currently I chair the Education and Outreach Committee.

I have also served 10 years on the Lake Redstone Property Owners Association (LRPOA) Board. I co-wrote the book Lake Redstone the First 50 Years in 2014. I also conceptualized and led the "Lake Redstone 50th Anniversary Celebration" held in June of 2016. Three years ago I started the Adopt a Road program for the roads around Lake Redstone.

I would like another 3 year term on the LRPD Board to continue to contribute.

DAVE CROCKETT

My wife, Jeannine and I purchased a home on Lake Redstone in 2012. Our permanent residence is in Davenport Iowa. We are members of the Lake Redstone Property Owners

Association and have performed annual reviews of their financial reports the past several years.

I am a member of the Lake Redstone Fishing Club.

My working life included auditing, accounting, bank administration and financial planning. I retired in 2015. I have served on our church finance committee and investment committee. I currently volunteer with the food pantry.

The Protection District has worked hard to protect and rehabilitate Lake Redstone. There has been great progress made through the efforts of many. I would love to join the Board and contribute to the efforts.



2022 ANNUAL MEETING MINUTES

KEN KEEGSTRA



SECRETARY'S REPORT

KEN KEEGSTRA



TREASURER'S REPORT

PAUL BURKE



MEADOWLARK WEIR PROJECT

| Item | Amount |
|---------------|-------------|
| Wisconsin DNR | \$56,811.40 |
| Sauk County | \$8,137.50 |
| LRPD | \$24,086.10 |
| | |
| Total Cost | \$89,035.00 |



TRIBUTARY SAMPLING PROJECT

| Item | Amount |
|-------------|----------|
| USGS | \$11,000 |
| Sauk County | \$16,275 |
| LRPD | \$16,725 |
| | |
| Total Cost | \$44,000 |

BALANCE SHEET AS OF 07/11/2023

| ASSETS | |
|--------------------------------|------------|
| Cash and Bank Accounts | |
| Checking LRPD | 89,102.92 |
| Clearing Account | 0.00 |
| Dredging Savings | 94,514.80 |
| LGIP - Maint | 80,877.17 |
| Accounts Receivable | 0.00 |
| TOTAL Cash and Bank Accounts | 264,494.89 |
| Other Assets | |
| Accounts Receivable Grant 1064 | 0.00 |
| Accounts Receivable Grant 1065 | 0.00 |
| Real Estate | 233,946.00 |
| TOTAL Other Assets | 233,946.00 |
| TOTAL ASSETS | 498,440.89 |

| LIABILITIES Other Liabilities | |
|----------------------------------|--------------|
| Accounts Payable | 0.00 |
| Dredging Loan - Royal Bank | 2,172,990.10 |
| Fund Balance | 0.00 |
| LPL 1064 - 06 Grant | 0.00 |
| LPL 1065 - 06 Grant | 0.00 |
| Meronek Meadows Draw | 0.00 |
| Meronek Meadows Loan | 8,493.06 |
| TOTAL Other Liabilities | 2,181,483.16 |
| TOTAL LIABILITIES | 2,181,483.16 |



