



# Why is the Navy Sampling Drinking Water Nationwide?

## The Navy is addressing potential exposure to PFOA and PFOS in drinking water wells near St. Juliens Creek Annex.

- The Navy issued a policy in June 2016 to address PFOA and PFOS in drinking water.
- The Navy’s primary historical source of PFOA and PFOS was firefighting foam.
  - No longer released during training and testing.
  - Currently used for lifesaving emergency measures.
- The Navy is investigating all installations to identify PFOA and PFOS exposure.

On March 14, 2023, **the EPA proposed a draft regulatory drinking water standard for certain PFAS**, including PFOA and PFOS. In response, the Department of Defense (DoD) has issued the following statement: “DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to the clarity that a final regulatory drinking water standard for PFAS will provide. In anticipation of the final standard that EPA expects to publish by the end of 2023, **the DoD is assessing what actions DoD can take to be prepared to incorporate EPA’s final regulatory standard** into our current cleanup process, such as reviewing our existing data and conducting additional sampling where necessary. In addition, **DoD will incorporate nationwide PFAS cleanup guidance**, issued by EPA and applicable to all owners and operators under the federal cleanup law, as to when to provide alternate water when PFAS are present.”

### TO REQUEST DRINKING WATER WELL SAMPLING

leave a message at  
**844-844-SJCA (844-844-7522)**  
 or email the Norfolk Naval Shipyard/SJCA  
 Public Affairs Office at [NNSY\\_PAO@us.navy.mil](mailto:NNSY_PAO@us.navy.mil)

### FOR MORE INFORMATION

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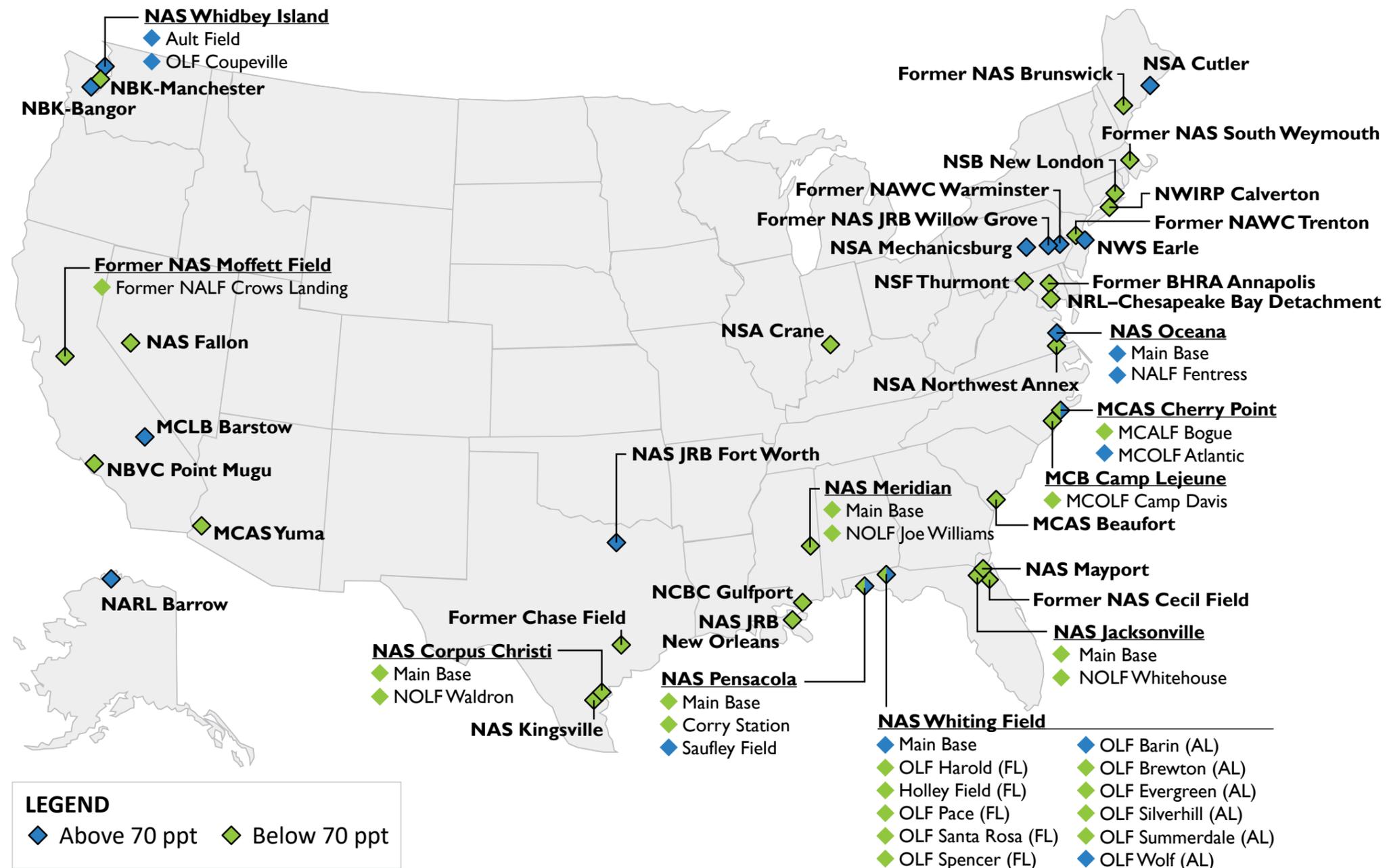


