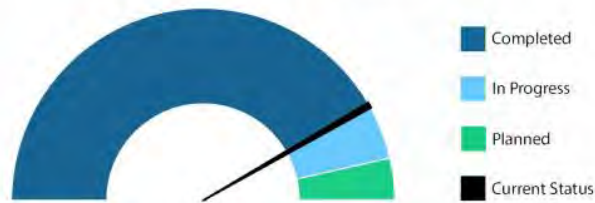


Forest Lake Alum Treatment Work Plan Highlights



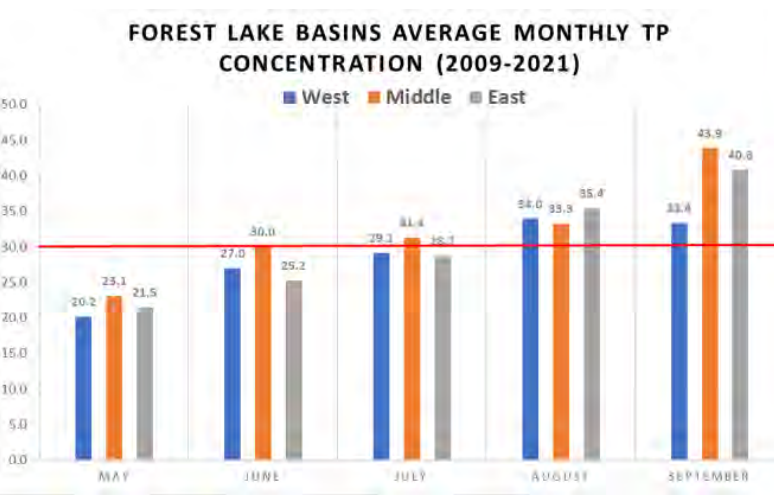
Forest Lake



Reduction Goal: 923lbs

Progress Toward Sustainable Goal: 83%

Figure 29. Forest Lake Phosphorus Reduction Goals and Project Progress Graph



- Nine sediment cores
 - 5 from Middle Basin
- 73,390 gallons of Alum
- 36,700 gallons of buffer
- Dosing validated by Dr. John Holz and Dr. Bill James
- Targeting depths > 15 feet
- Middle Basin only
 - 110-acre treatment area
- Split dose: 2023 and 2025

Key Project Dates - 2023



- **May 11, 2023:** Solicitation of bids at regular board meeting
 - April 28th deadline for board packet materials
- **May – August 2023:** Obtain special use permit from DNR for 3rd Lake boat launch staging/access
- **August 10, 2023:** Contract award at regular board meeting
 - July 28th deadline for board packet materials
- **September 15-30, 2023:** First dose applied

Project Phases



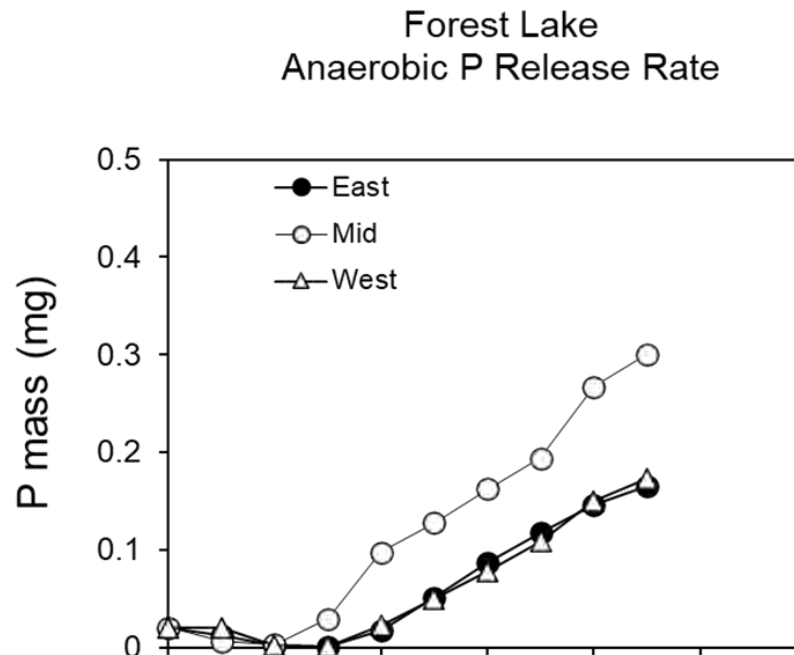
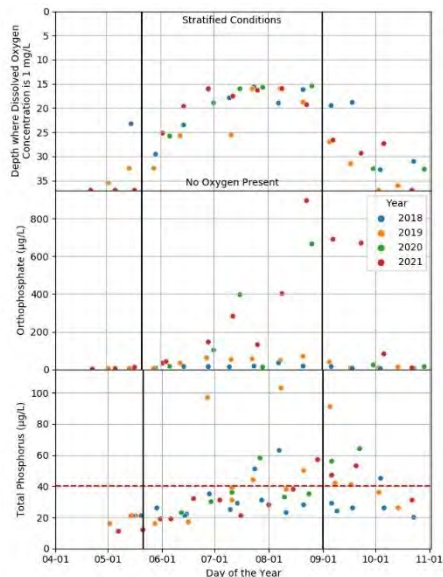
- **Phase 1: Alum Dosing / Bidding**
 - 2023 treatment – second or third week of September
 - 2025 treatment based on effectiveness monitoring in 2024
 - *Deliverables: Contractor bidding documents, Attendance at pre-bid meeting, bid opening, Bid award recommendation memo to CLFLWD Board of Managers, Site observation and project status reports, Pay requests, Actual alum application dosing map. Finalize Storage/Staging Area*



