

Public Comments

Meeting: Wednesday, August 17, 2022

Submittal: Written comments only; e-mailed received at planning@cityoftacoma.org by 12:00 noon, on the meeting day

Subjects: Comments are addressing the following Discussion Item on the agenda:

#1 – South Tacoma Groundwater Protection District – Consideration of a Moratorium

**No. of
Comments:** 4



From: [Dale Bickenbach](#)
To: [Planning](#)
Cc: [Heidi S.](#)
Subject: 17 August 2022, Planning Commission Meeting, South Tacoma Aquifer Moratorium
Date: Wednesday, August 17, 2022 7:38:22 AM

I support the proposed moratorium and implementation of a green zone. Many small industries currently existing are focused on fossil fuel vehicles. An industry expected to diminish in coming years.

'transform the South Tacoma Manufacturing/Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry specifically within South Tacoma, above and near this water source.'

Many of the comments received, as shown in the agenda notes, reflect the need to look at the long term future and not short term outcomes.

Thanks.

dnb

Dale N Bickenbach
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From: [Heidi S.](#)
To: [Planning](#)
Subject: Planning Commission 17AUG22 / Public comment regarding previous public comments
Date: Wednesday, August 17, 2022 11:49:31 AM

RE: STGPD Moratorium and the Public Asking for Infiltration/Recharge Surface Coverage Limitations

To the Planning Commission,

Protecting infiltration/recharge is a critical inclusion in the original STEGZ code amendment application (since it is not being appropriately addressed by the city) as well as the public having repeatedly requested for this and surface coverage limitations to be included in this moratorium... yet these are still being skipped over and left out.

As mentioned in the staff's own Findings of Fact, "infiltration/recharge and surface coverage limitations" were significant recurring comments.

The public had also repeatedly called for outside expert input on the matter, but in nearly two months' time the city did not pursue this. Regardless, substantive sources (from written submissions) support public comment requests for infiltration/recharge and surface coverage limits to be included in the moratorium.

Here are examples, below, from just the oral comments included in this week's agenda packet. Please also review the many additional written comments on the topic for in-depth source support, but please do not dismiss the public's request to include these items in the moratorium.

Excerpts from Aug. 17th Agenda Packet:

R. FINDINGS OF FACT: PUBLIC COMMENTS

With respect to the consideration for a moratorium in STGPD, some of the more significant, recurring comments include:

- Need proper infiltration recharge to keep aquifer at healthy level; infiltration recharge needs to be part of the review**
- Support objective/independent study done by experts for the infiltration recharge of the aquifer**

April 6 Planning Commission Public Hearing

Heidi Stephens

Loss of open space vegetation and increase of impervious surfaces require data collection and review on effects to groundwater infiltration anywhere within this designated geohydrologically sensitive area.

June 14 City Council Community Forum

Heidi Stephens

Information provided to City Council (recent District Court ruling; quarterly

violations) are reasons for supporting a moratorium for businesses covered by the current code and anything affecting infiltration...

June 21 City Council Public Comment

Heidi Stephens

Freshwater will be the most critical resource in the years to come. Mountain glaciers are quickly melting/disappearing, so Green River is not a forever, sustainable source. Need to protect aquifer from contamination and from volume being diminished by lack of open green space for proper infiltration.

- Planning policies and codes must be updated to stop allowing for development resulting in unintended consequences.

June 28 City Council Public Comment

1. Lester Pogue

- Supports moratorium amendment, but public comment has been more than just about heavy industrial and hazardous material contamination. Concerns are also about any development covering large ground surface area that could restrict appropriate infiltration and adequate aquifer recharge, traffic congestion, pollution from the 5000-12000 vehicle trips a day, and stress that can be caused by light industrial warehouse use sited over the aquifer.

Amanda Arnold

- Green River water source is vulnerable due to climate change; we must protect our aquifer and ability to recharge with green space above it.
- Supports moratorium while STGPD policy is being updated. Moratorium for any potentially contaminating activity and impacts to infiltration within recharge zone.

April Smith

- Supports moratorium language, but must include light industrial and other impervious footprints that prevents infiltration for adequate recharge aquifer. Aquifer must be filled to a healthy level, and this should be included in moratorium review.