PROPOSED INCOME 2024

| | 2022 Jan Dec. Actual | 2023 Approved Budget | 2023 Jan June Actual | 2023 July - Dec. Estimated | 2023 Jan Dec. Estimated | 2024 Proposed Budget |
|---|----------------------------|----------------------------|----------------------------|----------------------------------|-------------------------------|----------------------------|
| Revenue & Reinbursement for Grants DNR Grant Funding (see below) | | | | | | |
| - Aquatic Plant Management Plan | \$7,500 | \$2,500 | | | \$0 | \$2,500 |
| - Clean Boats/Clean Water Grant | \$2,613 | \$4,000 | \$1,000 | \$3,000 | \$4,000 | \$4,000 |
| - Lake Management Planning Grant | \$17,029 | | | | \$0 | |
| - Surface Water Grant - Martin Meadowlark Weir | | \$37,500 | \$14,202 | | \$14,202 | \$42,609 |
| - Surface Water Grant - South Chickadee Repair | | \$37,500 | \$10,875 | | \$10,875 | |
| Sauk County Grant Funding (see below) | | | | | \$0 | |
| - Martin Meadowlark Weir | \$3,750 | \$0 | | \$4,069 | \$4,069 | \$4,069 |
| - Stream Sampling | \$10,000 | | | | \$0 | |
| - Swallow Bay Weir | \$2,000 | \$0 | | | \$0 | |
| - Tributary Stream Sampling | | | | \$8,138 | \$8,138 | \$8,138 |
| FEMA Funds for Meronek Meadows Repair | \$16,329 | \$0 | | | \$0 | |
| Interest Income | \$1,026 | \$100 | \$1,593 | \$1,000 | \$2,593 | \$1,000 |
| General Tax Levy | \$84,399 | \$105,800 | \$70,492 | \$35,347 | \$105,839 | \$110,936 |
| Draw from Maintenance Fund | \$0 | \$33,000 | | | \$0 | \$21,500 |
| Grant Advance Payment from previous year | | | | | \$0 | \$37,283 |
| Total Revenue: | \$144,647 | \$220,400 | \$98,162 | \$51,553 | \$149,716 | \$232,035 |
| Tax Levy | | | | | | |
| - General | \$84,399 | \$105,800 | \$70,492 | \$35,308 | \$105,800 | \$110,936 |
| - Dredging | \$351,001 | \$351,000 | \$250,609 | \$100,391 | \$351,000 | \$351,000 |
| Total Tax Levy | \$435,400 | \$456,800 | \$321,101 | \$135,699 | \$456,800 | \$461,936 |
| Note: Special dredging levy approved on May 18th 2019 | | | | | | |

