

**Waste Water Advisory Council- Drinking Water Advisory Council
Joint Meeting
Amended Draft Meeting Agenda
December 11, 2018, 10 a.m. – 12 p.m. EST
300 Sower Boulevard, Training Room C
Frankfort, Kentucky**

- Introductions and Welcome Division of Water Assistant Director (Carey Johnson)
- Announcements
- Review Agenda
- Joint WWAC & DWAC Sep 2018 Meeting Minutes
- Sub-committees Assignments & Action Items
 - WWAC
 - Nutrients (Brian Bingham)
 - Small Systems (Gary Larimore)
 - Compliance (Sarah Gaddis)
 - DWAC
 - Compliance/Regulations (Kim Padgett)
 - Source Water Protection (Jack Stickney)
 - Joint Sub- Committee: Water Reuse (Annette DuPont-Ewing)
 - Joint Sub- Committee: Infrastructure Sustainability (Donna McNeil)
 - Joint Sub- Committee: Operator Recruiting & Development (Amanda LeFevre)
 - Sub-committee assignments
- HUB Utility discussion (Tim Kraus)
- Discussion to implement new sub-committee for Water Loss
 - Water Loss discussion from AWWA position (Greg Heitzman)
- DOW Reorganization (Peter Goodmann)
- Lead Testing in School (Peter Goodmann)
- Effluent Exceedance Notification System (Peter Goodmann)
- Triennial Review Regulations (Peter Goodmann)
- PFO & PFOS Sampling ORSANCO (Peter Goodmann)
- Capacity Development Strategy (Jory Becker)
- EPA Inspection Schedule (Sarah Gaddis)
- Reduce Health Base Violations (Sarah Gaddis)
- HMGP Money (Carey Johnson)
- Regulation Update (DOW)
 - Chapter 5 status
 - 401 KAR Chapter 11 Operator Certification Regulation
 - HB 513
 - KRS 151
- Other Issues from Council members & staff
 - OIG report on land application of biosolids (Mike Gardner)
- Public Comments (at discretion of Chair)
- Next meeting- March 12, 2019

MEETING SIGN-IN SHEET

Joint Wastewater & Drinking Water
Advisory Council

Meeting Date: 12/11/18

Place/Room: 300 Sower Blvd - Frankfort

Name (Please Print)	Company	E-Mail
Mary Carol Wagner	Northern KY Water	wagner@kywater.org
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MEETING SIGN-IN SHEET

Joint Wastewater & Drinking Water
Advisory Council

Meeting Date: 12/11/18

Place/Room: 300 Sower Blvd - Frankfort

Name (Please Print)	Company	E-Mail
Robin Strader	KWOWA	robin.strader@leitchfield.org
Larry Taylor	DEP-Co	Larry.c.taylor@ky.gov
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PENGAO Song	LWC	RSong@lucky.com
Miah Sene	Strand/ACTE	Miah.sene@strand.com

**Waste Water Advisory Council- Drinking Water Advisory Council
Joint Meeting
Draft Meeting Minutes
September 11, 2018, 10 a.m. – 12 p.m. ET
300 Sower Boulevard, Training Room C
Frankfort, Kentucky**