Esther Day

Wants moratorium on new development or expansion on any business that could potentially contaminate or inhibit natural infiltration and recharge aquifer to healthy level. Make sure moratorium review includes aquifer volume. Caution about allowing certain kinds of business and impervious surfaces.

Heidi Stephens

- Supports STGPD moratorium verbiage, but doesn't accurately reflect what public is asking for, including protecting aquifer ability to recharge through natural infiltration by including high-impact land uses in moratorium review.
- Tacoma Municipal Code states many critical areas have been lost to development. Tacoma facing increasing growth and diminishing land availability. Existing hydrology is to be maintained by protecting/maintaining existing groundwater supply. Impose restrictions on high-impact development that could affect quality and quantity of aquifer.

Stacy Oakes/350Tacoma

- Supports Phase 1 of South Tacoma Economic Green Zone and urges strongest moratorium possible on permitting in the STGPD and recharge areas until code has been updated, including pausing heavy industrial and considering surface area being covered.

Norma Ramirez

- Contamination and climate change concerns; aquifer needs to be able to adequately recharge through green space; protect proper infiltration

Janeen Provazek

- Supports passing Phase 1A workplan for updating STGPD code. Until code is updated, a moratorium is needed to halt any new development or expansion that could pollute or impede natural infiltration. Need to include maintaining adequate volume of aquifer by including green space for infiltration.

Marilyn Kimmerling

- Support and upgrade the STGPD. Outdated and hasn't been reviewed since 2006. Protect the aquifer and not pave over surfaces that feed the aquifer;

July 27 Community Informational Meeting

1. Janeen Provazek

- Infiltration/recharge needs to be studied by objective and independent experts; it is a conflict of interest to use in-house evaluators
- Permitting must be paused by any development of 10,000 sq feet or more surface coverage

2. Heidi White

- Support objective/independent study done by experts for the infiltration recharge of the aquifer

Heidi Stephens

- Public concerns about climate change and Green River not being

sustainable source,
especially with anticipated population growth

- Need proper infiltration recharge to keep aquifer at healthy level; not adequately understood or addressed by the city; being left out of conversation and needs to be included

- Code is outdated; recent District court judge that many chemicals are not being test for that should be; EPA says PFAS contamination is emergent; the City is not properly addressing hydrology in this critical area; all examples of why moratorium is needed to pause certain

development until code is updated (10,000 sq feet of surface coverage)

- Infiltration recharge needs to be part of the review and requires independent input

Timothy Smith

Moratorium is to stop planning dept, health dept, etc. Stop approving developments (10,000

sq feet and more) while we look at the code; need to look at aquifer infiltration

April Smith (Larchmont Safe Streets; SE neighborhood council)

- Groundwater code outdated; supports enacting moratorium; all permitting above 10,000 sq

feet must be paused; have independent experts objectively study the infiltration and recharge of the aquifer

From: [Heidi S.](#)
To: [Planning](#)
Subject: Public Comments for August 17th Planning Commission Meeting
Date: Wednesday, August 17, 2022 11:50:36 AM
Attachments: [image.png](#)

Public Comment for the August 17, 2022 Planning Commission Meeting

RE: STGPD Moratorium

To: Planning Commissioners

Thank you so much for your support of a moratorium in this environmentally sensitive area; however, so much of what the public has been asking for has still not been included for adequate discussion or in the staff's current draft.

Although a lot of time was spent covering the current code (even though it's not being fully enforced) and various other regulations, what hasn't been properly addressed are items missing from the current code and lack of monitoring/enforcement, which is the whole point of this moratorium review.

The most important item, being continually left out, is that of infiltration/recharge to keep the aquifer at a healthy level by limiting surface coverage. Although that concept is part of the groundwater and critical areas code, it isn't being enforced and is again being ignored in this situation... among many other things.

As the public has also called for, there needs to be:

- inclusion of "high impact" per the code
- actual enforcement of the critical area preservation code
- discussion of current toxic contamination
- discussion of two recent district court rulings
- chemicals and PFAS not currently tested for
- complete listing of total sources of potential contamination which number around 5,000 - not just 300-or-so mentioned
- discussion of the other controlling authorities (EPA and WA DOE) and additional violations they monitor separately
- thorough review of all and specific violations, and resulting impacts
- the actual enforcement actions after violations
- review of light industry "high impact" effects
- infiltration policy needing to be enforceable code
- independent expert input, and (as mentioned above and most important)
- infiltration/recharge impacts needing surface coverage limitations.

