

The background of the slide is a light gray gradient with several realistic water droplets and bubbles of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered on the slide.

LAKE FOREST ESTATES

WASTEWATER TREATMENT FACILITY & LAKES SEWER LINE CONDITION
ASSESSMENT AND DREDGING PROJECT

AGENDA

- PURPOSE FOR PROJECT
- CURRENT SITUATION / EXISTING WATER TREATMENT FACILITY CONDITION
- OPTIONS / CONSIDERATIONS / ALTERNATIVES
- CONCEPTUAL DESIGN
- ROUGH ORDER OF MAGNITUDE PROJECT SCOPE
- ROUGH ORDER OF MAGNITUDE PROJECT COSTS
- HOMEOWNER IMPACT
- COMMUNICATION PROCESS
- WHAT WE NEED FROM YOU
- NEXT STEPS

PURPOSE FOR PROJECT

- CURRENTLY IN PERMIT VIOLATION WITH THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, AND THE MISSOURI CLEAN WATER LAW
- LAKE FOREST SUBDIVISION HAS RECEIVED “NOTICES OF VIOLATION”
- WATER EFFLUENT DISCHARGE IS NOT IN COMPLIANCE
- EFFLUENT DISCHARGES INTO BIG BOTTOM CREEK AND CAN IMPACT ENDANGERED SPECIES
- LAKE FOREST NOTIFIED BY MDNR AS AN “ENFORCEMENT CASE”
- LAKE FOREST RETAINED ATTORNEY AND MUST ENTER INTO AN AGREEMENT FOR COMPLIANCE THROUGH AN ABATEMENT ORDER ON CONSENT (AOC) TO STOP FURTHER ENFORCEMENT ACTION
- CURRENT NOTICES OF VIOLATION WILL BE CONSIDERED “RESOLVED” ONCE THE AOC IS IN PLACE

CURRENT WWTF AND COLLECTION SYSTEM CONDITION

- EXISTING SYSTEM CANNOT MEET CURRENT REGULATORY REQUIREMENTS
- MODIFYING EXISTING MICRO-BIOLOGICAL SYSTEM DETERMINED BY ENGINEERING CONSULTANT TO BE THE LOWEST COST OPTION
- ORIGINAL SYSTEM IS OVER 50 YEARS OLD AND WELL PAST ITS USEFUL LIFE
- LAST SYSTEM UPGRADE WAS IN 2004 TO MEET REGULATIONS AT THAT TIME, MAJOR MODIFICATIONS NOW NEEDED TO MEET CURRENT AND FUTURE REQUIREMENTS
- MDNR HAS PATIENTLY WORKED WITH US UNTIL A TECHNOLOGY SOLUTION IS ENGINEERED AND INSTALLED WITH AN AGREED TO TIMELINE TO MEET REGULATORY DEADLINES
- THE BOARD HAS COMMUNICATED THIS ISSUE TO AREA RESIDENTS FOR OVER 5 YEARS, SEE WEBSITE FOR MEETING MINUTE SUMMARIES
- MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PATIENCE HAS COME TO AN END IF NO ACTION IS TAKEN

OPTIONS/ALTERNATIVES

- DO NOTHING – NOT AN OPTION
- WITHOUT COMMUNITY SUPPORT – STATE ENFORCEMENT INCLUDING FINES, THEY BUILD, EXPECTED TO BE IN THOUSANDS OF DOLLARS COST PER RESIDENT, UP TO TEN THOUSAND DOLLARS PER VIOLATION PER DAY
- CHEMICAL TREATMENT WWTF FACILITY / MUCH HIGHER CONSTRUCTION COSTS AND HIGHER ONGOING OPERATIONS & MAINTENANCE COSTS
- MICRO-BIOLOGICAL WWTF FACILITY / LOWER CONSTRUCTION COSTS AND LOWER ONGOING O&M COSTS, MORE ENVIRONMENTAL FRIENDLY, LET THE BUGS DO THE WORK

CONCEPTUAL DESIGN

- CONCEPTUAL DESIGN UNDERWAY
- SYSTEM IS CALLED A “SEQUENCED BATCHED REACTOR” OR SBR
- DESIGN INCORPORATES ALL THREE LAKES
- SEWER DISTRICT BOARD TO EVALUATE TIMING AND SEQUENCING OF THE WORK
- DETAILED ENGINEERING DESIGN TO START AFTER PROJECT FINANCING AND APPROVALS OBTAINED
- DETAILED ENGINEERING DESIGN DELIVERABLE TO INCLUDE OVERALL PROJECT TIMELINE INCLUDING WEATHER CONTINGENCY

PROJECT SCOPE

- MODIFY EXISTING MICRO-BIOLOGICAL TREATMENT SYSTEM
- ENHANCING WATER EFFLUENT FILTERING CAPABILITIES
- SUB SURFACE SEWER PIPING CONDITION ASSESSMENT AND REPLACE AS NECESSARY
- DREDGING IN COORDINATION WITH PIPING WORK
- EXCAVATION AND INSTALLATION OF WATER METERS AT RESIDENCE POINT OF USE
- SCOPING AND DESIGN TO ALLOW FOR MINIMAL SERVICE INTERRUPTIONS
- SCOPE TO INCLUDE PROJECT RISK ASSESSMENT TO HELP IDENTIFY CONTINGENCY REQUIREMENTS
- SCOPING TO INCLUDE REQUEST FOR QUOTE PACKAGES TO BE SENT OUT TO NUMEROUS PRE-QUALIFIED CONTRACTORS