- **Attendees:** Brian Bingham(MSD), Joe Burns(KRWA), Jennifer Burt(DPH), Claude Carothers(DOW), Daniel Cleveland(OLS), Rusty Cress(Dinsmore), John Dix(WCWD), Annette Dupont-Ewing(KMUA), Josh Gabbard(BMU), Sarah Gaddis(DOW), Mike Gardner(BGMU), Greg Goode(DOW), Peter Goodman(DOW), Tammi Hudson(DOW), Arianna Lageman(KRWA), Valerie Lucas(KY-TNWEA), Melissa Melton(RCAP), David Moore(PPC), Russell Neal(DOW), Kim Padgett(RCAP), Jason Pennell(KRWA), Todd Powers(DOW), Jackie Quarles(OLS), Roger Recktenwald(KACO), Brian Rice(PSC), Russ Romine(ACEC), Julie Roney(KWVOA), Floyd Schanz(PPC), Mark Sneve(ACEC), Jack Stickney(KRWA), Joe Uliasz(DOW), Mary Carol Wagner(NKWD), John Webb(DOW), Mike West(OLS), Tony Wilder(ADD's)
- **Call to Order:** The meeting called to order by Peter Goodman
- **Announcements**
 - 2019 KY/TN Water Professionals Conference - Louisville, KY 08/18/19 – 08/21/19
 - DOW Reorganization
 - Water Infrastructure Work Group
 - Presented to IJC on Energy and Natural Resources
 - Anticipate legislation (resolution)
 - probably begin work in April on a defined scheduled
- **Review Agenda:**
- **Joint WWAC & DWAC June 2018 Meeting Minutes:** Approved by consensus
- **Sub-committees Assignments & Action Items**
 - **WWAC**
 - **Nutrients** (Brian Bingham, Mark Sneve, Pete Goodman)
 - Iowa Model presentation and path forward
 - It was determined that a workgroup will be formed to address nutrients
 - **Small Systems** (Gary Larimore) No Current Report
 - **Compliance** (Sarah Gaddis) The Wastewater Compliance Subcommittee has not met since the last Advisory Council meeting. However, committee members have been communicating via email regarding trainings that we anticipate developing in the near future. Our next meeting is scheduled for October 24.
 - **DWAC**
 - **Compliance/Regulations** (Kim Padgett) No Current Report. The committee will convene on October 23, 2018.
 - **Source Water Protection** (Jack Stickney) No Current Report. The committee's next meeting will take place in early October.
 - **Joint Sub- Committee: Water Reuse** (Valerie Lucas)
 - A 3-minute video was presented about the Oregon Pure Brew Challenge and how it has helped spark a conversation about our most precious resource, water. You can learn more at <https://www.youtube.com/watch?v=HqkAo5crmVA&t=13s>
 - KY-TN WEA and KY/TN Section AWWA are sponsoring a Water Reuse Pilot Project for the August 2019 Water Professionals Conference in Louisville, KY. Effluent from Floyds Fork will be put through the clean water processes to create a drinking water, direct

potable water resource that will be supplied to local Louisville Breweries to make beer. This is a fun way to begin the conversation that all water is recycled and reused - even the water used to make beer!

