



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Brad Taylor, Water Operations Manager; Jeannine Parisi, Community and Local Government Outreach Coordinator
DATE: May 22, 2013
SUBJECT: College Hill Reservoir Access Plan
OBJECTIVE: Provide General Direction

Issue

Over the past few months, new measures have been put in place to safeguard drinking water at the College Hill Reservoir. Early indications suggest that these measures are having the intended effect of raising public awareness and reducing waste on the reservoir surface. This status report includes a staff recommendation to monitor compliance with posted restrictions, continue public education on safety risks, and consider other potential security enhancements before implementing more permanent changes.

Background

The College Hill Reservoir is a vital drinking water and fire protection storage system serving south Eugene residents. Unfortunately, the 75 year-old rooftop is prone to leaking through the multiple joints between the concrete panels. Last year's attempt to re-seal the joints with all new caulking was moderately successful, but follow-up tests show that the roof is not completely waterproof. State regulators are now requiring EWEB to test the reservoir water bi-weekly until corrective action is taken (e.g., the roof is made watertight). Management plans a comprehensive review of engineering alternatives that meet this requirement by the end of 2014, including decommissioning the facility and building new storage capacity elsewhere.

In the meantime, recognizing there is an elevated public health risk at this facility, EWEB is actively pursuing ways to minimize known threats. Animal waste is the most likely source of contamination, so interim measures have focused on keeping dogs off the reservoir roof. After preliminary conversations with several neighbors, EWEB erected gates and "No Dogs" signs at both entrances to the reservoir roof.

On April 9, EWEB hosted a neighborhood meeting to explain facility use expectations and new security measures. The concept of adding a fence to the gates and restricting public access to planned activities via a reservation system was discussed. Neighbors proposed a volunteer 'reservoir watch' system as an alternative solution, and feedback on both potential solutions was requested from attendees (see Attachment 1 for a summary).

Later in the month, staff attended the Friendly Area Neighborhood meeting and provided an update on the gates and other security enhancements under consideration. At that meeting, neighbors voted to form a reservoir watch committee to partner with EWEB staff in monitoring the reservoir for animal waste and other hazards.

Discussion

Neighbors and EWEB staff both report that since the installation of the gates, there is a dramatic reduction in dog-walking on the reservoir; EWEB has no documentation of dog waste being left on top recently. However, past experience is that continued compliance will require on-going monitoring and communication about expectations. Staff has met with neighbors to explore the 'reservoir watch' concept in more detail, including tracking of volunteer activity and documentation of any problems noted. Neighbors have proposed using a 'Google' calendar for scheduling volunteers and giving EWEB access to the calendar to review the inspection log (see Attachment 2). Given that the gates/signage seem to be working well, any partnership with neighbors will only enhance monitoring and provide quicker removal of potential hazards than weekly staff inspections. Other comments received from community members on this topic are included in Attachment 3.

In addition, management is also planning ahead for the July 4 holiday, when fireworks have caused damage to the rooftop the past few years. To reduce the likelihood of firework damage this year, the gates will be locked and posted that the reservoir is closed to public access. Exact dates are still being confirmed but the intent is to lock the gates starting the weekend before July 4 through the weekend after. As in the past, media notices will accompany signage, and extra EWEB security personnel will be assigned to patrol that facility more frequently, particularly the evening of July 4. The closure provides another opportunity for community education to raise awareness about the potential risks to drinking water at the facility and emphasize the dog prohibition.

TBL Assessment

A TBL review of a fencing option versus status quo (pre-gates) was conducted and can be finalized upon request.

Recommendation

With general Board direction, staff will continue to work with neighbors to implement the reservoir watch concept on a trial basis, as well as move forward with notifications to close the facility over the July 4 holiday. Over the next few months, management will also consider if there are additional measures that would enhance facility security (e.g. lighting and/or cameras) as well as continue to track incidences of dog waste and vandalism to see if a change in approach is necessary.

Triggers signaling a need to step up security would include declining participation in the reservoir watch program, increased evidence of dogs or other activities that elevate risks to drinking water, and collection of a confirmed positive water sample. It may be worth noting here that even if it is determined that fencing can be avoided at this time, permanent solutions that address a broader range of deficiencies associated with this aging facility may preclude public access in the future. However, with this determination at least a year out, management's recommended approach is both cost-effective and flexible to different potential alternatives.

Requested Board Action

Management requests general board concurrence with the recommended approach.

