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SUBJECT: South Tacoma Groundwater Protection District Code Update – Progress Report
DATE: January 22, 2025

PRESENTATION TYPE:

Informational Briefing

SUMMARY:

Planning and Development Services and Tacoma Water will provide an update to the Infrastructure, Planning, and Sustainability Committee regarding the progress of the South Tacoma Groundwater Protection District (STGPD) code update. This briefing will cover recent engagement activities, ongoing initiatives, and next steps in the code update process to enhance groundwater protection efforts in Tacoma.

BACKGROUND:

The Growth Management Act (GMA) requires the designation and protection of “Critical Areas” to prevent harm to the community from natural hazards and to safeguard natural resources. There are five types of critical areas defined by the GMA:

1. Wetlands
2. Areas with a critical recharging effect on aquifers used for potable water
3. Fish and wildlife habitat conservation areas
4. Frequently flooded areas
5. Geologically hazardous areas

One such area is the STGPD, which is designated as a Critical Aquifer Recharge Area (CARA). The City of Tacoma is currently reviewing and updating Tacoma Municipal Code (TMC) Section 13.06.070 (South Tacoma Groundwater Protection District) and Section 13.11.800 (Aquifer Recharge Areas). This effort aligns with the work plan adopted by Substitute Resolution No. 40985, which was later updated by the Planning Commission on December 20, 2023.

The STGPD was established in 1988 through adoption of City of Tacoma Ordinance No. 24083. This ordinance recognized the South Tacoma area (approximately nine square miles in extent) to be environmentally sensitive due to the high potential for contamination of the underlying aquifer system. The ordinance, which has been updated over time, put into place the following:

- Regulations regarding land uses and the handling, storage, and disposal of hazardous substances
- Technical standards outlining best management practices and design requirements
- Identification of prohibited uses
- Regulations pertaining to stormwater infiltration
- Permitting framework for new or substantially modified facilities
- Regulations regarding storage tanks
- Inspection, testing, and enforcement processes



It is important to note that the STGPD was established prior to development of State requirements and guidance related to CARAs in the GMA context and wellhead protection programs (WHPPs) as administered by the Washington State Department of Health (DOH).

State Regulations:

CARAs are defined under the GMA as “areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water or is susceptible to reduced recharge. The goal is to protect drinking water functions and values by preventing pollution and ensuring adequate supply. Local governments are guided by the Washington Administrative Code (WAC) Chapter [WAC 365-190-100](#) in determining CARA classification and designation, emphasizing the use of best available science (BAS) to inform regulatory decisions.

Key Points from [WAC 365-190-100](#):

1. Potable water is essential for life. Much of Washington's drinking water comes from groundwater. Once groundwater is contaminated, it is difficult and costly to clean up. Preventing contamination is crucial to avoid significant costs and potential harm to people and ecosystems.
2. Link Between Groundwater and Recharge Areas: The quality and quantity of groundwater in an aquifer are inextricably linked to its recharge area. Where aquifers and their recharge areas have been studied, counties and cities should use this information as the basis for classifying and designating these areas. Where no specific studies have been done, counties and cities may use existing soil and geological information to determine where recharge areas exist. Existing land use activities that may threaten groundwater quality should be evaluated.
3. Classification Based on Vulnerability: Counties and cities must classify recharge areas based on aquifer vulnerability, which combines hydrogeological susceptibility to contamination and contamination loading potential.
 - High vulnerability: This may be indicated by hydrogeological conditions that facilitate degradation, particularly when combined with land uses that contribute or may potentially contribute to contamination.
 - Low Vulnerability: This may be indicated by hydrogeological conditions that do not facilitate degradation and land uses that do not contribute or are not likely to contribute contaminants that will degrade groundwater. Factors that support low vulnerability include effective natural filtration systems, distance from potential contaminant sources, and the presence of protective geological formations.
4. Classification strategy for Aquifer Recharge Area: Classification strategies should focus on maintaining groundwater quality and quantity, particularly in highly susceptible recharge areas. In these areas, studies should be initiated to assess groundwater contamination. Classification of these areas should include consideration of:
 - The degree to which the aquifer is used as a potable water source.
 - The feasibility of protective measures to prevent further degradation.
 - The availability of treatment measures to maintain potability.
 - The availability of alternative potable water sources.
5. Examples of CARAs:
 - Recharge areas for sole source aquifers designated under the Federal Safe Drinking Water Act
 - Areas established for special protection under groundwater management programs
 - Areas designated for wellhead protection under the Federal Safe Drinking Water Act;