This moratorium needs to include a surface coverage limit (recommended at 10,000 sq ft) until the city has addressed these numerous issues via an updated code.

The most serious "unintended consequences" don't result from proceeding carefully with facts (that's what avoids problems and is the point of this moratorium); the most serious unintended and irreversible consequences are those which come from rushed construction/expansions.

Now is the time to pause and study these items which deserve focus while there is the opportunity to, which is why independent expert input should be sought.

There is no short-term worth which could ever supersede the price to protect this precious water resource -- the real cost (as noted in the code) would be from damaging our water supply, both quality

and quantity.

Thank you,
Heidi Stephens

Additional Sources

Infiltration/recharge needing limitation of surface coverage / "high impact":

Staff's own information in the August 17th agenda packet

R. FINDINGS OF FACT: PUBLIC COMMENTS

With respect to the consideration for a moratorium in STGPD, some of **the more significant, recurring comments include:**

- **Need proper infiltration recharge to keep aquifer at healthy level; infiltration recharge needs to be part of the review**
- **Support objective/independent study done by experts for the infiltration recharge of the aquifer**

From the Tacoma Municipal Code (which is not being adequately applied):

"imposing additional restrictions on high impact land use development"...

"by preserving and maintaining the existing groundwater supply"...

"if unsuitable high impact land uses were to reduce either the quality or quantity of this important public water supply source."

From: Earthjustice (environmental law) / previous statement to the city:

"... replacing the site's existing permeable, water-absorbing surfaces with impervious concrete will substantially alter stormwater management, impeding recharge of the City's aquifer and increasing the load on the area's stormwater system."

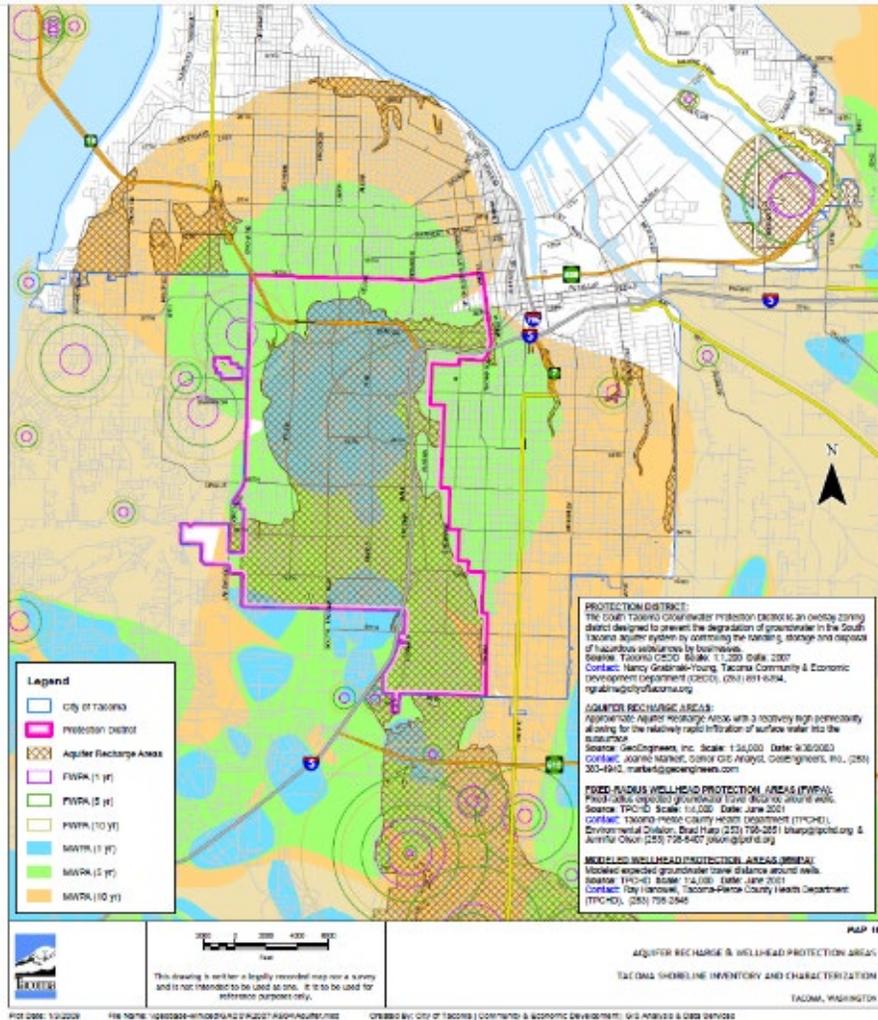
From: CHB / previous statement to the city:

"Recharge amounts vary from 5-30 inches per year, largely controlled by the amount of urbanization.² The SEPA checklist states that the site will become 75 percent impervious surface at project completion – we have strong concerns about the longevity and viability of this aquifer should this site become majority impervious surface. Given the annual average precipitation of nearly 40 inches, complete urbanization will reduce infiltration from about 23 inches (for those areas presently without trees) to about 5 inches per year. For the surfaces that are presently tree covered, the reduction will be from 18 inches to 5 inches, and for mixed (tree and non-tree covered) surfaces, complete urbanization will reduce infiltration from about 12 to 5 inches of recharge per year.² With these facts in mind, we request the following questions be addressed through the lens of an EIS: How will the almost complete urbanization of this space impact the South Tacoma aquifer? How will the annual recharge rate change? How will this change impact Tacoma's access to clean drinking water? Given that we are already experiencing, and will continue to experience climate-change induced drought, what measures will be in place to protect the water budget of the aquifer?"

United States Geological Survey. (2010). *USGS Scientific Investigations Report 2010-5055: Hydrogeologic Framework, Groundwater Movement, and Water Budget in the Chambers Creek-Clover Creek Watershed and Vicinity, Pierce County, Washington*, Savoca, et al, 2010, 45 pp.

From the City of Tacoma's STGPD Aquifer and Recharge map, which shows that the areas immediately above/around the aquifer are the most permeable for critically needed "rapid" infiltration.

Lower right description on map:
"Aquifer Recharge Areas with a relatively high permeability allowing for the relatively rapid infiltration of surface water into the subsurface."



This "rapid infiltration area" is vital to retain needed water volume, and slower farther outlying areas cannot be considered an acceptable substitute. As noted by one of the commissioners, we also have less control over land outside of the city limits, so this more "rapid recharge" area within our city limits needs to be kept open, green and undeveloped as many other municipalities have understood and implemented.

The recharge area for the shallow aquifer is estimated to be approximately 180 square miles in area (encompassing upland areas including South Tacoma, the Roy 'Y', and Fredrickson), with massive development occurring in those areas outside of Tacoma's

control (such as the 2.0 million square feet planned in Milton, and the 2.3 million square feet planned in Fredrickson ("FRED310 Phase 1" Boeing).

FINDINGS OF FACT: POLICY CONTEXT

1. Environment and Watershed Health Policy EN-1.5 Protect the quantity, quality and function of high value environmental assets identified in the City's natural resource inventories, including: ... groundwater. Policy EN-3.23 **Encourage infiltration of stormwater to promote aquifer recharge and assure continuous and adequate groundwater supply.**

Critical Area Preservation

Although the "Findings of Fact"s now includes acknowledgement of Critical Area Preservation:

Applicability to Groundwater: The South Tacoma Groundwater Protection District, and regulations and permit procedures therein, are established via the South Tacoma Groundwater Protection Overlay District. Aquifer recharge areas are classified as a critical area under Tacoma Municipal Code 13.11.

... it hasn't been included in any depth nor certain pertinent parts of that code noted but which very much apply (see also farther below on this page).

Applicability: Critical areas include wetlands, streams, and fish and wildlife habitat conservation areas, as well as flood hazards, geologically hazardous areas, and aquifer recharge areas. Applicability to Groundwater: **Aquifer recharge areas are a classified critical area under TMC 13.11. P**

Per the current Tacoma Municipal Code / Critical Areas Preservation, only existing structures are allowed in the STGPD -- no new construction... this alone is reason to pause everything, until there is a full compliance review by outside sources:

TMC, Title 13:11 Critical Areas Preservation

13.11.145 / Pre-existing Uses/Structures.