PROPOSED EXPENSES 2024

| - Property owners for shoreline improvement incentive - Sauk county lakes meeting Plan Integration - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Swallow Bay Repair - Watershed Improvement Funding - Sauk county lakes meeting Support - Support - Support - Standon - Stan | \$0 \$14,000 \$2 \$2,000 \$0 \$1,000 \$8 \$3,500 \$9 \$1 \$3,000 |
|---|--|
| Buoys \$886 \$500 \$821 \$86 \$500 \$821 \$86 \$500 \$821 \$86 \$500 \$821 \$86 \$500 \$821 \$86 \$500 \$821 \$86 \$500 \$821 \$86 \$860 | \$0 \$14,000 \$2 \$2,000 \$0 \$1,000 \$8 \$3,500 \$9 \$1 \$3,000 |
| - Commissioner per diem and consulting fees \$11,124 \$14,000 \$2,682 \$8,047 \$10,7 - Insurance \$1,565 \$2,000 \$1,562 \$1,565 \$1,565 \$2,000 \$1,562 \$1,565 \$1,565 \$1,565 \$2,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$2,000 | \$0 \$14,000 \$2 \$2,000 \$0 \$1,000 \$8 \$3,500 \$1 \$3,000 |
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| - Financial Review \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,000 \$4,000 \$6,000 \$2,0 | \$1,000 \$8 \$3,500 \$9 \$1 \$3,000 |
| - Legal Fees \$80 \$3,500 \$1,368 \$1,500 \$2,8 - Meronek Meadows Loan Payment \$32,122 \$16,400 \$8,169 \$8,500 \$16,6 - Office, Administration, and Mailing \$4,757 \$3,000 \$1,821 \$1,200 \$3,6 - Wisconsin Association of Lakes Convetnion \$3,305 \$3,000 \$1,877 \$1,8 Education and Outreach Funding \$2,000 \$3,996 | \$8 \$3,500 59 21 \$3,000 |
| - Meronek Meadows Loan Payment \$32,122 \$16,400 \$8,169 \$8,500 \$16,6 - Office, Administration, and Mailing \$4,757 \$3,000 \$1,821 \$1,200 \$3,0 . Wisconsin Association of Lakes Convetnion \$3,305 \$3,000 \$1,877 \$1 | 9 21 \$3,000 |
| - Office, Administration, and Mailing \$4,757 \$3,000 \$1,821 \$1,200 \$3,000 \$1,877 \$1,800 \$3,000 \$1,877 \$1,8000 \$3,000 \$1,877 \$1,877 \$1,81,81,81 \$1,81 | \$3,000 |
| - Wisconsin Association of Lakes Convetnion \$3,305 \$3,000 \$1,877 \$1,8 Education and Outreach Funding \$2,000 \$500 \$5 - Newsletter \$3,385 \$4,000 \$3,996 \$3,8 - PLRW Field Day - Property owners for shoreline improvement incentive - Sauk county lakes meeting Plan Integration - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir \$54,000 \$9,262 \$10,875 \$20,7 - Lake Maintenance and Erosion Control \$6,035 \$10,000 \$47 \$3,000 \$3,000 \$9 Swallow Bay Repair \$8,114 \$12,000 \$1, | |
| Education and Outreach Funding \$2,000 \$500 \$5 - Newsletter \$3,385 \$4,000 \$3,996 \$3,996 \$3,5 - PLRW Field Day - Property owners for shoreline improvement incentive - Sauk county lakes meeting Plan Integration - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Swallow Bay Repair - Watershed Improvement Funding \$3,841 \$12,000 \$1,00 | 7 \$3,000 |
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| - Newsletter \$3,385 \$4,000 \$3,996 \$3,5 - PLRW Field Day - Property owners for shoreline improvement incentive - Sauk county lakes meeting Plan Integration - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Swallow Bay Repair - Watershed Improvement Funding \$3,841 \$12,000 \$1,000 \$ | 10 |
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| - Sauk county lakes meeting Plan Integration - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Standous Stan | 50 \$10,000 |
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| - Lake Mgt. Plan Sauk Cty. Yearly Employee Support - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Swallow Bay Repair - Watershed Improvement Funding Support \$54,000 \$54,000 \$9,262 \$10,875 \$20,1 \$3,000 \$3,00 \$3,00 \$3,00 \$3,00 \$3,00 \$3,00 \$3,00 \$10,000 \$47 \$3,000 \$10,0 | 60 |
| - Lake Mgt. Plan Consultant - Producer Conservation Practices Incentives Sediment Control - Design & Repair of Martin Meadowlark Weir - Design & Repair of South Chickadee Bay - Design & Repair of South Chickadee Bay - Lake Maintenance and Erosion Control - Swallow Bay Repair - Watershed Improvement Funding \$ 3,841 \$ 12,000 \$ 1,000 | 50 \$1,000 |
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| - Design & Repair of South Chickadee Bay \$54,000 \$9,262 \$10,875 \$20,1 - Lake Maintenance and Erosion Control \$6,035 \$10,000 \$47 \$3,000 \$3,000 - Swallow Bay Repair \$8,114 - Watershed Improvement Funding \$3,841 \$12,000 \$1, | 50 \$89,035 |
| - Lake Maintenance and Erosion Control \$6,035 \$10,000 \$47 \$3,000 \$3,00 - Swallow Bay Repair \$8,114 - Watershed Improvement Funding \$3,841 \$12,000 \$1,000 \$1,000 | · · · · · · · · · · · · · · · · · · · |
| - Swallow Bay Repair \$8,114 - Watershed Improvement Funding \$3,841 \$12,000 \$1,000 \$1,000 | |
| - Watershed Improvement Funding \$3,841 \$12,000 \$1,000 \$1,000 | 60 |
| | |
| Water Quality | 00 |
| - Aquatic Plant Management \$19,178 \$15,000 \$10,000 \$10,00 | |
| - DNR Grant Clean Boats/Clean Water \$3,342 \$4,000 \$615 \$3,885 \$4,5 | 0 \$4,500 |
| - DNR Grant Lake Management Planing Grant \$0 \$0 | 0 |
| - DNR Grant Aquatic Plant Management Plan \$8,443 \$5,000 \$3,500 \$1,500 \$5,000 | 0 |
| - Stream/Lake Monitoring, Sampling \$36,400 \$12,000 \$20 \$11,000 \$11,000 | 20 \$6,000 |
| | \$33,000 |
| Grant Advance Payment Carryover \$37,283 \$37,2 | |
| Total Budget \$146,577 \$220,400 \$37,740 \$102,291 \$140,0 | 3 |



BUDGET MOTION

I MOVE THAT WE APPROVE THE PROPOSED 2024 BUDGET WITH OPERATING EXPENSES OF \$232,035 AND AN OPERATING EXPENSE LEVY OF \$110,936.