College Hill Reservoir Status Update – April 2013

Overview

The College Hill Reservoir is not only a popular neighborhood amenity, it is a vital drinking water and fire protection storage system serving south Eugene residents. Unfortunately, the 75 year-old rooftop is prone to leaking through the multiple joints between the concrete panels. Last year's attempt to re-seal the joints with all new caulking was moderately successful, but follow-up tests show that the roof is not completely waterproof. With a leaky roof, graffiti/vandalism, dog waste and fireworks all increase risk that contaminants will reach the water supply that goes directly to your taps.

State regulators are now requiring EWEB to test the water at this reservoir bi-weekly (from a typical monthly schedule) until a more permanent solution is found. A positive sample from bacterial contamination, including giardia and cryptosporidium which are not impacted by chlorine, would require EWEB to issue a boil water notice to thousands of customers. This is a serious and disruptive situation unprecedented in EWEB's 101-year history that we would like to avoid. Recognizing that there is a small, but real, elevated public health risk at this facility, EWEB is actively considering how to minimize known threats.

To reduce risk of a contamination event, EWEB is asking neighbors to help raise awareness of this issue and to assist in keeping dogs off the reservoir roof. The recently installed gates and "No Dogs" signage were erected with this in mind, but our experience with fireworks is that signage alone is not always effective in changing long-standing behavior. A higher measure of protection would be to add a wrought-iron fence to the entrance gates, restricting access to only planned activities via a reservation system (e.g. starazing parties, picnics). However, EWEB recognizes that this option represents a significant change to the current level of 24/7 access.

Community Input So Far

Some neighbors have suggested trying out a 'reservoir watch' system to enhance compliance of posted rules, remove any waste found during daily inspections, and alert EWEB of any other problems. This option would require organization of neighborhood volunteers to develop a program that could be sustained over time, as well as a formalized commitment to document activities and findings.

EWEB hosted an information session on April 9 to discuss these two options with about 35 people in attendance. Some **general themes** were:

- People like the gates and with the new signs, are seeing fewer dogs on top.
- Some people said fencing with a reservation system seemed fair and placed drinking water safety as the highest priority. Ideas included making it easier to reserve the roof (give key to FAN?) and/or improving the old reservoir (handrails around perimeter, ramps to top).
- Concerns about fencing included that this option would be permanent even if the roof were eventually waterproofed and that it would result in fewer eyes on the reservoir.

- Others preferred a partnership model to enhance security/inspection on reservoir with perhaps some additional technical tools in addition to daily inspections (webcams, texting pictures).
- General support for the idea of giving the 'reservoir watch' a trial run to see how it works and then evaluate if additional measures were needed.

What's Next

So where are we at now? Staff have kept the EWEB Board briefed but are waiting to make a recommendation until later this spring. This should allow enough time for neighbors to learn more about the issues, provide input to staff, and if there is energy and interest, more fully develop an alternate proposal for Board consideration. Ultimately, we would like to have additional protective measures in place before the July 4 holiday.

We invite your thoughts and suggestions to find a reasonable balance between risk mitigation, public access, and the financial burden to all customers who support infrastructure maintenance through their water rates. Please feel free to share your questions and comments with me directly (jeannine.parisi@eweb.org) as I will be compiling these as part of the staff recommendation to the Board.

You are also welcome to attend EWEB Board meetings and share your ideas directly with commissioners. Upcoming Board meetings are on Tuesday, May 7 and June 4. Board agendas with times for public comment are posted online the Friday before meetings at www.eweb.org.

College Hill Reservoir Watch Program

In response to the discovery that the seams atop the College Hill Reservoir are leaking and EWEB's concern that contaminants could wash through those seams into the water supply, the Friendly Area Neighborhood in a general meeting has authorized the creation of a subcommittee to find a way to keep our water safe and keep the reservoir top open to the public. Along with the agreement, which was approved by the Friendly Area Neighborhood Board, to put up gates and signage that dogs are now not let on the reservoir, the College Hill Reservoir subcommittee is creating a Reservoir Watch program to ensure that potential contaminants are not allowed to linger on the reservoir's concrete surface.

With assistance from Friendly Area Neighbors and members of the Eugene Astronomical society, the College Hill Reservoir Subcommittee has organized a task force of volunteers who are patrolling the surface of the reservoir on a daily basis. Any contaminants such as dog waste, litter, or anything else that shouldn't be left on the surface is being removed. The goal is to prevent anything from seeping through the joints during rainstorms, to maintain the beauty of the area for those who enjoy using it, and to provide EWEB with assurance that public use of the reservoir will reduce rather than increase any danger to the water supply caused by the leaking seams.

There are currently enough volunteers to make the task bi-weekly at most for any participating individual. We expect to expand that list of volunteers over time until no one volunteer needs to patrol the reservoir more than once a month. The committee has set up an online calendar where volunteers can sign up ahead of time and report the completion of their patrol, ensuring that the reservoir will be patrolled at least once per day and providing documentation of that patrol. The College Hill Reservoir Subcommittee members will monitor this calendar to make sure the patrol does in fact happen daily. They have volunteers who will fill in for anyone who misses. EWEB is invited to monitor this calendar as well.