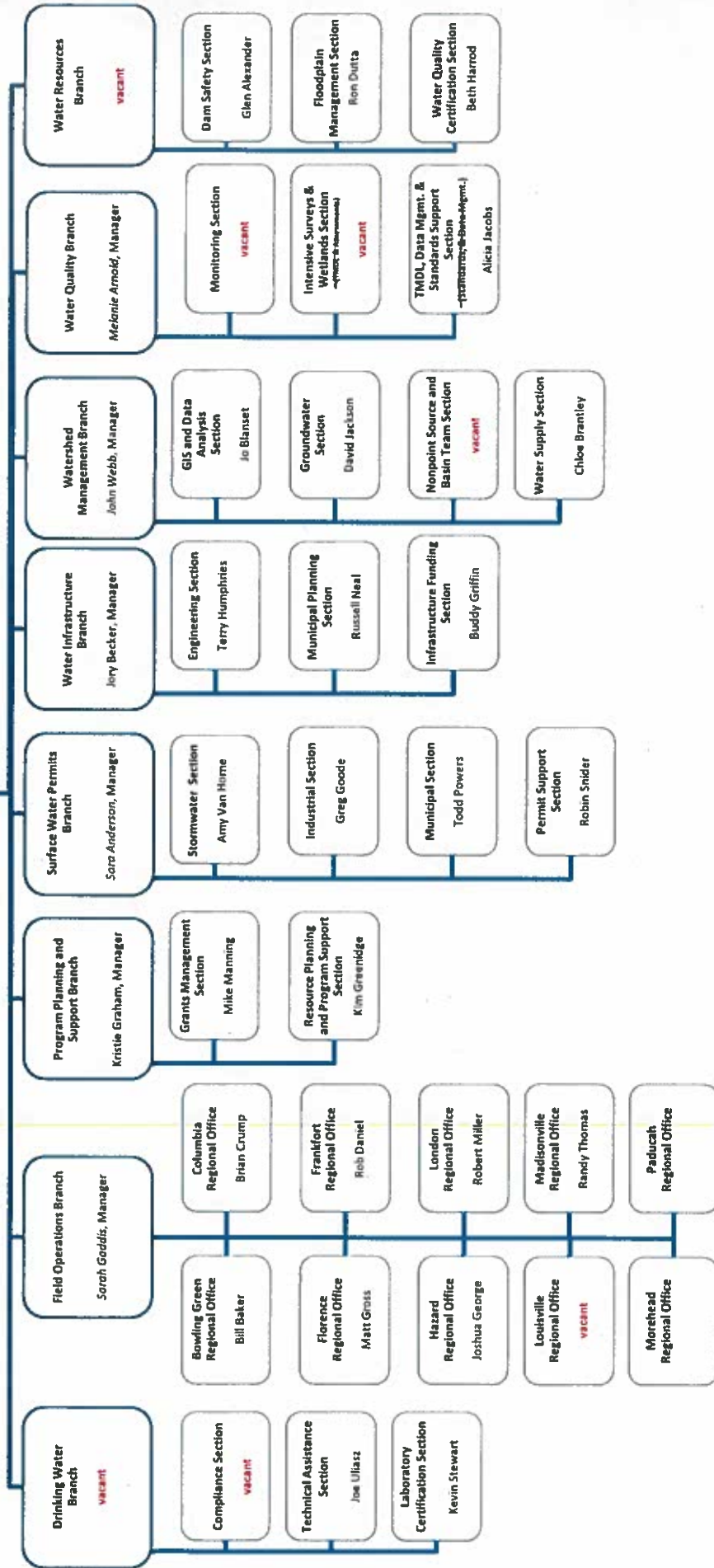
- Louisville MSD and Louisville Water will be providing technical expertise and promoting the project. The University of Louisville Speed School will also be providing technical assistance.
 - This important pilot project is looking for additional sponsors and project supporters.
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- **Joint Sub- Committee: Infrastructure Sustainability (Donna McNeil)** The floor was given to Russell Neal of the Capacity Development Workgroup. The Division has updated the Capacity Development Strategy document. A draft of the document has been completed and is currently being reviewed internally by management. After the internal review is completed, the Strategy document will then be submitted to the workgroup for review and comment; then later presented before the Council. It was also noted by Sarah Gaddis that currently there is an 80% compliance rating in the field. This number is decreasing because of the age of our infrastructure facilities within the state.
 - **Joint Sub- Committee: Operator Recruiting & Development (Melissa Melton)** see attached documentation including power point presentation
 - **Sub-committee assignments** Jack Stickney (Source Water Protection) will reach out to the KADF in reference to being added to the agenda for their November Meeting. Sharing information concerning Nutrients and enlisting representation on the workgroup for nutrients.
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- **Regulation Update (DOW)**
 - Chapter 5 status - The ARRS will hear proposed amendments to the regulations in 401 KAR Chapter 5 this afternoon (Sep 11)
 - **HUB Utility discussion (Tim Kraus, LWC)** Peter Goodman expressed the desire to have Mr. Kraus present at the December Meeting
 - **Other issues from Council members & staff**
 - **Public Comments (at discretion of Chair): none**
 - **Next meeting- December 11, 2018**
 - **Meeting Adjourned 12:23**



DIVISION OF WATER

300 Sower Boulevard, Frankfort, KY 40601
Phone: 502.564.3410

Peter Goodmann, Director
Carey Johnson, Assistant Director
Claude Carothers, Admin
Tammi Hudson, Consultant Sr.



Drinking Water Advisory Council - Source Water Protection Sub-committee
Meeting Agenda
October 3, 2018, 10am-12pm
300 Sower Boulevard, Room 314
Frankfort, Kentucky

- Introduction
- Announcements
- Review Agenda
- March 1, 2018 Meeting Minutes-comments or corrections
- Dr. Stuart Foster (Ky. State Climatologist) will be presenting an update on development of the Kentucky Drought Early Warning System (DEWS) project.
- General Issues- on going

Source Water Protection Plans, PWS all?

Agriculture & Utilities, critical need to foster working relationships.