HIGH LEVEL OVERVIEW

MIKE MITTELSTADT

LAKE MANAGEMENT PLAN HIGH LEVEL OVERVIEW

- IMPLEMENT BEST MANAGEMENT PRACTICES(BMP) THROUGHOUT THE WATERSHED TO REDUCE SEDIMENT AND PHOSPHORUS LOADING INTO LAKE REDSTONE
- IMPROVE THE RIPARIAN AREA BY IMPLEMENTING BMPS TO INCREASE QUALITY HABITAT FOR WILDLIFE AND MITIGATE THE EFFECTS OF DEVELOPMENT ON LAKE REDSTONE
- USE BMPS WITHIN LAKE REDSTONE TO REDUCE NEGATIVE IMPACTS FROM POLLUTION, AQUATIC INVASIVE SPECIES, AND SHORELINE EROSION
- BUILD AND MAINTAIN PARTNERSHIPS WITH OUTSIDE RESOURCE, STATE, UNIVERSITY,
 COUNTY, LAKE GROUPS, AND OTHER LOCAL ENTITIES TO GUIDE THE IMPLEMENTATION OF BMPS

LAKE MANAGEMENT PLAN KEY PARTNERSHIPS

- SAUK COUNTY LAND RESOURCES AND ENVIRONMENT DEPARTMENT
- JUNEAU COUNTY LAND AND WATER RESOURCES DEPARTMENT
- PRODUCERS OF THE LAKE REDSTONE WATERSHED (A PRODUCER LED COOPERATIVE)
- DISCOVERY FARMS (A PROGRAM OF UW-MADISON DIVISION OF EXTENSION)
- LAKE REDSTONE PROPERTY OWNERS' ASSOCIATION
- WISCONSIN DEPARTMENT OF NATURAL RESOURCES
- UNITED STATES GEOLOGICAL SURVEY (USGS)
- TOWN OF LAVALLE
- PROPERTY OWNERS ON LAKE REDSTONE
- GENERAL LAKE USERS

PLAN INTEGRATION COMMITTEE

- MIKE MITTELSTADT, CHAIR
- **VOLUNTEERS**: PAUL BURKE, DON HAASL, MATT MESSMER, JIM OLSON, SHERRYL PERTZBORN, CARY DUDZAK, DICK FISH, KEN KEEGSTRA, KEN KIDD, PAT SULLIVAN
- 1. Milestone tracking and monitoring
- 2. Coordinating with partners to report progress
 - A. Sauk County Producers BMP
 - B. USGS Stream Monitoring
 - C. Fishing Club Carp removal
 - D. Sauk County Transect Survey

Lake Redstone Protection District Transect Survey Route Legend RS_Transect_Route Recreation Trail Juneau Roads OL OR Pierce Road Douglas Road 03-R 21



EDUCATION AND OUTREACH

BRAD HORNER

COMMITTEE MEMBERS SUE WALTERS AND JAY KOLB

ACTIONS SINCE LAST AUGUST

- PRODUCERS FIELD DAY
- PARTNERS MEETING
- ANNUAL "PROTECTION CONNECTION" NEWSLETTER
- WIDESPREAD COMMUNICATION OF 2022 SURVEY RESULTS
- TAKE A STAKE IN THE LAKE (NEW EVENT!)
- REGULAR UPDATES TO LRPD WEBSITE AND FACEBOOK
- MONTHLY LRPD BOARD MEETINGS
- PARTNERING WITH PROPERTY OWNERS ASSOCIATION FOR COMMUNICATIONS

PLANNED ACTIONS FOR NEXT 12 MONTHS

- CONTINUE THE REGULAR EVENTS/ACTIONS. NO TAKE A STAKE IN THE LAKE
- POTENTIAL FOR A "SHORELINE SHOWCASE" VIRTUAL AND/OR PHYSICAL TOUR OF PROPERTIES.