PRELIMINARY PROJECT COSTS

- ROUGH ESTIMATE \$4-\$5M INCLUDING FACILITY/PIPING/DREDGING AND SIGNIFICANT CONTINGENCY REQUIRED DUE TO STATUS OF ENGINEERING DESIGN
- ONLY MONIES NEEDED WOULD BE DRAWN FROM THE LOAN
- FINAL PROJECT COST ESTIMATE TO BE REFINED UPON ENGINEERING DESIGN COMPLETION
- O&M COSTS YET TO BE DETERMINED AND FINALIZED DURING ENGINEERING PHASE

HOMEOWNER IMPACT

- WE ANTICIPATE ANNUAL ASSESSMENT COST LOWERED DUE TO CREATION OF SEWER DISTRICT BOARD
- ACTUAL AMOUNT OF ANNUAL ASSESSMENT REDUCTION NOT YET KNOWN
- EACH HOMEOWNER BILLED ON A “USAGE” BASIS FOR WATER/SEWER COSTS
- WATER/SEWAGE BILLING CYCLE TO BE MONTHLY
- WATER SEWAGE BILLING TO INCLUDE ADMINISTRATIVE AND O&M COSTS TO MAINTAIN THE ASSET
- ACTUAL COSTS TO BE COMMUNICATED AS SOON AS WE KNOW

COMMUNICATION PROCESS

- SEWER DISTRICT BOARD TO RESPOND TO ALL QUESTIONS MONTHLY VIA WEBSITE FREQUENTLY ASKED QUESTIONS (FAQ) TAB
- THERE MAY BE QUESTIONS WE CANNOT ANSWER AT THE TIME, BUT WE WILL RESPOND ACCORDINGLY
- SEWER DISTRICT BOARD TO HOLD PERIODIC INFORMATIONAL MEETINGS
- SEWER DISTRICT BOARD TO OFFER IN-HOME INFORMATIONAL MEETINGS FOR THOSE WHO NEED OR DESIRE SUCH A SETTING
- SEWER DISTRICT BOARD WILL NOT MONITOR OR RESPOND TO INFORMATION OR QUESTIONS SHARED ON SOCIAL MEDIA
- ALL INFORMATIONAL MEETINGS TO BE FACT BASED WITH BEST KNOWN INFORMATION AT THE TIME AND WITHOUT OPINION
- REALIZE ATTORNEY RECEIVED COMMUNICATIONS ARE CLIENT PRIVILEGED AND “CONFIDENTIAL”

WHAT WE NEED FROM YOU

- FEEDBACK AND QUESTIONS ARE NEEDED AND WELCOMED
- UTILIZE WEB SITE FOR INFORMATION UPDATES AND SUBMITTING QUESTIONS
- SEWER DISTRICT BOARD TO UPDATE WEB SITE “FREQUENTLY ASKED QUESTIONS” MONTHLY
- THOSE NOT HAVING COMPUTER ACCESS, INFORMATION WILL BE PLACED ALONG WITH MONTHLY MEETING MINUTES IN POST OFFICE
- REALIZE WE ALL HAVE A VESTED INTEREST IN THE OVERALL PROJECT SUCCESS
- WE NEED YOUR SUPPORT WITH A SIGNATURE ENDORSEMENT

NEXT STEPS

- ATTORNEY RETAINED WITH SUBJECT MATTER EXPERTISE ON SEWER DISTRICTING
- WORKING WITH ENGINEERING FIRM TO PERFORM DETAILED ENGINEERING
- ESTABLISH LAKE FOREST SEWER DISTRICT BOARD BY 12/31/19 PER ABATEMENT ORDER ON CONSENT (AOC)
- LOAN APPLICATION SUBMITTED TO MDNR BY 01/31/20
- RECEIVE CONFIRMATION FOR COMPLIANCE DEADLINE OF 12/31/22
- PROJECT COMPLETION BY 12/31/22 AND SUBMIT STATEMENT OF WORK COMPLETED TO MDNR
- UPON PROJECT COMPLETION THE WWTF PLANT AND ASSOCIATED PIPING GET TRANSFERRED AS AN ASSET OVER TO THE GOVERNING SEWER DISTRICT BOARD PER REGULATORY GUIDELINES

WHAT DO WE MEAN BY A SIGNATURE ENDORSEMENT?

- TODAY WE NEED YOUR SIGNATURE ALLOWING US TO FORM OUR OWN SEWER DISTRICT BOARD
- THERE IS A PETITION FOR YOUR SIGNATURE
- THERE WILL BE A PUBLIC ELECTION BY REGISTERED VOTERS ALLOWING US TO INCORPORATE THE DISTRICT (TENTATIVELY NOVEMBER 2019) WE NEED YOU TO VOTE IN FAVOR OF INCORPORATION. THIS ALLOWS US TO MANAGE OUR OWN SEWER DISTRICT BOARD.
- ONCE SEWER DISTRICT BOARD IS INCORPORATED WE NEED TO APPROVE THE TRANSFER OF THE SUBDIVISIONS WASTE WATER TREATMENT ASSETS OVER TO THE SEWER DISTRICT BOARD, TENTATIVELY SCHEDULED FOR MARCH 2020.

ABBREVIATIONS & DEFINITIONS

- AOC : ABATEMENT ORDER ON CONSENT
- FAQ : FREQUENTLY ASKED QUESTIONS
- MDNR : MISSOURI DEPARTMENT OF NATURAL RESOURCES
- O&M : OPERATING AND MAINTENANCE COSTS
- WWTF : WASTE WATER TREATMENT FACILITY
- EFFLUENT: THE WATER THAT EVENTUALLY LEAVES OUR PROPERTY AS A PERMITTED DISCHARGE FROM THE WWTF
- SBR : SEQUENCE BATCHED REACTOR