Source water monitoring

- Existing data from DOW, USCOE, USGS, EPA, ORSANCO, KGS
- Identify priority monitoring areas/reaches to benefit multiple systems
- Funding and resources to conduct monitoring

Secondary sources, interconnects and the testing, evaluating and authorizing emergency sources.

SWP Sub-Committee

Wednesday October 3rd, 2018

10:00 am

- Introductions
- Water shortage response plan & relevance in SWP planning
- Need for more utility involvement in work group
- Dr. Stuart Foster – KY State Climatologist presents on KY Drought Early Warning System (DEWS)
 - National Integrated Drought Information System (NIDIS) funded this project
 - What is a Drought Early Warning System (DEWS)?
 - NIDIS has 9 Regional Drought Early Warning Systems across US
 - Progression of drought
 - Impact on public water suppliers and agriculture industry
 - What do utilities do in a drought situation?
 - What customers get cut first? Based on need for supply. Golf courses, car washed, etc.
 - Does ag get cut off if connected to city water supply?
 - Need to prepare ahead of time in these circumstances.
 - Need back up source
 - Dimensions of drought in space and time
 - How to detect a drought
 - Difficult hazard to predict, identify, and monitor
 - Historic Drought
 - Not as bad of drought in KY in a long time
 - Correlation between heat wave and drought
 - Case study: WKY
 - KY is currently in a “wet period” since 2012
 - Building the DEWS – 4 components
 - Data Collection
 - Information Extraction
 - Messaging component
 - Building stronger communication
 - Keys to Success: Finding Balance
 - What information from all levels can be useful for the public?
 - A work in progress and feedback is encouraged as this program develops
- Water suppliers should know of these resources that are available to them
 - Example – Mesonet site and data
 - Are mesonet locations in close proximity to WTPs?
 - 70 stations in 68 counties
 - Need for information sharing/webinars with water suppliers, extension agencies, and ag groups that could utilize this information and resources
- What are the requirements to be involved in the mesonet program?
 - Match program between WKU and partnering group(s) (county, water supplier, etc) to set up a station
- Data and information sharing capabilities for already existing systems in a county (rain gage vs mesonet)

- QA/QC concerns
- Data generated by individual utilities can be used on a broad statewide scale
 - How do we get this useful information out to others in the state?
- How can local government and PWS utilize mesonet data?
- Encourage local governments to organize water resource/environmental/source water protection workgroups
 - Already existing groups – get them all to the table to discuss and create partnerships
 - Utilities, farmers, extension agents, fiscal courts
- DOW is currently working with DCA to develop a training program for operators on how to complete a CCR and SWPPs
 - Could incorporate how utilities can better educate the public
 - Good outreach possibilities/how to make it relevant to average customer
 - Increase education level and increase public interest in SWP
- Collaboration in Source water protection planning and ag community

- Closing statements
 - Next meeting in 6 months – early march
 - Goal to meet twice a year
 - Include more utility folks in upcoming meetings
 - Next meeting – tie down major swp issues and prioritize/rank

Kentucky Drought Early Warning System

Project Overview

Water is a valuable and normally abundant resource in Kentucky. However, extended periods of dry weather, often accompanied by summer heat waves, lead to periodic droughts that create adverse economic, environmental, and public health impacts. Kentucky's most recently experienced severe drought conditions in 2012, but significant droughts have occurred in nearly every decade. Improved monitoring, analysis, and communication can provide early indication of developing drought conditions, enabling managers in water-sensitive sectors to be pro-active as the threat of a water shortage grows. With support of NOAA's National Integrated Drought Information System (NIDIS), the Kentucky Climate Center at Western Kentucky University is leading an effort to develop the Kentucky Drought Early Warning System (DEWS). This project involves four components:

- **Soil Monitoring** – Soil moisture and temperature probes will be installed at an additional 10 Kentucky Mesonet stations.
- **Data Visualization and Analysis** – An interactive data visualization and analysis dashboard will be developed that integrates data from the Kentucky Mesonet and US Geological Survey, along with a drought impact reporter being developed by the Kentucky Division of Water, to enable users to explore and analyze drought indicator and impact data.
- **Targeted Engagement with Managers and Responders** – A webinar series will be launched to provide regular updates on hydrologic conditions and impacts, highlighting both drought and extreme precipitation, and to facilitate ongoing communication with managers in water-sensitive sectors.
- **Public Messaging via Information Graphics** – Static and interactive information graphics will be developed to highlight drought status and summarize drought episodes.