Project Phases (Cont.)

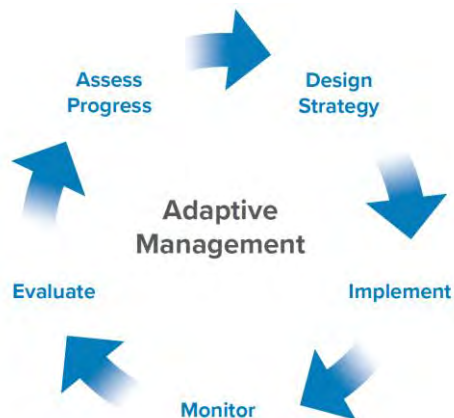


- **Phase 2: Water Quality Data Review, Sediment Core Collection, and Lake Response Model Update**
 - EOR will collect five (5) cores from the middle basin in 2024
 - **Laboratory analysis by Dr. Bill James – (UW-Stout)**
 - **Water column monitoring data review**
- *Deliverables: In-lake water quality + sediment core analysis, Updated Lake response model*



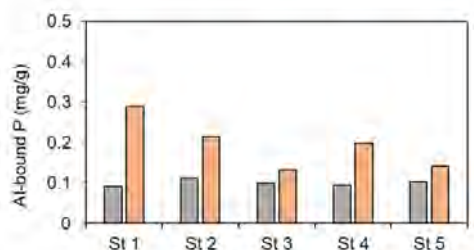
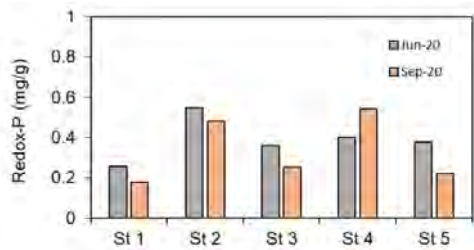


Commitment to Adaptive Management + Incorporating the Latest Science



Phase 2: Post-treatment Limnological Response monitoring

- 1) Lake limnological response variables (total P, soluble reactive P, chlorophyll, Secchi transparency),
- 2) Diffusive P flux from sediment under anaerobic conditions for stations located within and outside the treatment area, and
- 3) Binding of P by the alum floc.



Project Phases (Cont.)



- **Phase 3: Civic Engagement**

- *Deliverables: Supporting graphics and educational information in formats **at the request** of the District that can be printed and incorporated into online engagement platforms, translated in up to two languages. EOR understands that CLFLWD will be leading Civic Engagement efforts.*

- **Civic Engagement Efforts Will:**

- 1) Answer frequently asked question
 - 1) **What are algae/ Harmful Algal Blooms?**
 - 2) **Is Alum Safe?**
 - 3) **How long until I can swim, eat fish?**
 - 4) **How does it work**

- **Engage diverse audience**

Project Budget



Phase	Budget
Phase 1: Alum Dosing / Bidding	\$9,600
Phase 2: Water Quality Data Review, Sediment Core Collection, and Lake Response Model Update	\$16,400*
Phase 3: Civic Engagement and Messaging	\$12,200**
Total	\$38,200

* Includes **\$6,400** in estimated laboratory costs for sediment core analysis by Dr. Bill James at UW-Stout

** Includes **\$400** in costs to promote civic engagement media in up to two (2) additional languages to target underrepresented communities.