contamination, and more.

Scott Pruitt is known as a top challenger of President Obama's environmental agenda – and specifically is at the forefront of lawsuits challenging EPA regulations on carbon emissions and water pollution. Pruitt has been a leading critic of the aforementioned Clean Water Rule. He also is a leading critic of climate change.

Pruitt began his career as a private lawyer before spending 8 years in the Oklahoma Senate where he served as GOP whip and assistant floor leader at different times during his tenure.

Congressional changes

Also, over the next several months, congressional committee chairmanships and memberships will be assigned. For the water sector, key committees in the House include

- the Committee on Appropriations (specifically, the Energy and Water Development and the Interior and Environment Subcommittees),
- the Natural Resources Committee, and
- the Transportation and Infrastructure Committee (specifically, the Water Resources and Environment Subcommittee).

Rep. Bob Gibbs (R-OH) is term-limited as the chairman of the Water Resources Subcommittee. His replacement will be made in the coming months to lead what is expected to be a busy legislative agenda for the subcommittee in 2017.

The key Senate committees include

- the Committee on Appropriations (specifically, the Energy and Water Development Subcommittee and the Interior and Environment Subcommittee),
- the Energy and Natural Resources Committee, and
- the Environment and Public Works Committee.

Sen. Jim Inhofe (R-OK) also is term-limited and is stepping down as chairman of the Environment and Public Works Committee. He is likely to be replaced by Sen. John Barrasso (R-WY).

Sen. Barbara Boxer (D-CA), the ranking member is retiring and potential replacements include Sen. Tom Carper (D-DE), Sen. Ben Cardin (D-MD), and Sen. Sheldon Whitehouse (D-RI).

Transition communication

On Dec. 7, WEF sent a letter to President-Elect Donald Trump providing recommendations for water sector priorities for the next administration. Specifically, WEF addressed water sector challenges related to aging water infrastructure, research and development, workforce development, stormwater, affordability, and resource recovery and the energy–water nexus. In the letter WEF pledged to provide reliable and expert input to the next administration to help solve the nation's water challenges.

Read the letter at www.wef.org/advocacy/legislative-affairs.

– Amy Kathman, Steve Dye, and Claudio Ternieden, *WE&T*

Engage with your newly elected leaders

Water Advocates

Join the WEF Water Advocate program to form a network of water professionals in every state and community, in every congressional district, to get the word out about the value of water and steps needed to protect it. Visit www.wef.org/water-advocates.

2017 National Water Policy Forum

Participate in the 2017 National Water Policy Forum, Fly-in, and Expo on March 21 and 22, in Washington, D.C. Held in conjunction with Water Week, this event attracts water professionals from across the U.S. to hear congressional speakers, attend policy briefings, visit Capitol Hill, and participate in roundtable dialogues with key policymakers and experts on important regulatory and policy matters. Visit www.wef.org/waterweek.

EPA to survey WRRFs about nutrient practices

Baseline data on nutrient removal would help set more realistic and achievable reduction targets

The U.S. Environmental Protection Agency (EPA) is initiating a national study focused on nutrient removal and secondary technologies at water resource recovery facilities (WRRFs). The goals of EPA's multiyear, multiphase study are to establish a statistically representative, nationwide baseline for nutrient discharge and removal and to characterize operation and management practices that result in improved nutrient reduction.

As a first stage of this study, EPA will collect basic information from all facilities nationwide through a voluntary questionnaire, to be sent out later this year. Making the questionnaire voluntary is a change from the agency's earlier plans

to make the questionnaire mandatory. According to EPA, the collected data will be used to identify statistically representative types of treatment trains at WRRFs in parts of the country where temperature and other influent characteristics are expected to change the percentage of total nitrogen and total phosphorus removed by the facilities.

"The questionnaire will ask for basic facility information that is not currently available in other databases, but should not require facilities to collect additional data," said EPA spokesperson Monica Lee. "The information will be used to generate a comprehensive and nearly complete population of publicly owned treatment works (POTWs) not found in any other database."

EPA then will use the questionnaire responses to focus on collecting more detailed information from a subset of facilities of different sizes in different geographic regions, including facilities that have optimized procedures for nutrient removal. Eventually, the agency plans to collect paired influent and effluent samples from a representative subset of facilities to understand nutrient removal at optimized and unoptimized WRRFs.

In some areas of the U.S., according to EPA, it has been shown that nutrient reductions can be achieved without major capital investments, but rather by optimizing operations and maintenance. "In order to provide states and utilities with enough information to adopt these practices more widely, baseline information is needed on nutrient removal at secondary treatment plants across varying geographic regions and treatment trains with and without optimized operations and maintenance," Lee said.

EPA envisions that many other entities would benefit from the information collected from both the basic questionnaire and the more detailed phases of the study.

"For example, POTWs could use the information for peer-to-peer mentoring and sharing best practices for nutrient removal within the industry," Lee said. "State permitting authorities can use estimated nutrient loads from POTWs when developing accurate TMDLs [total maximum daily loads] or watershed plans, including point and nonpoint source tradeoff analyses."