This lot had massive amounts of runoff into the lake due to a culvert and just grass. Now there is almost zero runoff. Not shown: deflecting berm and rockimbedded gulleys above the shoreline.



INITIATION OF A "SHORELINE REIMBURSEMENT PROGRAM" IF APPROVED. UP TO \$2000 REIMBURSEMENT TO
PROPERTY OWNERS IN ADDITION TO POTENTIAL \$\$ FROM SAUK COUNTY AND DNR



This grass-only lot contributes tons of sediment and an estimated 14 lbs. of phosphorus annually to the lake



SEDIMENT CONTROL

PAT SULLIVAN, CHAIR

VOLUNTEERS: PAUL BURKE, CARY DUDCZAK, DICK, FISH, BRAD HORNER,
MIKE MITTELSTADT, AL JOHNSON(TOWN OF LA VALLE)

Status of 2023 DNR Surface Water Grants

- Chickadee South
- Meadowlark Weir

Prioritize stream/gully washes for runoff issues

Scale for Points: 1 Low 5 high

| | Property Damage | Volume of Water | Ease of Fix | Bad Content of | TOTAL POINTS (larger # of | Action and Comments |
|--------------------------------|--------------------|--------------------|------------------------------------|-------------------|-------------------------------------|--|
| | Dumage | or water | (higher means easier fix) | Runoff | points indicate higher priority) | |
| Chickadee South (North end) | | | | | | 2. Clean out ditch . |
| Chickadee South (South end) | | | | | | 1 Plan already in place . DNR grant approved Mar 23 |
| Chickadee North | 1 | 2 | 2 | 4 | 9 | Owner on west side of road may want to do something. O'Brien owns property next to his. No LRPD responsibilities. Possible retention pond on west side of road. |
| Warbler | 4 | 5 | 4 | 1 | 14 | 3 Get county input. May be a healthy lakes project? |
| Eagle South/Hopi Ct | 4 | 5 | 3 | 2 | 14 | 2 and 3_Potential prop owner solution. Gulley of rocks from road culvert to lake. Trees blocking flow. Increase size of culvert. Cty working with farm owner |
| Eagle/Timmons Rd | 2 | 4 | 3 | 2 | 11 | 2 and 3. Upstream, Al is talking with landowner. Clear brush. Possible bridge. Change culvert size. |
| Cardinal going south. | 4 | 4 | 2 | 2 | 12 | 2 or 3 Maintenance needed to clear rocks and make deeper (going in to lake). Possible retention pond. Possible LRPD responsibility. Take out concrete bridge |
| Little Mourning Dove | 2 | 5 | 1 | 2 | 10 | 3. Al look at it. Culvert on west side of road has dislocated. Other culvert under driveway appears blocked. May need new culvert under road. |
| Fox | 1 | 4 | 4 | 5 | 14 | 3. LRPD have culvert removed @ lake. Review priority |
| Arapaho Beach Club | 2 | 3 | 2 | 2 | 9 | 1 Retention pond East of Road. |
| Tanager | 2 | 3 | NA | 2 | 7 | 2 Sediment pond on opening of culvert? Property owner responsibility. Clear ditch to Lake |

Actions:

1= No Action by Committee

2= Suggested Improvements by Owner. Get Back to Owner

3= Next Step Necessary by LRPD.

