



WELL ORDINANCE POLICY WORKING GROUP

Robert Pennington, Professional Geologist, Permit Sonoma November 30, 2022

Presentation Overview

- Public Trust Resources and Public Trust Review Area
- Discussion Questions
 - Q1 What waterways require impacts analysis under the public trust doctrine? [PWG lead, TWG inform]
 - Q2 What classes or categories of wells receive a ministerial (routine) permit? What well classes receive a discretionary (more tailored) review?
 - Q3 What public trust resources and uses are sensitive to streamflow depletion due to groundwater extraction? [TWG lead, PWG inform]
 - Q4 What aquifers are interconnected with public trust waterways and groundwater extraction from these areas is likely to have an adverse impact on public trust resources? [TWG lead, PWG inform]

Ordinance Sections

October 4th Proposed Ordinance

- □ 25B-1. **Declarations.**
- Sec. 25B-3. **Definitions**
 - Public Trust Resources
 - Navigable Waters
 - Critical Watershed Areas
- Sec. 25B-4(d) Discretionary Public Trust Review Process
- □ Sec. 25B-4(d)(1)(ii) Public Trust Review Area
- □ Sec. 25B-4(e) Ministerial (Exempt) Well Classifications
- Sec. 25B-12 Monitoring Requirements
- Sec. 25B-13 Water conservation and best management practices

Public Trust Resources

October 4th Proposed Ordinance

Definitions:

"Public trust resources" means waterways the government is obligated to hold in trust pursuant to the public trust doctrine for the benefit of the public for purposes of commerce, navigation, recreation, fishing, and preservation of wildlife habitat and natural resources.

"Navigable waters" means waterways capable of being navigated by oar or motor-propelled small craft, consistent with the California public right of navigation test.

Public Trust Resources

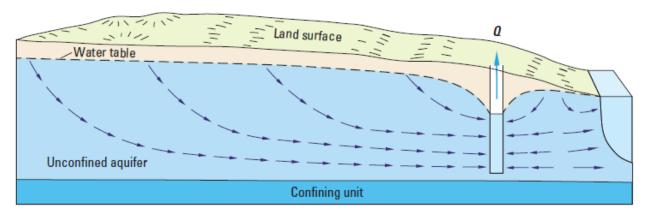
October 4th Proposed Ordinance

Navigable waterways identified in Sonoma County:

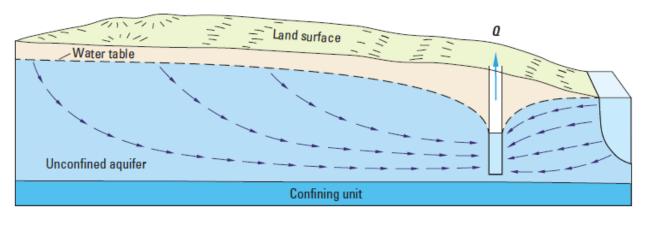
- Army Corp Survey (1971), applies the "federal regulatory definition"
 - Petaluma River (SF Bay to downtown)
 - Sonoma Creek (SF Bay to Hwy 12/121)
 - Gualala (west of Highway 1)
 - Estero Americano (Pacific Ocean to near Valley Ford)
 - Salmon Creek (west of Highway 1)
- Hitchings vs Del Rio Wood (1976), applies "CA Public Right of Navigation Test"
 - Russian River (Pacific Ocean to County line)

How are Public Trust Resources Impacted by Groundwater Pumping?

"Streamflow depletion"



Decreased discharge from groundwater to surface water



Increased recharge from surface water to groundwater

Figure 7 – USGS Circular 1376

How are Public Trust Resources Impacted by Groundwater Pumping?