Recognizing that many people use the reservoir on a daily basis, the College Hill Reservoir Subcommittee also plans an education campaign that will enlist the public at large to help keep the reservoir clean, both by reducing litter to begin with and by encouraging visitors to pick up any litter that they see.

It's encouraging to note that the reservoir has been patrolled daily since April 16th and so far no dog waste and very little litter has been found on the reservoir surface. In fact, no dogs have been spotted on the reservoir surface at all since the gates and "No dogs" signs went up. The gates, signs, and public awareness of the need for a clean surface seem to be working, and it is the College Hill Reservoir Subcommittee's intention to ensure that it continues to work so that closure of the reservoir remains unnecessary.

The College Hill Reservoir Subcommittee officers are Greg Giesy, Chairman (541-687-1858, ggsb@continent.com), Jerry Oltion (541-343-4758, j.oltion@sff.net), Larry Deckman (541-731-1227, ldeckman@gmail.com), Bill Murray (541-684-5978, bmurray47@gmail.com), and Ethen Perkins (541-345-3944, epandlk@efn.org). They welcome any input from EWEB on this Reservoir Watch program.

Additional Comments Received

Jeannine,

Just a quick observation. I am on the reservoir over an hour everyday seven days a week and can represent that since the gates went up I have not seen a dog on the reservoir or evidence of dogs on the reservoir.

It is also interesting to note that the foot traffic on the reservoir seems to be down. Perhaps people see the gates and assume the surface is closed.

Fred Siegrist

I'm very aware that you need to comply with the requirements of OHA/DWS. It is essential that the College Hill Reservoir be made watertight, and, failing that, that it ultimately be decommissioned.

In light of these realities and different possible outcomes, you need flexibility regarding exclusion of the public. Fortunately there are now gates on the reservoir top that can be locked, effectively fencing off the surface. As you move forward with remediation, or for special occasions like July 4th, you can lock the gates and exclude the public, and then make a decision about public access after the remediation is accomplished. In the event that remediation is not successful and a new reservoir is built elsewhere, you would be able to simply unlock the gates and allow the public back on the surface.

Another virtue of locking the gates rather than building a fence is that you are not committed to permanent exclusion of the public, and can accurately maintain to OHA/DWS that you're taking all appropriate steps to secure the water supply. Furthermore, the neighborhood is already accepting of the gates, so locking them is an incremental step and not likely to produce significant community push back.

Regardless of whether it is the existing gated fence or a wrought iron fence, some persons will find a way over. However, the vast majority will honor a locked gate and signs that excludes entrance, and those that don't will be liable to prosecution as trespassers. The community will be involved in making sure such trespass is caught through the eyes and ears of the neighbors.

In a nutshell, you can save money by buying a couple of hardened locks rather than a new fence, and have the added benefit of flexibility and public acceptance. As we move forward with fixing or replacing the reservoir, all options will remain open regarding future public access.

Thanks for your consideration of this perspective.

Larry Deckman

Thanks for getting back to me in such a timely manner.

I regularly walk the reservoir and pick up trash as I do so. I also will talk with people who bring their dogs on the surface, though this has only happened once since the gates have been installed. I will at times purposely not pick up a piece of trash, just to see how long it takes for someone else to do so. There has been some broken glass, probably a beer bottle, in the northeast corner now for at least four to five days.

In my hope to be part of the solution/ compromise, I am already on the list of neighborhood people who have volunteered to monitor the reservoir surface in a more organized and systematic fashion.

Thanks again, Bill Watson

Additional Comments Received

Here is my two cents:

You are doing a great job:) Thank you! My only gripe with signs is that they often miss the mark. For example, "No Fireworks" is not as effective as *"Fireworks contain heavy metals that leak into our reservoir. Please, enjoy your fireworks away from our water source."*

What is really happening is ignorance. Really, an educational mini-lesson about the reservoir to our local schools would be very helpful. It's just a matter of putting it in the right way. Give a text if you need help:)

Keep on trucking, Jill

Via phone: EWEB needs to install gates on the College Hill Reservoir to keep dogs out. Maintaining water quality and preventing contamination should be the first priority. She is tired of dog poop on reservoir. She is fine if EWEB fences the reservoir. (Marianne, Donald St. Eugene)

Hi Jeannine,

I had to leave the April 9th public meeting early due to a previous commitment so I'd like to express my thoughts on the public access to College Hill Reservoir via this email.