Reduce gully/ravine erosion in riparian zone



Before



After

Maintenance review sediment control structures

- Swallow Bay
- Meronak Meadows
- Meadowlark



2021



2022

2023 Summer/Fall Projects

- Cardinal Bay
- Eagle Bay
- Chickadee North



WATER QUALITY ISSUES

KEN KEEGSTRA

WATER QUALITY PROJECTS COMMITTEE

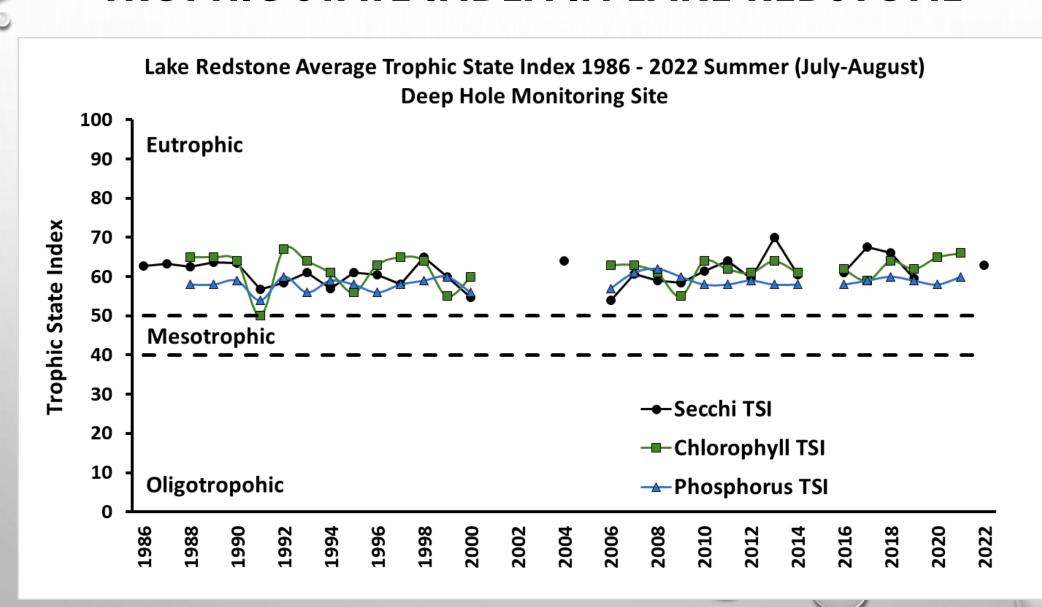
- KEN KEEGSTRA, CHAIR
- **VOLUNTEERS:** TOM ALBERT, PAUL BURKE, CHUCK ECKLUND, KEN KIDD, JAY KOLB, PAT SULLIVAN, LAURIE VIDELE, TOM WAGNER, SUE WALTERS, TOM WALTERS
- 1. Updating of Aquatic Plant Management Plan (APMP)
- 2. Update on lake water monitoring program
- 3. Connection to stream monitoring program (USGS)
- 4. Ideas to lower phosphorus levels in Lake Redstone

REVISED AQUATIC PLANT MANAGEMENT PLAN

Major points/goals & recommendations

- PLANT POPULATIONS ARE DECLINING IN LAKE REDSTONE
- PROTECT NATIVE AQUATIC PLANTS AND OTHER ORGANISMS.
- MONITOR AND MANAGE EURASIAN WATERMILFOIL TO MAINTAIN OCCURRENCE THAT ALIGNS
 WITH BENEFICIAL USE OF LAKE REDSTONE
- PREVENT INTRODUCTION OF NEW INVASIVE SPECIES
- PROVIDE EDUCATIONAL OPPORTUNITIES PERTAINING TO AQUATIC PLANTS, AQUATIC INVASIVE SPECIES AND MANUAL REMOVAL TECHNIQUES

