



Energy Efficiency Assessment for Small Water Systems

Responses in grey areas indicate potential for gains in energy efficiency

1. LOW-LIFT PUMPS

- A. Do you have low-lift pumps?
- B. If yes, do you have variable speed control on the pumps?
- C. If yes, are your low-lift pumps equipped with premium efficiency motors?

Yes	No

2. HIGH-LIFT PUMPS

- A. Do you have high-lift pumps?
- B. If yes, do you operate your high-lift pumps mainly during off-peak hours?
- C. If yes, do you utilize storage as a way to minimize pumping during peak hours?
- D. If yes, do you have variable speed control on the pumps?
- E. If yes, are your high-lift pumps equipped with premium efficiency motors?

Yes	No

3. FLOCCULATION/COAGULATION

- A. Do you currently have mixers?
- B. If yes, do you currently have 2-speed motors or VFDs on your mixers?
- C. If yes, are mixers currently equipped with premium efficiency motors?

Yes	No

4. FILTRATION/ DISSOLVED AIR FLOTATION

- A. Do you have filter backwash pumps?
- B. If yes, do you backwash filters based on filter performance?
- C. If yes, do minimize backwash pumping with elevated tanks?
- D. If yes, are your backwash pumps premium efficiency motors?
- E. Do you use dissolved air flotation for solids separation?
- F. If yes, are your blowers/compressors premium efficiency motors?

Yes	No

5. DISINFECTION

- A. Do you currently use an ultraviolet disinfection system?
- B. If yes, does the UV system utilize low-pressure, high-output lamps?
- C. If yes, is the UV system operated via flow-pacing and/or dosing setpoint?
- D. Does your plant currently use ozone as a disinfectant?

Yes	No

7. FACILITY

- A. Has your plant had any energy efficiency improvements in the last 5 years?
- B. If yes, have you switched to more efficient lighting?
- C. If yes, have you done any load shedding and/or off-peak load shifting?
- D. If yes, have you installed new or improved HVAC equipment?
- E. Are energy efficiency measures included with future improvement plans?

Yes	No

8. ADDITIONAL COMMENTS & INFORMATION

9. PRIORITY AREAS FOR POTENTIAL ENERGY EFFICIENCY GAINS

Efficiency Project	Estimated Project Cost	Potential Savings/Year	Payback Period

10. FUNDING MECHANISMS