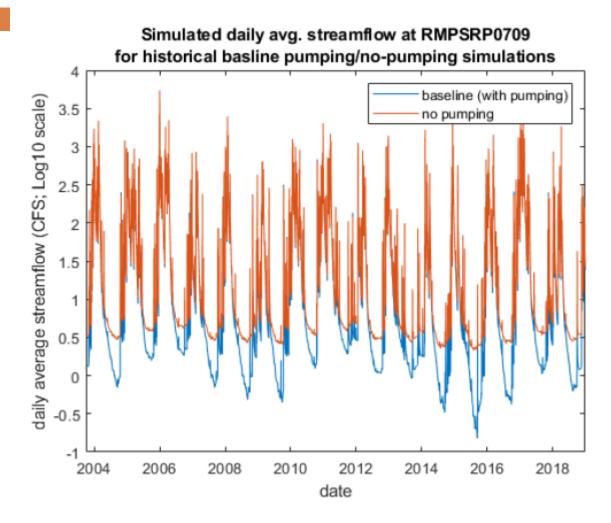
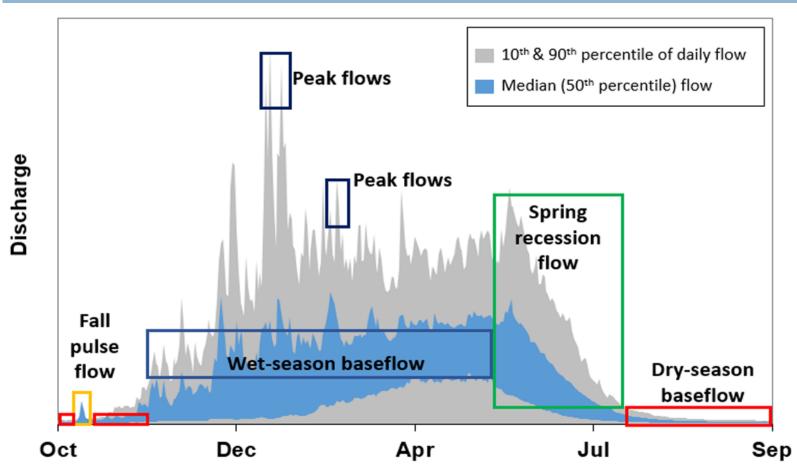


Figure 5: Differences in simulated streamflow at RMP SRP0709 during 2004–2018.

Santa Rosa Plain – GSP Appendix 4-D

How are Public Trust Resources Impacted by Groundwater Pumping?



The five functional flow components for California depicted on a representative hydrograph.

Defining Public Trust Review Area

October 4th Proposed Ordinance Recommended

- Areas where available information indicates potential for groundwater extraction to impact surface waters (within the contributing watershed of navigable waters)
 - Subterranean Stream or Potential Stream Depletion Area
 - Stetson Engineers, inc., 2008
 - Critical Watershed Areas
 - Upper Mark West Creek
 - Upper Green Valley Creek
 - Mill Creek
 - Dutch Bill Creek
 - SGMA Priority Basins
 - Santa Rosa Plain
 - Petaluma Valley
 - Sonoma Valley

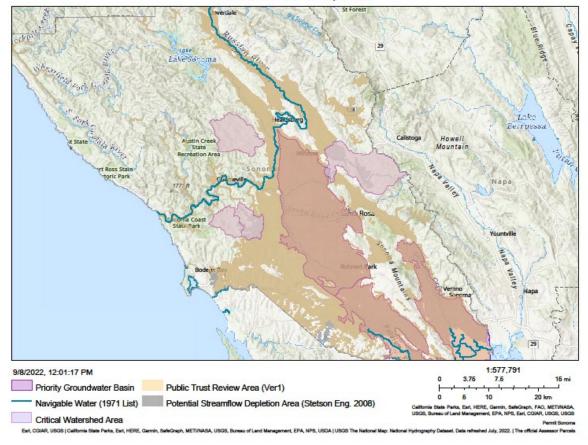
Public Trust Review Area

October 4th Proposed Ordinance

Please visit and explore using the online GIS viewer:

https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=8baedfd50be640b0b11548537f89fee2