TROPHIC STATE INDEX IN LAKE REDSTONE

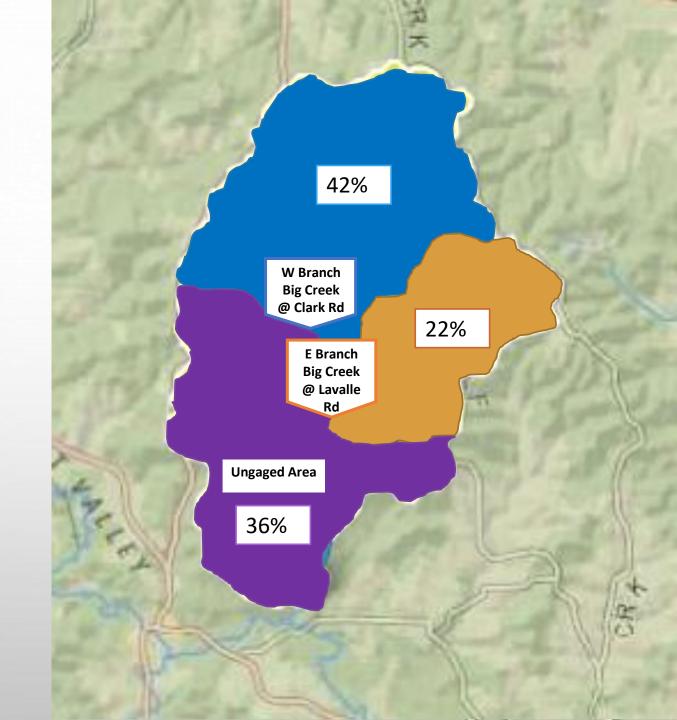


LAKE REDSTONE DRAINAGE AREA-28.8 SQ MILES

W Branch Big Creek @ Clark Rd = $12 \text{ mi}^2 = 42\%$

E Branch Big Creek @ Lavalle Rd= $6.38 \text{ mi}^2 = 22\%$

Ungaged Area = $10.42 \text{ mi}^2 = 36\%$



USGS-LAKE REDSTONE STREAM MONITORING

TWO MAJOR INLET STREAMS AND OUTLET STREAM

Water Year 2021

- October 1, 2020 September 30, 2021
- Installed auto-samplers to collect TP and SS samples
- Data Collection: Discharge + Concentrations = Loads

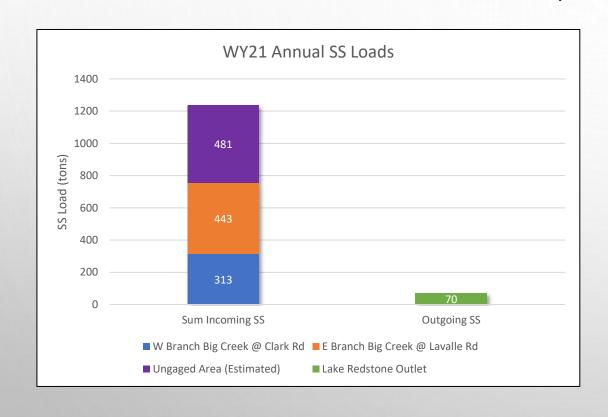
Water Year 2022:

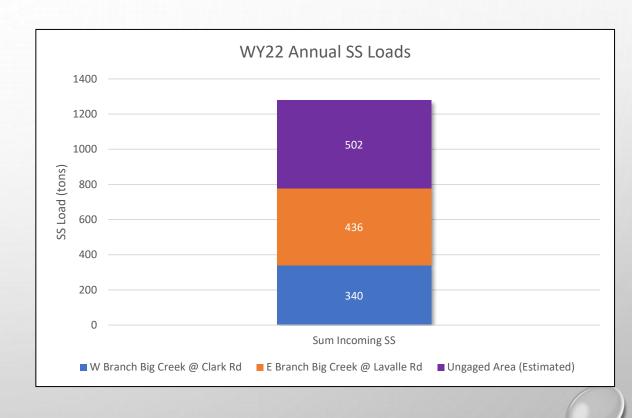
- Completed 2nd year of loading data collection on 9/30/22
- Sampled 24 of the ~30 events this year
- Another dry year -- slightly less precip than last year
- WY22 discharge and loads were similar to WY21 loads
- Most sediment and phosphorus enters the lake during major storms



COMPARISON OF SEDIMENT ENTRY IN FIRST TWO YEARS

WY2021 = October 1, 2020 thru September 30, 2021 WY2022 = October 2, 2021 thru September 30, 2022