*A. An established use or **existing structure** that was lawfully permitted prior to adoption of this chapter, but which is not in compliance with this chapter, may continue subject to the provisions of Tacoma Municipal Code (TMC) Chapter 13.11 Critical Areas Preservation and Section 13.06.010.L.*

*B. Except as otherwise required by law, a legal **pre-existing use or structure** may continue unchanged; or modified only where the use or structure becomes less non-conforming, and where the modification will increase the buffer, and increase the functions of the critical area.*

13.11.190 / Review Process

***Existing hydrology** will be maintained to support critical areas...*

13.11.200 / Allowed Activities

*Maintenance of legally **existing** structures,*

13.11.210 / Allowed with Staff Review

*Reconstruction or exterior remodeling, of **existing** structures...*

*One-time expansion of **existing** structures and accessory structures, provided*

*that expansion of the developed footprint within the critical area or buffer does not increase by more than 25 percent and that the new construction or related use extends away from the critical area; keeps disturbance of native vegetation to a minimum; and replaces native vegetation that may be disturbed This expansion may also occur in a direction parallel to the critical area if the expansion takes place upon **existing impervious surfaces**.*

Recent Court Rulings / EPA Announcement / Items not tested for

There had been mention of no PFAS showing on the Dept. of Ecology's contamination site but that's because **PFAS are not currently being appropriately tested for yet**, even though the well at S. 74th Street is current unusable because of PFAS contamination (which TPU neglected to mention in the previous month's meeting).

That's precisely the public's point about needing to pause permitting until a number of items are correctly added to the code. Unfortunately, the August 3rd agenda was not fully posted in time for the public to offer timely response but, besides PFAS, a District Court Judge has ruled that WA is out of compliance with the Clean Water Act by not monitoring for the following items:

- aluminum
- ammonia
- arsenic
- copper
- cyanide
- mercury
- nickel
- PCBs
- selenium
- pentachlorophenol
- tributyltin.

[<https://www.northwestenvironmentaladvocates.org/2021/12/30/protections-for-washington-waters/>]

... and NWEA listed more than two dozen chemicals for which the state uses numeric criteria that are either higher or close to the levels found to be in violation of the Endangered Species Act. "Levels of these and other toxic pollutants are among the reasons that EPA has long been concerned about the health of one of Washington's most important waterbodies, Puget Sound," states the legal complaint (PDF 490 kb).

[<https://www.pugetsoundinstitute.org/wp-content/uploads/2021/12/Order.pdf>]

In addition, PFAS contamination needs stronger monitoring and much quicker action (EPA has announced there are no safe levels of many PFAS, all of which need immediate testing for).

[<https://www.epa.gov/newsreleases/epa-announces-new-drinking-water-health-advisories-pfas-chemicals-1-billion-bipartisan>]



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August 17, 2022

Attn: Stephen Atkinson, Principal Planner, Long Range Planning Division
City of Tacoma, Planning and Development Services
747 Market Street, Room 349
Tacoma, WA 98402

Submitted electronically to: satkinson@cityoftacoma.org

Re: South Tacoma Groundwater Protection District – Consideration of a Moratorium

Dear Mr. Atkinson,

Thank you for providing the opportunity to review and comment on the South Tacoma Groundwater Protection District (STGPD) – Consideration of a Moratorium Findings of Fact and Recommendations Report.

Communities for a Healthy Bay (CHB) is a 31-year-old organization whose mission is to represent and engage people in the cleanup, restoration, and protection of Commencement Bay, its surrounding waters and natural habitat. We are a 501(c)3 nonprofit providing practical, solutions-based environmental leadership in the Puget Sound area. We work side-by-side with residents, businesses, and government to prevent and mitigate pollution and to make our community healthier and more vibrant.

CHB supports the adoption of a moratorium in the STGPD to preclude the development of heavy industry and storage of hazardous materials. Below, we outline conditions on site that warrant a moratorium until further study has been completed to ensure that the zoning of this area is protective of environmental and public health, which is a mandate of the City of Tacoma.