Additionally, federal agencies can use baseline nutrient loads for modeling to inform and enhance river basin plans, while academics and contractors can use the information to identify good candidate facilities for optimization and site-specific studies, Lee said.

A lack of data

EPA's long-term study is anticipated to help fill a void related to the lack of available nationwide data on nutrient control practices at WRRFs. Currently, when developing waterbody and watershed plans, regulatory entities rely on estimates from WRRFs in terms of nutrient removal capabilities as well as the overall contribution of nutrients to U.S. waters from these facilities. However, according to EPA, estimates on nutrient discharges are outdated – by as many as 50 years in some cases – and often were provided before facilities integrated the process controls that many use today.

"Moreover, these estimates do not reflect variable attributes such as differential plant loadings or temperature effects," Lee said.

Current databases that are available

How can WRRFs get more involved?

EPA encourages all WRRFs to participate by responding to the questionnaire when it is sent out later this year.

In developing the questionnaire, EPA is working with the Water Environment Federation (Alexandria, Va.), the Water Environment & Reuse Foundation (Alexandria, Va.), the National Association of Clean Water Agencies (Washington, D.C.), the National Rural Water Association (Duncan, Okla.), the Association of Clean Water Administrators (Washington, D.C.), and the Environmental Council of States (Washington, D.C.). WRRFs interested in getting involved with questionnaire development can work through one of these associations and can also consult the study website at www.epa.gov/eg/national-study-nutrient-removal-and-secondary-technologies#webinars.

Here are some additional ways to ensure EPA develops a meaningful and useful questionnaire, and administers it successfully.

EPA published its current list of facilities in the Sept. 19 *Federal Register* notice for the draft questionnaire. Although the public comment period for the notice has closed, this list is available in the docket for the notice at www.regulations.gov, Docket Number EPA-HQ-OW-2016-0404. WRRF employees can ensure their facility, and any other facilities with which they are familiar, are on the mailing list with accurate address information.

Before the questionnaire is administered, EPA will reach out to facilities and will host a series of webinars to walk through the questionnaire and its format, which is intended to be electronic.

After it addresses any concerns, EPA will send the questionnaire to facilities, most likely in the second half of 2017. Responding to the questionnaire accurately, and encouraging peers to participate, is the best way to ensure that EPA collects useful information.

– Jeff Gunderson, *WE&T*

– such as EPA's Integrated Compliance Information System database and the Clean Watersheds Needs Survey database – do not contain the level of detail on treatment processes or coverage of small- and medium-sized plants needed to develop a baseline of nutrient removal capabilities, Lee said. "For example, basic nutrient discharge information and paired influent and effluent data from POTWs with secondary treatment are generally not available in any database."

Claudio Ternieden, director of government affairs at the Water Environment Federation (Alexandria, Va.), said EPA's survey would provide the needed statistically representative data for determining how far nutrient control limits could be reasonably pushed. "The EPA is lacking thoroughly in concrete data as to the technology performance that currently exists at secondary facilities for removing nutrients," Ternieden said. "Comprehensive data at this level would effectively provide an understanding of what facilities can realistically be expected to accomplish."

Importantly, this information could enable EPA to determine if a facility is doing everything it can, given the resources and technology available to it, Ternieden said. "Ultimately, this would help establish goals within a permit that are achievable."

– Jeff Gunderson, *WE&T*

Nutrients in Illinois

Loss reduction through stakeholder planning

Nathan Davis

It's no secret that excess nutrients within natural aquatic systems are an on-going concern across the country. This is especially true in the Mississippi River Basin and requires action from multiple states.

Illinois has recognized the importance of managing nutrients to mitigate the potential on local and national water quality, and has undertaken efforts over the last decade to control the loss of nitrate–nitrogen and total phosphorus into Illinois waterbodies. These efforts have led to comprehensive state nutrient loss reduction strategy that includes two new special conditions for some Illinois facilities to complete.

Illinois efforts and accomplishments to date

Illinois has adopted numerical water quality criteria for total phosphorus for lakes and a narrative standard to prevent discharges from causing unnatural plant and algae growth within streams. In addition, Illinois adopted numerical effluent phosphorus limitations for all discharges from point sources to lakes, and effluent limitations for all water resource recovery facilities (WRRFs) with flows greater than 3785 m^3/d (1 mgd) that undergo an expansion.

Illinois has also seen many volunteer planning efforts within specific watersheds. These efforts typically are comprised of clean water utilities, environmentalists, and water quality experts who work together to identify water quality issues and needs basinwide. These efforts have a history of successfully prioritizing projects based upon the maximum benefits provided per finding utilized. Recognizing this fact, the

Maximizing the use of existing wastewater treatment structures is a consideration when addressing phosphorus requirements. In Salem, Ill., an existing tank was elevated and repurposed as an anaerobic reactor. CMT