

# 2021 KWWOA CONFERENCE AWARDS

Outstanding Drinking Water System Operations: [Hopkinsville Moss Drinking Water Treatment Plant](#)



The Moss Water Treatment Plant is located on the northeast side of the City of Hopkinsville, on Metcalfe Lane and is named after the previous General Manager of HWEA, McKenzie Moss. Construction of the plant began in 1995 and the plant went online producing water in May 1997. In 2012 the plant was expanded and renovated. Currently the plant has a design capacity of 15 million gallons per day. The treatment plant serves drinking water to Hopkinsville, Pembroke, Crofton and the Christian County Water District. The plant processes raw water from Lake Barkley in a 27mile pipeline to Hopkinsville. HWEA also maintains a separate raw water supply at its North Quarry. The Lake Barkley raw water intake and pipeline has a capacity of 20 MGD, projected to meet the needs of Hopkinsville - Christian County over the next 50 years.

Listed below are the stages of treatment:

1. Coagulation: Raw water treated with aluminum sulphate, carbon, potassium permanganate, and chlorine flows through a static mixer vault so that larger solids can form for the settling process.

2. Clarification: Treated water passes through while the sludge blanket and solids begin to settle out.
3. Filtration: Remaining solids are filtered out using dual media filters (anthracite and sand).
4. Disinfection: Filtered water is chlorinated and fluoridated before leaving the plant.
5. Corrosion control: Treated water is dosed with caustic soda and polyphosphate to reduce corrosivity.

Water quality monitoring is an important part of the treatment process. Parameters such as pH, turbidity, and free and total chlorine are checked through the plant every 4 hours. Hardness, alkalinity, iron, manganese, and fluoride levels are checked daily on the raw and finished water. Bacteriological monitoring, which consists of 50 samples a month taken on the distribution system as well as numerous process control samples, is performed on-site in our state certified bacteriological laboratory.

### **Outstanding Waste Water System Operations: [Glasgow Water Co Waste Water Treatment Plant](#)**



The WWTP has a design biological capacity of 4MGD and a Hydraulic Capacity of Clarifiers around 14 MGD, with extra storage in an Equalization Basin. The plant is operated M-F from 7:00-3:30 and 4 hrs. on the weekend. SCADA is built in with alarms that alert the operators if failure occur.

The WWTP was built in 1962 with upgrades in 1977,1995, 2011, 2015, and 2016. The headworks consist of 2 Parkson Aqua Guard Perforated Plate Screens with a smith and loveless Pista Grit unit. The INF

station consist of two 83hp and two 35hp Flyt Submersible pumps (2015). The plant consists of 7 aeration tanks all tied into manifold coming from the RAS, EQ, and INF lines. The aeration is measured with D.O & ORPS probes to drive the VFD's tied into 200hp electric motors coupled to Multistage Centrifugal Blowers. The flow goes from the aeration tanks to two newly constructed (2015)1 MGD Circular Clarifiers. We have 4 Gorman Rupp RAS pumps and 2 Vogelsang WAS Pumps that pull from a flooded suction wet-well located between the clarifiers. The effluent flow is disinfected with Peracetic Acid. If a heavy rainfall event occurs the plant is equipped with a 7MGD EQ Basin. The plant runs off the city electric but also has electric switch gear which is tied into another electric company and a methane powered generator. The plant is lab certified and runs all KPDES samples except for the WET Testing. Most of the equipment at the WWTP is tied into a SCADA system along with a camera system that covers the property. The plant employees attend many trainings and the state school annually. The WWTP is ran by 5 Class 4 WWTP operators, 3 Full Time /2 Part Timers. The plant also has 3 Class 1 ABC Lab Certified Analyst.

### **J.C. Chambers Award**

Any person being nominated for this award must be a member of the KWWOA in good standing with ten years or more of professional involvement in the water industry, must have demonstrated a commitment to the improvement of the management and technical progression of operations, maintenance and/or water quality.

**J. C. Chambers Award Winner:** [Adam Headrick](#)



Class IV WW Operator & Class 1 ABC Lab Certified

Graduate from Barren County High School in 2008

He has assisted with the CKWVOA Scramble and other trainings with his coworkers in the past. He has been active in attending trainings the KWVOA has offered in the past and thinks highly of the organization.

Adam is Class 1 Lab Certificated and a Class 4 WW Operator at the WWTP. He completes and keeps records of all the plant equipment maintenance at the WWTP. He helps in the Certified Lab when needed and completes the ongoing monthly audits in the lab. He gets rounds at the plant daily checking on pumps, recording flows, inspecting chemical feed systems, observes wet-well conditions and changes out flow charts. Adam is not bound to just these tasks, he can also run the press to waste solids, operate the skid steerer or backhoe if needed and he helps keep the grounds up during the growing season.

## Eugene Nicholas Award

Any person being nominated for this award must be a member of the KWVOA in good standing with ten years or more of professional involvement in the water industry, must have demonstrated a commitment to the improvement of the management and technical progression of operations, maintenance and/or water quality, with the emphasis/involvement being on the advancement of water and/or wastewater operator education.

**Eugene Nicholas Award:** [Kevin Shaw](#)



Kevin is the current District Manager for the Grayson County Water District

Kevin started his career off as a WW Operator in a small system. He currently holds a Class IIIA Distribution and Class IIIA Treatment Drinking Water License. He has worn many hats in his nearly 40 year career which has given him the knowledge and experience that he passes down to operators and

co-workers every day. He has served on the Central Chapter and KWWOA boards, he also has helped with trainings and golf scrambles for many years. Kevin was a big part of making the State Conference what it is today. Kevin is supportive in encouraging his employees to be active members at the chapter and state level KWWOA.

## Earl T. Mitchell Award

Any person being nominated for this award must be a member of the KWWOA in good standing with ten years or more of professional involvement in the water industry, must have demonstrated a commitment to the improvement of the management and technical progression of operations, maintenance and/or water quality

**Earl T. Mitchell Award:**     [Jason Tubb](#)



Jason is currently the Distribution Supervisor for Grayson County Water District

Jason is always there to support anything going on in Grayson County that involves the Central chapter and has attended the state conference for many years and is always willing to help with anything during the conference.

Jason holds a Class IIIA Drinking Water Distribution license. Jason manages the work duties of 3 people in a distribution system that consist of over 600 miles of watermain. He also tracks inventory, construction schedules, and work schedules for the distribution system. Jason works hand in hand with the Water Treatment Plant to allow Grayson County Water District to provide a high-quality drinking water to its customers.