- Areas near marine waters vulnerable to saltwater intrusion
- Other areas meeting the definition of "areas with a critical recharging effect on aquifers used for potable water."

Under WAC [365-196-485](#), jurisdictions are required to incorporate the best available science in developing policies and regulations to protect the functions and values of critical areas.

Recent outreach and engagement:

The following outreach and engagement efforts have been conducted to gather input and inform the community:

- Spotlight on South Tacoma (January, February, March 2024)
- Sustainability Expo (April 13, 2024)
- Dia de los Ninos/Eastside Mini-Olympic Games Family Event (May 4, 2024)
- Nine One Tacoma Comprehensive Plan Visioning Workshops (May-June 2024)
- Ocean Fest (August 2024)
- South Tacoma Neighborhood Plan Steering Committee (August 22, 2024)
- Tacoma Permit Advisory Group (September 18, 2024)
- South Tacoma Business District Association (September 19, 2024)
- South Tacoma Neighborhood Council
- Tacoma Water Integrated Resource Plan Public Advisory Committee
- STGPD Health Impact Assessment (HIA) Advisory Group

ISSUE:

The work plan adopted by City Council in Resolution No. 40985 and updated by the Planning Commission identifies multiple issues to be addressed in this round of code updates:

1. Review High Impact Use standards, including those from the South Tacoma Neighborhood Council [application](#) and ongoing moratorium:
 - a. Metal Recycling/auto wrecking facilities*
 - b. Above ground storage tanks
 - c. Below ground storage tanks*
- *These uses were subject to the adopted moratorium and must be addressed as part of the work plan.
2. Infiltration Policy and Impervious surface standards
 3. Landscaping and Tree Canopy Standards for industrial zones, South Tacoma Manufacturing Industrial Center (STMIC) and the Tacoma Mall Regional Growth Center (RGC) in the STGPD
 4. STGPD HIA
 5. Improve integration of STGPD Overlay Zone with Critical Areas Ordinance (TMC 13.11) and address applicability of TMC 13.11 to the STGPD
 6. Map refinements for the South Tacoma Aquifer and CARAs



Next Steps and Tentative Schedule:

Date	Body	Action
January 22, 2025	Infrastructure, Planning, and Sustainability Committee	Progress report on STGPD Code Update
January 2025	HIA Advisory Group	Initial Baseline Health Assessment
January to February 2025	City Council	Consider 6-Month Extension of Moratorium Progress report on STGPD Code Update
January to March 2025	Public	Community engagement
March 2025	Planning Commission	Present BAS review and progress report
February to April 2025	HIA Advisory Group	HIA Recommendations
March to May 2025	Planning Commission	Draft Groundwater Code Development Public Comment Period and Recommendation
June to August 2025	City Council	Review Planning Commission Recommendations; Conduct Public Hearing Adoption

ALTERNATIVES:

This is an information briefing only. There are no alternatives presented.

FISCAL IMPACT:

This is an information briefing only. There is no fiscal impact.

RECOMMENDATION:

This is an information briefing only. There is no recommendation.

ATTACHMENT:

Project Update – Coordinated Review of the STGPD Code Update



Project Updates – Coordinated Review of the STGPD Code Update

Coordinated Review:

The STGPD code review and update is being coordinated across multiple departments and agencies through their ongoing planning initiatives. The following is a summary and current status of these initiatives.

Tacoma Water Integrated Resource Plan:

The Integrated Resource Plan (IRP) includes an assessment of future water needs and a plan to meet those needs. Tacoma Water has hired HDR, Inc, a consultant with expertise in this area, and they are currently deep into the technical work. Key activities include updating climate change information, updating demand forecast, accounting for the loss of Westrock demand, and evaluating emerging wholesale opportunities.