Well Ordinance Update



Clarifying Questions

Principles Letter from Trout Unlimited, California Trout, Nature Conservancy, and Law Office of Peter Kiel

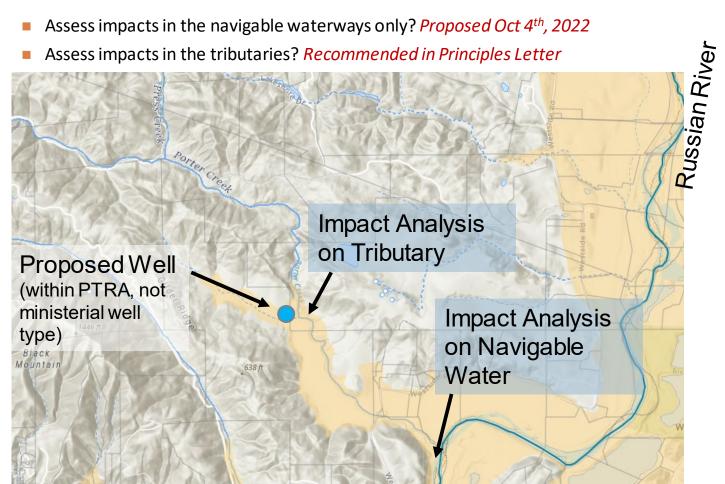
- 1. The TAC's and Policy Committee's analyses should be based on a clear understanding of the pathways by which groundwater extraction can affect public trust resources in navigable waterways.
- This can happen in at least two ways:
 - (i) by reducing flows in navigable waterways, and thereby impairing the ability of those navigable waterways to support one or more public trust uses;
 - (ii) by reducing flows in **non-navigable** tributaries that provide habitat for aquatic life that support public trust uses in the mainstem; for example by de-watering tributaries that provide spawning or rearing habitat for fish that are found in the mainstem at other times of year.

Discussion Questions

- Q1 What waterways require impacts analysis under the public trust doctrine?
 - Defined navigable waterways Given Agree?
 - Non-navigable tributaries (within watershed of a navigable waterway) that provide habitat for salmonids? Discuss
 - Assess impacts in the navigable waterways only? Proposed Oct 4th, 2022
 - Assess impacts in the tributaries? Recommended in Principles Letter
 - Other?

Discussion Questions

Q1 What waterways require impacts analysis under the public trust doctrine?



Ministerial versus Discretionary

Ministerial permits

- "Over the counter" permit
- County must approve if application meets objective codified standards
- No site specific conditions or site specific mitigation measures
- Standards clearly defined in ordinance

Discretionary permits

- CEQA applies (unless exempt)
- County has discretion to deny, approve, or approve with conditions
- Staff weighs, deliberates over, and analyzes facts in making determination
- Methods of analysis will not be defined in the well ordinance

Well Classification Discussion Questions

- What classes or categories of wells receive a ministerial (routine) permit?
- □ What well classes receive a **discretionary (more tailored) review**?
- Oct 4th Proposed Ordinance Ministerial Well Types
 - Replacement domestic well (groundwater use of parcel limited to 2 AFY)
 - **Well on low water use parcel** (groundwater use of parcel limited to 2 AFY)
 - **Well for existing land use** where groundwater use of parcel limited to existing use
 - Public water wells (where CEQA has been completed)
 - Injection wells
- Supported by BOS on Oct 4th Ministerial Well Types
 - Wells diverting surface water regulated by the SWRCB
 - Wells subject to Zero Net Use

Feedback for Technical Working Group

- Q2 What public trust resources and uses are sensitive to streamflow depletion due to groundwater extraction?
- Q3 Public Trust Review Area
 - What aquifers are interconnected with surface waters, and groundwater extraction from these aquifers is likely to have an adverse impact on public trust resources?