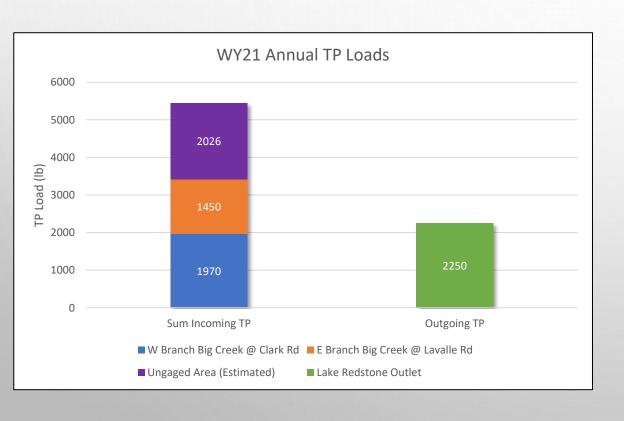


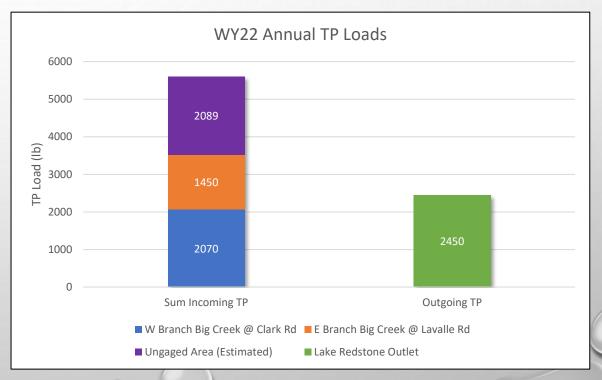


COMPARISON OF PHOSPHORUS ENTRY IN FIRST TWO YEARS

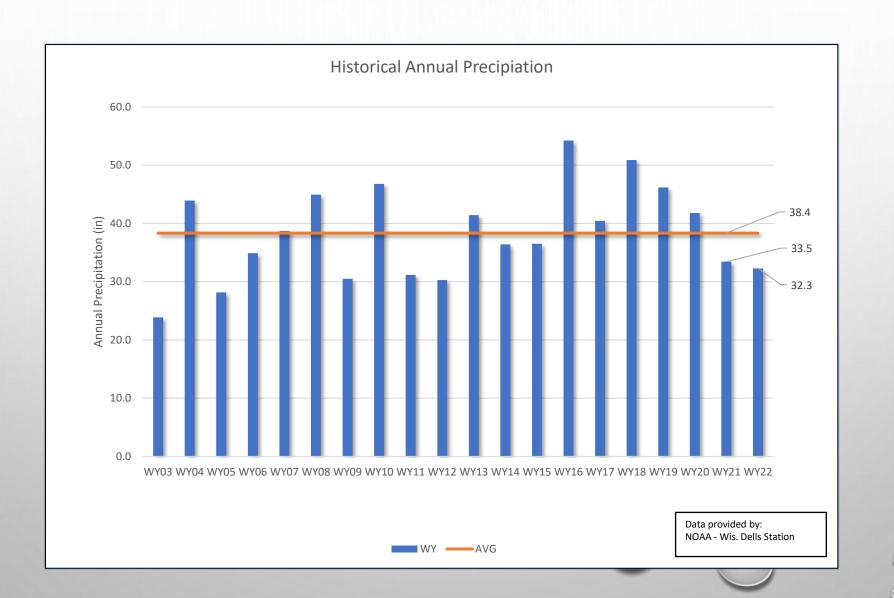
WY2021 = October 1, 2020 thru September 30, 2021

WY2022 = October 2, 2021 thru September 30, 2022





WY21 & 22 WERE DRYER THAN AVERAGE





INTRODUCE NEW COMMISSIONERS

MIKE MITTELSTADT



QUESTIONS & COMMENTS

- LIMITED TO 1 QUESTION/COMMENT PER PERSON AND 3 MINUTES INCLUDING RESPONSE
- PLEASE IDENTIFY YOURSELF FOR THE RECORD



THANK YOU!

FOR MORE INFORMATION:

WWW.LAKEREDSTONEPD.ORG

LRPD.BOARD@GMAIL.COM



EXTRAS

Lake Redstone Detail Sauk County, WI T. 13.V-R. 3 E.