I have lived across Lincoln Street from College Hill Reservoir since 1990. My family and friends have almost exclusively used the grassed area and the inactive reservoir to the north of the active reservoir to play Frisbee and watch the sunset. Occasionally we hang out on the active reservoir when a special event was occurring like the Star Gazers.

Unfortunately, we have also experienced the loud, drunken folks who like to hang-out at the reservoir mostly during the summer months. We also go across the street to the inactive reservoir every July 4th to monitor those who like to light fireworks and launch them across the street toward our house.

When the issue of water quality protection came up following 9/11 and EWEB held a Board meeting to hear feedback from the public regarding restricting access to the reservoir to protect water quality and delivery of water, I was shocked to hear how many folks at that meeting were opposed to the proposed restrictions. And now here we are some 10 years later revisiting the decision that allowed and, in some cases, encouraged access like the access ramp to the reservoir.

Like then, my position on this remains that water quality should be EWEB's highest management priority and that I support prohibiting public access to the active reservoir - period. At the same time, I know that EWEB is under lots of pressure to ensure public access continues. So, here's my own list of options as to how I'd like to see the reservoir managed, listed in priority order.

Option 1 - PROHIBIT PUBLIC ACCESS TO THE ACTIVE RESERVOIR - NO EXCEPTIONS. Install appropriate fencing, gates that can lock, and monitoring webcams. Provide an option to use the inactive reservoir to the north by upgrading public access along its eastern side by using fill material so that a gentle slope

Additional Comments Received

results providing an easy walk up from the existing grassed area to reservoir's surface. Fence the inactive reservoir to prevent falling off the reservoir's surface.

Option 2 - RESTRICTED-SCHEDULED PUBLIC ACCESS. IF EWEB feels compelled to provide some public access, then here's my recommended conditions for that alternative:

- Install the same "appropriate fencing, locking gates, and webcams per above, and require the organizer to enter into a written, signed agreement with EWEB that specifies the date/time of the access and that the following conditions are imposed: No Dogs; No Fire Works; No Motorized Vehicles; No Paint or Other Similar Chemicals, and that the condition of the reservoir's surface is to match the pre-scheduled event condition.
- A non-refundable "user fee" is imposed for the costs EWEB incurs for managing the scheduled events.
- A "clean-up deposit" is to be paid prior to the scheduled event so that any discrepancies found between the before and after condition of the reservoir can be paid for at no cost to EWEB. If no discrepancies are found following the scheduled event, the deposit is returned to the user. If discrepancies are found, the deposit will be used to pay costs for clean-up.
- A "user" that fails to perform to the conditions of the user agreement more than once shall be prohibited for any future use.
- Access to the locked gate shall be provided via a "code" that EWEB provides to the user. The code shall be available to unlock the gate for the period of time of the scheduled event. When the scheduled event is over, the access code will be eliminated and a new code will be provided to the next user at the scheduled time of the agreement.
- Provide an option to use the inactive reservoir to the north by upgrading public access along its eastern side by using fill material so that a gentle slope results providing an easy walk up from the existing grassed area to reservoir's surface. Fence the inactive reservoir to prevent falling off the reservoir's surface.

Lastly, I hope EWEB keeps the bigger picture in mind that this is about the safe and healthy delivery of drinking water to its customers. This shouldn't be about those who selfishly feel its their "right" to continue to use the reservoir even if it results in increased risks to water quality.

Let me know if you have any questions.

Tim Bingham

My interest in keeping the reservoir surface open to the public is both personal and related to what I think is best for the neighborhood. My children, grandchildren and I all use the reservoir surface for recreation, as do many of my neighbors.

Placing gates with more emphatic signage at the entrances to the reservoir appears to have stopped usage of the surface by those few but consistent pet owners who had continued to ignore the previous signage.

In the almost three years I've been an EWEB customer, I've never been made aware of a documented contamination event at the College Hill Reservoir. Closing the surface to access except for licensed larger events seems excessive, given the low or nonexistent number of episodes where the public health has been documented as being at risk. In looking on the internet, one can have a water sample tested for coliform for

Additional Comments Received

\$25 or \$30 per day. If you chose to do so, you could test daily for a rather low annual cost, considering your entire budget or the cost of resurfacing the reservoir, and allow safe public use of the space.

In addition, concerns about toxic paint could rather easily be dealt with by beefing up the fence and locking the gates before nightfall, since graffiti painting is basically done under cover of darkness. A collateral issue is that your decision could potentially impact adjacent property values.

I have worked for the U.S. Center for Disease Control and Prevention in the past, so I am well aware of issues related to water quality, public safety and tradeoffs that sometimes are required. This Board decision requires careful consideration and, I believe, compromise.

Thanks for taking the time to read my note.

Bill Watson