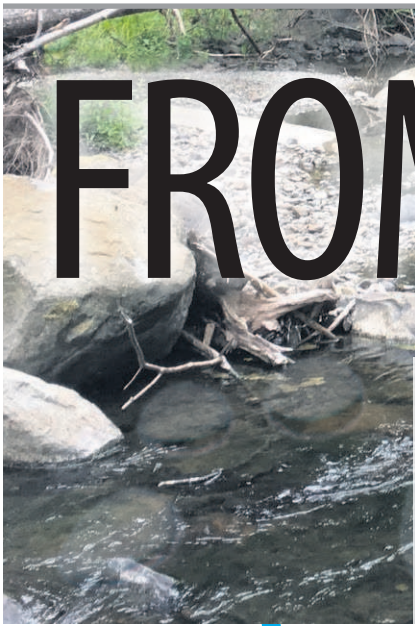


FROM RIVER TO TAP



PHOTOS BY R.J. MARX



Headwaters of the Necanicum, where water is diverted for Seaside's water supply.



Fish diversion at the system's headwaters.



Kevin Nagle inside the diversion building.

Usually, we don't think about it until we lose it. Our most precious resource was brought to mind after 200,000 Salem residents lost fresh water for the month of June because of a potentially toxic algae bloom.

The bloom shut down the Salem water system and led to the delivery of bottled water. It also led to a statewide review of water systems.

Nearly 100 public water systems around Oregon began testing for harmful contaminants from algae blooms under rules unveiled by the Oregon Health Authority on July 1, said Dave Emme, Environmental Public Health Section Manager.

While the state monitors 3,000 water systems, the Health Authority chose only 200 or 300 that use surface water, and of those, applying parameters, narrowed it down to about 100 systems that would be potentially susceptible to algal blooms.

Under the new rules, Seaside and nearly 100 water systems around the state are required to collect samples of the raw water flowing into their treatment facilities every other week and continue testing through October.

Seaside was named to the list because of a mid-July 2009 algal bloom that led the city to send out a notice of "unusually high algae growth in the raw water reservoir at Peterson Point" after identifying a blue-green algae called anabaena that could produce cyanotoxins, Emme said.

The city determined the water supply was back on track the next month.

Seaside already tests for coliform and any other potential contaminants.

If the biweekly tests turn up cyanotoxins above a certain threshold, the city will be required to conduct weekly tests. Water providers would be required to issue "do not drink" advisories if toxins are detected above health guidelines in treated water.

H2O in Seaside

Water department utility worker Kevin Nagle introduced me to the system with a tour of the city's reservoir and source.

I rode shotgun as Nagle took me first up Underhill Road, where you first see the pump station on the road leading up to the Peterson Point reservoir, named for the nearby portion of U.S. Highway 101.

One of seven pump stations, this one feeds treated water to residents of Highway 26.

Up a steep side spur, the reservoir stands as a glittering pond of fresh water, a picture postcard of Seaside's infrastructure. The reservoir is cleaned by a SolarBee, basically a solar-powered paddle wheel that stirs the water and discourages the creation of algae.

Further up the road, adjacent to the water treatment plant, stands an unassuming brick building with a blue metal roof.

Visitors enter by a double door, next to the sign reading "RESTRICTED AREA: Get permission before entering."

The room smells like a big swimming pool, which in a sense it is, with big concrete ponds holding water as it is clarified.

In a computer room, monitors present data on filters, generators, chlorine feeds and flow trends — "the brains of the system," Nagle said.



Seaside's reservoir at Peterson Point.

The processor provides live measurements monitoring multiple aspects of the process: 1,936 gallons per minute flowed while I was there. The reservoir level stood at 186 feet the day I was there, water temperature at a little above 20 degrees Celsius, or 68 degrees Fahrenheit.

The main area of the water treatment plant consists of what looks like a giant swimming pool, accessible by a metal staircase to a second level. Lights overhead illuminate a series of concrete pools with multiple layers of sand and rock. Chlorine and a small amount of fluoride are added before water is sent to a filtering tank.

The filtered water must sit for a certain amount of time before it enters the system and much of the chlorine "cooks off" before it is sent to the city. The piping system is comprised of 43.4 miles of water main of various materials from 2 inches to 2 feet in diameter.

Layers of anthracite both air- and water-clean the filters every three hours in a process called "a rinse," Nagle said, removing unwanted chemicals. Water from the rinse goes into a waste pond, not the water supply.

A backwash cleans the filters once a day.

Back to the source

Our next stop was the water intake source at the headwater diversion site at the South Fork of the Necanicum River, where fresh water is diverted to feed into the Peterson Point reservoir.