The STGPD sits on top of the South Tacoma aquifer, which at times supplies up to 40 percent of Tacoma's drinking water.¹ Groundwater flow below the site is recharged from as far southeast as Highway 161 and flow is generally to the west and north, eventually discharging to Puget Sound between the Narrows Bridge on the north to University Place on the south in the Tacoma Narrows region. Recharge amounts vary from 5-30 inches per year, largely controlled by the amount of urbanization.²

Further, the project site largely intersects with the Commencement Bay, South Tacoma Channel Superfund site – specifically, the South Tacoma Field operable unit (OU). The soils and groundwater at the site were left contaminated from industrial and commercial activities, spanning over a century, including "railroad equipment manufacturing, repair and maintenance; iron and brass foundry; aircraft maintenance and refueling operations; disposal area for foundry, construction, and domestic wastes; unauthorized dumping areas for household and commercial wastes; public utilities; and

builders supply.”³ Over 120,000 tons of contaminated sediments were consolidated and covered on-site. Based on the information from the Environmental Protection Agency’s (EPA) last 5-year review, concentrations of contaminated sediments capped on-site are far above acceptable levels for any disturbance without a comprehensive soil management plan – this includes high concentrations of arsenic, lead, cPAHs (carcinogenic polycyclic aromatic hydrocarbons) and PCBs (polychlorinated biphenyls).⁴ Elevated iron concentrations have recently been found near the southernmost cap.⁵

We are very concerned about the risk of disturbing contaminated sediments left in place mobilizing into the groundwater and surface water, particularly during excavation and grading activities of any new development. Surface water on-site ultimately feeds into Flett Creek, then Chambers Creek, and then Chambers Bay. These are all salmon-bearing streams that support Fall Chinook, Coho, Summer, Fall, and Winter Chum, and Winter Steelhead.⁶

Residents who live directly west of the STGPD rank 10 out of 10 on the Environmental Health Disparities scale – meaning these residents experience worse health outcomes because of where they live. People of color make up the majority of the demographic of this neighborhood, and residents living in this area experience poverty at the highest rate compared to other areas of the City.⁸ We are very concerned about the risk of disturbing the contaminated sediments left in place on-site, particularly dust becoming airborne and entering the adjacent residential areas.

Thank you for providing the opportunity to review and comment on the South Tacoma Groundwater Protection District – Consideration of a Moratorium. If you have questions or need clarification of any of our comments, please contact Erin Dilworth at edilworth@healthybay.org.

Sincerely,



Erin Dilworth
Communities for a Healthy Bay
Deputy Director

1. Tacoma Pierce County Health Department. (n.d.). *South Tacoma Groundwater Protection District*. Accessed on April 4, 2022 from <https://www.tpchd.org/healthy-places/waste-management/business-pollution-prevention/south-tacoma-groundwater-protection-district>
2. United States Geological Survey. (2010). USGS Scientific Investigations Report 2010-5055: Hydrogeologic Framework, Groundwater Movement, and Water Budget in the Chambers Creek-Clover Creek Watershed and Vicinity, Pierce County, Washington, Savoca, et al, 2010, 45 pp.
3. Environmental Protection Agency. (2005). *Commencement Bay, South Tacoma Channel Partial Deletion Narrative*. June 14, 2005. 2pp.
4. Environmental Protection Agency. (2018). *Fifth Five-Year Review Report for Commencement Bay, South Tacoma Channel Superfund Site*. Tacoma, Washington. September 28, 2018. 86pp.
5. Environmental Protection Agency. (n.d.). *Commencement Bay, South Tacoma Channel Tacoma, Wa*. Accessed on May 6, 2022 from <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=1000979>
6. Washington Department of Fish and Wildlife. (n.d.). *SalmonScape*. Accessed on April 4, 2022 from <http://apps.wdfw.wa.gov/salmonscape/map.html>
7. Chu, Margaret. (2022). Letter to Shirley Schultz regarding City of Tacoma’s February 8, 2022, Public Notice of the permit application for the Bridge BNSF Warehouse Project (LU21-0125; EPA number 22- 0016-SEPA). March 10, 2022.
8. Washington State Department of Health. (n.d.). *Washington Tracking Network: A Source for Environmental Public Health Data*. Accessed from <https://fortress.wa.gov/doh/wtn/WTNIBL/> on April 13, 2022.