A thorough evaluation of groundwater, including changes to our system and new regulations regarding water quality (PFAS), will be conducted. The IRP consultant will also evaluate and suggest updates to relevant portions of the TMC as they relate to the STGPD. Tacoma Water has also established a Public Advisory Committee (PAC) to assist in this effort.

The IRP work is expected to be completed in early 2025, with a presentation to the Public Utility Board for approval in March 2025.

STGPD HIA:

HIAs serve as a tool to inform decision-makers, and the public about the potentially significant impacts – both beneficial and harmful – of a proposed project, policy, or program. There are generally six iterative phases of an HIA:

- Screening
- Scoping
- Assessment
- Recommendations
- Reporting and dissemination
- Monitoring and evaluation

The Tacoma-Pierce County Health Department (TPCHD) has completed the screening and scoping phases of the HIA. The three assessment topics identified are:

1. Water quality
2. Water quantity
3. Air quality

The TPCHD gathered input from its HIA Advisory Group, conducted an online survey, held public testimony, and consulted subject matter experts to select these topics.

During the assessment phase, the TPCHD will describe the baseline health status of communities in and around the STGPD. It will determine whether certain population groups experience worse health outcomes compared to the City as a whole. The assessment will identify and characterize surface water, groundwater, and air pollutants in the STGPD, examine sources of these pollutants and their effect on human health, and evaluate risks to groundwater recharge and drinking water availability. The TPCHD will also investigate additional comprehensive research questions, as this list is not exhaustive.



Comprehensive Plan and Critical Areas Code Update:

Planning and Development Services (PDS) is currently updating the Comprehensive Plan, with an expected completion date of June 2025. This update will include revisions to the goals and policies in the Comprehensive Plan relating to critical areas and the groundwater protection district.

In May and June 2024, eight visioning workshops were conducted in each neighborhood council district, along with one virtual workshop, to gather public input for drafting the Plan.

Landscaping and Tree Canopy Standards:

In December 2023, the Planning Commission directed staff to extend the scope of the STGPD to include landscaping and tree canopy reviews for the South Tacoma Manufacturing Industrial Center (STMIC) and industrial zones in the STGPD, and the Tacoma Mall Regional Growth Center (RGC).

Concerning landscaping and tree canopy in these areas of the STGPD, PDS staff have done engagement with the Planning Commission, the Neighborhood Planning South Tacoma Steering Group, the Permit Advisory Group, and South Tacoma Business District Association.

Draft code recommendations developed for landscaping and tree canopy standards in the STMIC and Tacoma Mall RGC will be incorporated into the full STGPD draft code update materials, which will be subject to further public review and comment.

Stormwater Comprehensive Plan:

The Stormwater Comprehensive Plan (SWCP) will assist Environmental Services in addressing the impacts of polluted stormwater runoff on natural receiving waters, impacts of local flooding and drainage problems, and National Pollutant Discharge Elimination System (NPDES) permit compliance.

By September 2024, background information was collected, and several workshops were held with City staff to define boundary conditions and establish a mutual understanding of the City's stormwater program needs. The consultant's were scheduled provide in November 2024 a Data Gaps and Needs Assessment technical memorandum, documenting the City's existing stormwater program and identifying gaps in the program as defined by the 2024-2029 NPDES Phase I municipal stormwater permit (Phase I permit).

In early 2025, the consultant and City staff will develop the following:

- Goals and policies that should be incorporated into the SWCP
- Final preliminary Capital Improvement Project summary table for up to 10 to 15 problem locations, including flooding and water quality treatment facilities
- Final climate change assessment technical memorandum
- Final monitoring recommendations technical memorandum
- Draft annotated flood vulnerability study outline

In spring 2025, city staff will engage the community to help ensure that the SWCP meets City expectations and provides the most useful guide for managing the SWMP, implementing the CIP, and securing stormwater utility funding for years to come, in ways that stakeholders support. The SWCP is expected to be finalized in late 2025.