



Innovative & Affordable Ways to Comply with Phosphorus Standards

A MULTI-YEAR ADVENTURE



Speaker Background

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 - B.S. Business Administration
 - Member of League Lobby Team
 - Board of Directors Local Government Institute
 - Instructor At UW Green Bay Clerks and Treasurers Institute
 - Twenty Years In Product Management and Account Management for Wausau Financial Systems, A Financial Services Technology Company





Agenda

- Community and Facility Overview
- Initial Facility Options
- Compliance Alternatives
- Factors Creating Turbulence
- End Game
- Lessons Learned



Community and Facility

- Central Wisconsin Community Ten Miles West of Wausau and STH 29
- Population 1572 with 640 Utility Customers
- Current Facility Constructed in 1971 and Upgraded in 1999
 - 0.35 MGD Average Flow and 1.39 MGD Design Max Flow
 - One Commercial Customer Accounts for 50% of Phosphorus (P) Load
- Among First WPDES Permits in WI To Have Ultra-low Numeric Phosphorus Limits 2012
 - Target P limit of 0.075 MGL Compliance Schedule Target Jan 2017
 - Required to Reduce Annual P Load from 800 lbs. to 60 lbs.
 - 800 lbs. is 0.63% of the Annual Total Phosphorus Load to the Big Rib River
 - In Upper Wisconsin River TMDL



Compliance Alternatives

- Complete A Phosphorus Only Facility Upgrade
 - \$3.5M to \$4.5 In Potential Cost
 - Significant Cost Burden to Rate Payers Tripling Rates
 - Huge Cost (\$5,263 per pound) For Virtually No Water Quality Improvement in the Rib River
- Become Part of a Joint Facility
 - Nearest Facility in Edgar Faced Similar Issues to Marathon City.
 - Others, Simply Too Far Away



Compliance Alternatives

- Pursue the Multi-Discharger Variance (MDV)
 - The MDV Option Was Not Approved by EPA at the Time
 - Significant Questions Regarding the Program
 - Significant Issues With Paying the County Based on Historic Conservation Practices and Zero Accountability
- Pursue Adaptive Management Programs
 - Politically Sensitive to Spend Utility Funds In Farm Fields
 - Shift From Effluent Compliance to In-stream Compliance Is Staff Intensive and Costly
 - No Control Over Non-Point Sources



Compliance Alternatives

- Implement Water Quality Trading (WQT)
 - Presented at 2016 League Conference Promoting
 - Addressed the Challenges of the Other Compliance Alternatives
 - Made the County Accountable and Leveraged Their Non-point Relationships
 - Huge Upside in Total Phosphorus Reduction in Our Watershed

- Water Quality Trading Was Our Compliance Solution



Turbulence

- Evolution Of Strategy Driven By Outside Factors
 - Pending WPDES Permit Re-issuance
 - County Partnership Implosion
 - Moving Target For Final Effluent Limits
 - MDV Was Approved Feb 2017
 - TMDL Was Approved April 2019
 - Water Quality Trading Clearing House Approved in 2020
 - Site Specific Criteria Was Approved July 2020
- DNR Regulatory Constraints, EPA Standards, Early Compliance Guidance
- Facility Issues
 - Phosphorus Only Focus Ended

End Game



- We Didn't Follow Conventional Wisdom
 - Saved Millions As A Result
- We Challenged DNR
 - Situational Review Versus Blanket
 - Consider External Factors and Impact
 - Provide Better Options
 - Focus On Results Not Dates
- Ultimately Found A Better Path



End Game

- Received Approval For An MDV Watershed Project Feb 2020
 - Partnered With MilTrim Farms: CAFO
 - Project Will Generate 5,000 to 11,000 lbs. in Phosphorus Reduction Annually
 - Village Will Purchase Phosphorus Credits at \$55 per Pound
 - Projected Cost of \$22,000 Annually (Interest on a \$1.5M Note is \$37,500)
- Pursuing Biosolids Integration With MilTrim As Part of Permit Renewal
 - Over 4500 Acres For Land Application
- Designing New Wastewater Facility
 - Addresses Aging Plant and Obsolescence
 - Prepares For Future Regulatory Compliance
 - Improves Bio P removal



Lessons Learned

- Being First Is Not Always Best
- Engage The Agency, Push Back Were Appropriate
- Pursue Alternatives
- Take A Long-term View
- Don't Settle