The Kentucky Climate Center, in partnership with NIDIS, the National Drought Mitigation Center, and the Kentucky Division of Water, will hold a kickoff meeting on Thursday, September 6th, in Frankfort, Kentucky. The purpose of the meeting is to build a professional support network and engage participants from a broad range of water-sensitive industries and agencies to help define the functional requirements for the Kentucky DEWS. Registration information for the meeting is forthcoming.

For more information, contact Stuart Foster (Email: stuart.foster@wku.edu | Office: 270.745.5983)



Source Water Protection Sub-Committee meeting
Frankfort, Kentucky
Registration Sheet

Meeting Location EBC Building room 314.

Date and Time October 3, 2018 10:00 AM

NAME (print)	EMAIL	TITLE/POSITION	SYSTEM/AGENCY NAME
Allan Singleton	allan.singleton@ky.gov	Geologist	DOW
Jack Stickney	j.stickney@KRWQA.org	Source Water Protection Specialist	KRWQA
Steve Coleman	soil1951@yahoo.com	Water Management WorkGroup	LEFEB
Stu Foster	stuart.foster@wku.edu	State Climatologist	WKU/KCC
Russ Rose	RRose@OSHAMCOUNTYWATER.COM	CEO	OSHAM COUNTY WATER
Dorothy Rader	dorothy.rader@amwater.com	WQA Manager	Kentucky American Water
Mary Carol Wagner	wagner@nkywater.org	Water Quality Manager	Northern KY Water
Melissa A Melton	mam@noky.org	Technical Assistance Provider	RCAP
Chise Brantley	chise.brantley@ky.gov	ENV. COURTS SUPERVISOR	KY Division of Water
Rob Blair	robert.blair@ky.gov	Env. Scientist	DOW
Chip Zimmer	edward.zimmer@ky.gov	Env Scientist	DOW
Frank Lee	frank.lee@uky.edu	Professor	UK

HONORABLE MENTIONS

PROGRAM: KENTUCKY SRF

RECIPIENT: LINCOLN COUNTY SANITATION DISTRICT

PROJECT: JUNCTION CITY TO HUSTONVILLE SEWER

Located in central Kentucky, Lincoln County constructed a sanitary sewage system to service 535 previously unsewered residential and 50 previously unsewered commercial customers. This new collection system was a critical upgrade because it replaced 223 failing septic tanks, 101 straight pipes, and 2 package treatment plants that resulted in the direct discharge of raw sewage. This raw sewage was a direct public health issue with documented findings of pathogens and E. coli contaminations in local waterbodies. Additionally, an elementary school in the area retired an inadequate sewage treatment package plant, which meant the school cafeteria's dishwashers could no longer be used due to the capacity overload. Instead, meals were served on styrofoam trays with plastic utensils at a large cost to the school district. These problems were mitigated with the new conveyance system, which was made possible through the collaboration of many supporting partners including the Kentucky Infrastructure Authority CWSRF who provided over \$4 million in financing towards the overall project costs.

