



Minutes

May 3, 2024

Nut Island Headworks

Attendees:

WAC Members: **Kannan Vembu** (Chair), Dan Winograd (Vice Chair), **Adriana Cillo** (BWSC), Craig Allen, Wayne Chouinard, George Atallah, **Karen Lachmayr**, **Martin Pillsbury**, Stephen Greene, **Taber Keally** (NepRWA), **Alfredo Vargas**, Jim Ferrara, Christine Bennett (Members in attendance in **bold**)

Guests: Wendy Leo, Sally Carrol, Lucner Charlestra, Tori MacMullin (MWRA), Moussa Siri (WSCAC).

Tour hosts: Charles Ryan, director of wastewater operations; John Flaherty, area supervisor for Nut Island HW

Staff: Andreae Downs

VOTES: March 3 minutes,

Discussion of comment letter on the PFAS Act, H. 4486: Members supported in principle, but asked that figures cited on MWRA biosolid production, how much is land-applied in and outside of the Commonwealth, and the financial & environmental cost to land-apply vs. landfill, incineration, be firmed up and updated.

MWRA Update—Wendy Leo: noted retirement of Betsy Reilley (July), two promotions (Kimberly LeBeau for drinking water; David Wu for wastewater quality) to replace her. John Parkhurst hired as wastewater operations manager.

A variance update is due in August, which will trigger a new CSO plan for the variance waters.

The Boston Harbor court case and CSO plan required Annual Report was just finalized (and sent to WAC members).

Deer Island clarifier rehab, mostly concrete and coatings, is about to begin. This is a very expensive project.

WSCAC Update— Learning about new PFAS rules; new Lead & Copper rule.

DIRECTOR'S REPORT: Mostly covered in writing to the WAC. Highlighted CSO hearings (mostly attended by CRWA and Save the Alewife members), CRWA webinar with Milwaukee Metropolitan Sewerage District director Kevin Shafer, personnel changes at MWRA wastewater-related departments; addition of Christine Bennett to WAC; wipes costing MWRA \$1m/year at Deer Island alone.

TOUR— Charles Ryan welcomed WAC to Nut Island and introduced John Flaherty and Tori MacMullin.

He outlined how headworks remove the grit and floatables from effluent before sending it out to Deer Island for more advanced treatment.

Nut Island has just upgraded its odor control system and is mostly using 10 carbon beds, all now vertical, instead of wet scrubbers (which use corrosive chemicals), although the latter are still available. A wet scrubber caught fire about 8 years ago, setting the odor control upgrades back, and lessons learned include regular tours for the Quincy Fire Department of the headworks area, and hatches that can be accessed from outside.

Odor control is particularly important here because of the park (on top of the works and beyond it), but also because some flow comes from faraway Ashland, and can take a day to arrive at the plant, causing a buildup of hydrogen sulfide. The airflow out of the headworks is continually tested, H₂S levels kept below 1.0 ppm.

Nut Island serves about 800,000 people, processing up to 400 million gallons/day (mgd); Ward Street and Columbus Park headworks treat up to 430 mgd — it all adds up to about 1.3 bgd at Deer Island.

After the grit & floatables are removed, the effluent drops to a shaft and is sent via pipe to Deer Island, where it is pumped up to the plant. The Weymouth Intermediate Pumping Station also sends effluent to Nut Island. There used to be a full treatment plant on the island, but MWRA decided to consolidate advanced treatment on Deer Island.

A return line from Deer Island sends sludge to the former Fore River shipyard, where the pelletizing plant is.

The tour took in the screenings room, conveyer belts, wet and carbon odor control, and stack.