### ACRONYMS & ABBREVIATIONS

EPA	U.S. Environmental Protection Agency	PFOS	perfluorooctane sulfonic acid
PFAS	per- and polyfluoroalkyl substances	ppt	part(s) per trillion
PFOA	perfluorooctanoic acid	SJCA	St. Juliens Creek Annex



# Locations of Completed Off-Base Drinking Water Sampling for PFOA and PFOS



**The Navy will provide bottled water to properties with PFOA and/or PFOS above 70 ppt in drinking water until a long-term solution is implemented.**

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# St. Juliens Creek Annex On-Base PFAS Investigation



- Preliminary Assessment finalized in 2021 identified five geographic areas where PFAS were potentially released.
- Site Inspection conducted between 2022 and 2023.
  - 27 groundwater samples collected on base during Site Inspection.

PFAS	Concentration range (ppt)
PFOA	not detected–1,690
PFOS	not detected–50,800

- PFOA and PFOS found above 70 ppt in 21 groundwater samples.
- Information collected about the direction of groundwater flow.

**FOR MORE INFORMATION**  
 access the St. Juliens Creek Annex Administrative Record at <https://go.usa.gov/xSvtf>  
 or scan the QR code →

### LEGEND

- Groundwater well with PFOA and/or PFOS above 70 ppt
  - Groundwater well with PFOA and/or PFOS below 70 ppt
  - ▭ PFAS release area
  - ➔ Groundwater flow direction
  - ▭ Base boundary
  - City boundary
- Scale: 0 to 0.5 mile

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# St. Juliens Creek Annex Off-Base PFAS Drinking Water Well Sampling

**The Navy needs your permission to sample your private drinking water well.**

- Proposed sampling area is 1 mile in the direction of groundwater flow from areas on base where PFOA and/or PFOS were detected above 70 ppt.
- If your drinking water is provided by the City of Chesapeake, the Navy does not need to sample your water.
- The Navy may expand the sampling area based on the results from the proposed sampling area.



## LEGEND

- Orange dot: Groundwater well with PFOA and/or PFOS above 70 ppt
- Cyan dot: Groundwater well with PFOA and/or PFOS below 70 ppt
- Green outline: Base boundary
- Blue arrow: Groundwater flow direction
- Pink outline: Proposed sampling area
- Dashed yellow line: City boundary



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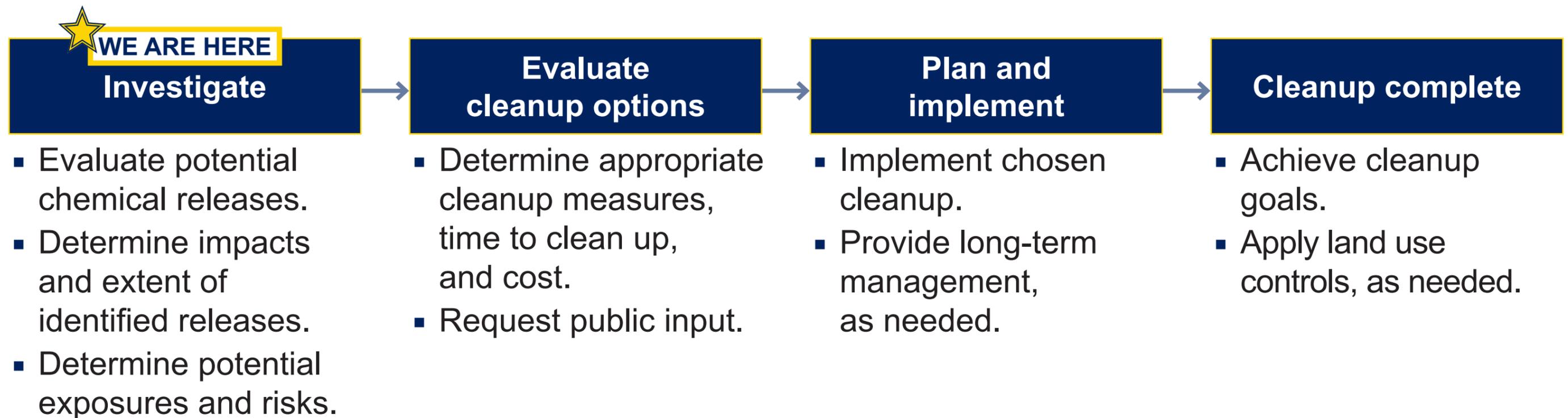


# Environmental Cleanup Process

## PRIORITY: Protect Human Health and the Environment

- The structured regulatory process, shown below, is used to identify and clean up past environmental releases at St. Juliens Creek Annex.
- The Navy works closely with Virginia Department of Environmental Quality and EPA.
- Public input welcome throughout the process and formally requested at certain times.
- This is a comprehensive process and will take some time.