PROGRAM: MAINE SRF

RECIPIENT: LEWISTON-AUBURN WPC AUTHORITY

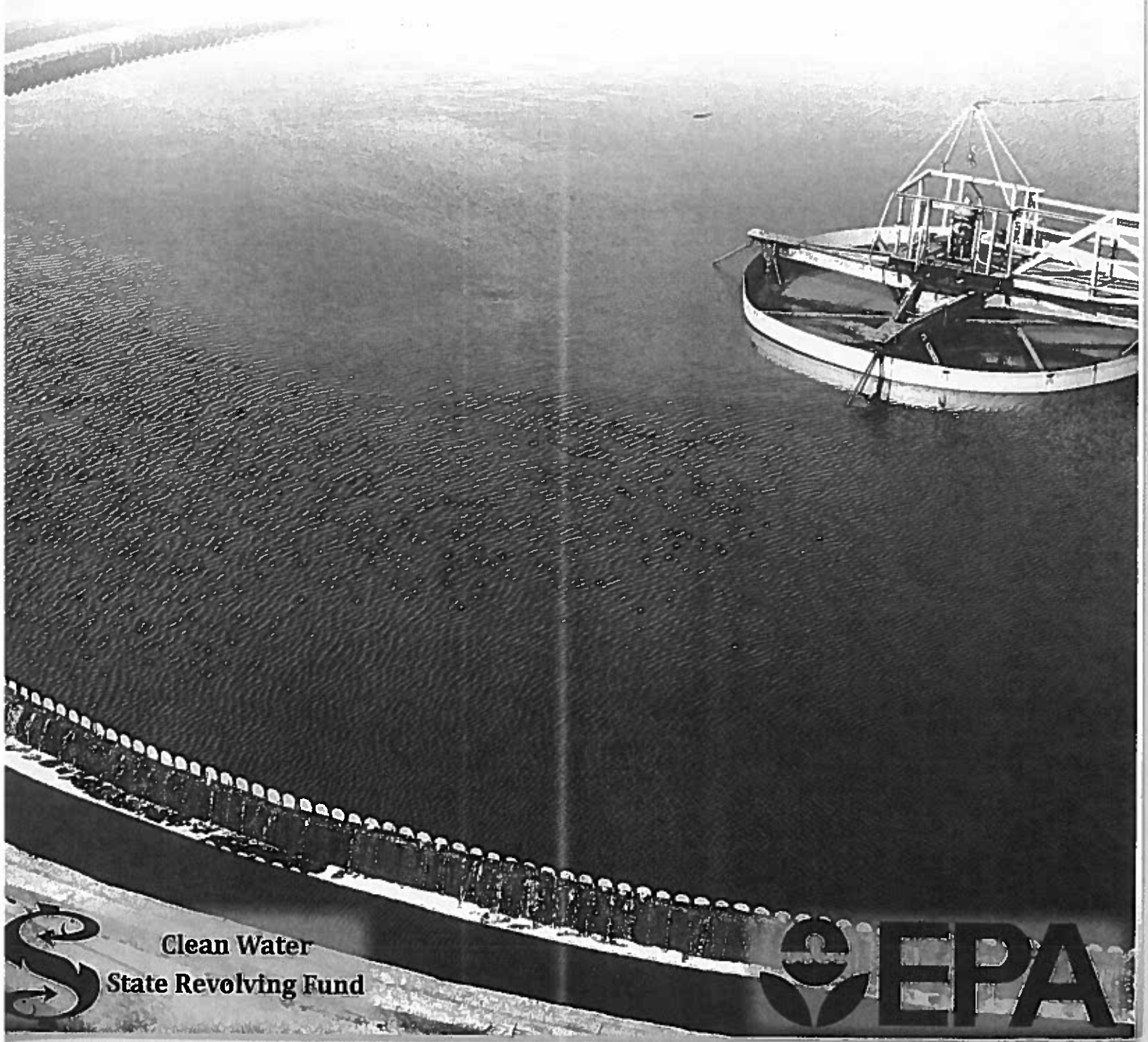
PROJECT: ANAEROBIC DIGESTION & COGENERATION

The Lewiston-Auburn Water Pollution Control Authority (LAWPCA) needed new options for disposal of their biosolids due to rising costs for application to farm fields. LAWPCA received a one percent interest SRF loan to construct an anaerobic digestion facility to reduce their biosolids capacity. The project had the added benefit of producing significant amounts of electricity, which is used to power the water reclamation facility. The project's two 230-kilowatt biogas cogeneration engines produce an average of 200,000-kilowatt hours per month and have gone as high 380,000-kilowatt hours in some months. This self-generated power significantly reduces the facility's energy costs, and the low interest rate financing made this project affordable. LAWPCA turned a problem into a success by converting their biosolid disposal issue into a process that now produces energy for the facility without raising rates for their community.



PISCES
Recognition Program

2018
Compendium



 Clean Water
State Revolving Fund

 EPA