In a pristine setting with a lack of development, agriculture or septic systems around it,

"It's Mother Nature at her best," Public Works Director Dale McDowell commented as he introduced the city's Source Water Protection Plan at a July City Council meeting.

Neighboring landowners Lewis & Clark and Weyerhaeuser have "stringent rules for their own property," McDowell said. "Everybody is working together to protect the city."

The city has owned water rights since the 1920s, providing 8.0 cubic feet of water per second or 5.2 million gallons per day.

To get there, Nagle drove to a logging road turn-off another seven or eight miles up Highway 26.

After entering a series of locked gates — squatters sometimes camp in the nearby woods, Nagle said — we arrived at the headwaters where the water split.

The headwaters of the Necanicum are a lonely, beautiful place, the river abundant with fall chinook, Oregon Coast coho, chum and winter steelhead.

During spawning season, the fish are jumping. "There are some huge things," Nagle noted.

Along with separating leaves, sticks and stone before the water is piped downhill, the small diversion house — looks a bit like an Irish cottage — includes a fish bypass. Debris is manually removed by water department workers.

The trip ended back where we started, at the Public Works building on Avenue U.

I got out realizing I would never look at a glass of water the same way.



Kevin Nagle monitors the system at Seaside's water filtration plant.

Staying safe

The Health Authority says it hasn't seen any new detections in the state. The state did issue a health advisory at nearby Cullaby Lake in late August due to a bloom of harmful algae, but Cullaby Lake is not considered source water for any water systems, Jonathan Modie of the Health Authority said. Cullaby Lake only subject to recreational advisory levels under the state's harmful algae bloom surveillance program.

"We're not finding surprises, we're not finding occurrences in other systems," Emme added. "Part of the reason we adopted these rules was to add a level of public confidence in the safety of water people are drinking."



Inside the city's water filtration plant.



Kevin Nagle at a pump station on Beerman Creek Road. The pump station provides water for residents of Highway 26.

Holy Walkamolie! Loving the Hood to Coast run!

One of the hashtags this year for Hood To Coast is #finishcancer. (There's also #htc2018 and #HoodToCoast2018.) Last weekend, when the event took over some of Seaside, just as the first of the running teams were crossing the finish line, I went on Instagram to see what people were posting.

"What an incredible, difficult, inspiring experience," one participant said. "My legs feel broken but my heart is so full." She thanked her fellow Holy Walkamolies for inviting her to join them. A runner representing Timberline Lodge posted: "With about 20,000 participants and 43,000 on the waiting list, we feel blessed to have been invited back!"

The Hood to Coast relay is 200 miles from Mount Hood to Seaside. The winning team this year, The Toyo University Ekiden Team, competed against some 1,050 teams of 12 to finish in just seven

VIEW FROM THE PORCH

EVE MARX



hours. If that's not an athletic feat, I don't know what is. Our pet and house-sitter, who lives on 14th Street, was messaging with me that morning how happy she and her family were to stand outside and cheer the runners on.

I know a lot of people who say they hate Hood to Coast. Some of them are merchants who complain the event drives down business on what should be one of the busiest weekends of the year. I frequently hear locals referring to the runners as "entitled," although nobody has yet properly explained to me what that means.

Around 10 a.m. Saturday, after snapping some photos on the beach, I wandered along Broadway to



see what I could see. There was a line outside the door to Tsunami Sandwich Co. and Beach Day Coffee. A little further up the street, tables at The Big Kahuna were all taken. I guess after you've just finished a race, even at 10 a.m., it's not too soon for a bloody Mary or a margarita. A little later I got in the car to drive to the library. Roosevelt Avenue was no more congested than it is any summer Saturday.

I'd like to change the conversation about Hood to Coast. Truth to tell, I'm weary of the griping and ancient grievances. I'm tired of locals saying that some runner somewhere left a "brownie" on their lawn — it's become a Seaside urban legend. I saw a barrage of insults on a local person's social media page about the event that seemed clearly lacking in substance. Complaining about Hood to Coast

strikes me as an ingrained habit, a habit I'd like to see changed.

Why not focus on the \$750,000 raised to fight cancer or the benefit to our hospital? You're a merchant and you say the event drives your business down? Then do something to entice it. Once the race is over, there's hours before the big party starts. And most of the hotel rooms have to be booked through Sunday. That leaves plenty of time for the runners to explore our area, dine at our restaurants, sample our recreational medical marijuana edibles, drink our beer. Where are the signs saying, "Welcome Hood to Coasters"? Some of the visitors might be thinking, "Hey, this is a pretty nice place," and one day make their permanent home here.

Changing the attitude changes the conversation. The participants feel blessed to have made the cut to even be in the race. Let's work on feeling more blessed to welcome them.