## PFAS Environmental Cleanup Process



**The PFAS evaluation is in its early stages.**

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# Exposure to Per- and Polyfluoroalkyl Substances (PFAS)

## What Are PFAS?

- Family of manufactured chemicals.
- PFOA and PFOS are the most studied and understood.
- Found in the environment around the world (in air, water, soil, animals, plants, as well as in humans).
- Last a long time in the environment.
- Widely used since 1950s in many products, such as:



firefighting foam



stain-resistant carpets and fabrics



water-resistant fabrics



personal care products



nonstick cookware



food packaging

## How Can People Be Exposed to PFAS?

- PFAS may be present in drinking water, food, indoor dust, some consumer products, and workplaces.
- Drinking water is a primary source of exposure.
- Most non-occupational exposures occur by drinking water or eating food that contains PFAS.
- Exposure is minor through skin contact when bathing, showering, or swimming.
- Mothers with PFAS in their bodies can transfer PFAS to their unborn or nursing child.
- Based on current science, the benefits of breastfeeding appear to outweigh the risks for infants exposed to PFAS in breastmilk.

## How Can People Reduce Exposure to PFAS in Drinking Water?

- **Get your drinking water well tested.**
- Use an alternative water source for drinking, cooking, and making baby formula.
- Certain certified and commercially available filters reduce PFAS in drinking water.

**FOR MORE INFORMATION** about PFAS filtration systems certified by NSF International, a public health organization, visit <http://www.nsf.org> or scan the QR code →



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# Health Effects

## What Are the Potential Health Effects?

- Scientists are still learning about how exposure to PFAS might affect people's health.
- Exposure to PFAS could increase the risk of:
  - ♥ Higher cholesterol levels.
  - 🍷 Changes in liver enzymes.
  - 👶 Higher blood pressure and preeclampsia in pregnant women.
  - 👶 Lower infant birth weight and changes in growth.
  - 🏠 Lowered/decreased vaccine response.
  - 🎗️ Certain types of cancers (testicular and kidney).

## Are Blood Tests Available for PFAS?

- Blood testing for PFAS is available but is *not* a regular test offered by a doctor.
  - Blood test results will not tell you if PFAS exposure will cause current or future health problems.
  - Blood tests results cannot provide information on treatment.

**Chemical exposures do not always lead to health effects.**

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# Drinking Water Well Sampling Results Timeline

Sequence of Events	Approximate Timeline
1. Navy receives preliminary results.	<ul style="list-style-type: none"> <li>■ Within 1 month after sample collected.</li> </ul>
2. Navy calls property owner with preliminary results.	<ul style="list-style-type: none"> <li>■ Within 24 hours of preliminary results received by the Navy.</li> </ul>
3. Bottled water delivered if PFOA and/or PFOS are above 70 ppt.	<ul style="list-style-type: none"> <li>■ Within 24 hours of preliminary results notification.</li> </ul>
4. Lab data are verified and Navy mails final, verified results to property owner.	<ul style="list-style-type: none"> <li>■ 3 months after sampling.</li> </ul>

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# Sign Up for Your Sampling Appointment

## Sampling Appointment

- No cost to you.
- Available to residents within the sampling area who obtain drinking water from a private drinking water well.
- Available daily (including weekends) **Wednesday, February 7**, through **Wednesday, February 14, 2024, 8 a.m. to 4 p.m.**  
*Additional times are available upon request.*

## What We Need from You

- Right-of-Entry Agreement signed by homeowner.
- Completed homeowner questionnaire.
- Adult must be present at the property during sampling.

**The Navy will provide bottled water for cooking and drinking if PFOA and/or PFOS are above 70 ppt.**

## Sampling Process

- Samples collected by a team of two experienced contractors:
  - Takes less than an hour.
  - Collected as close to well as possible.
  - Water will run prior to sample collection .
- Samples will be collected and analyzed according to approved Navy and EPA drinking water standards.
- Team will take health precautions during sampling, if requested.

To schedule an appointment after the Open House, call **844-844-SJCA (844-844-7522)**, or send an email to **NNSY\_PAO@us.navy.mil**.

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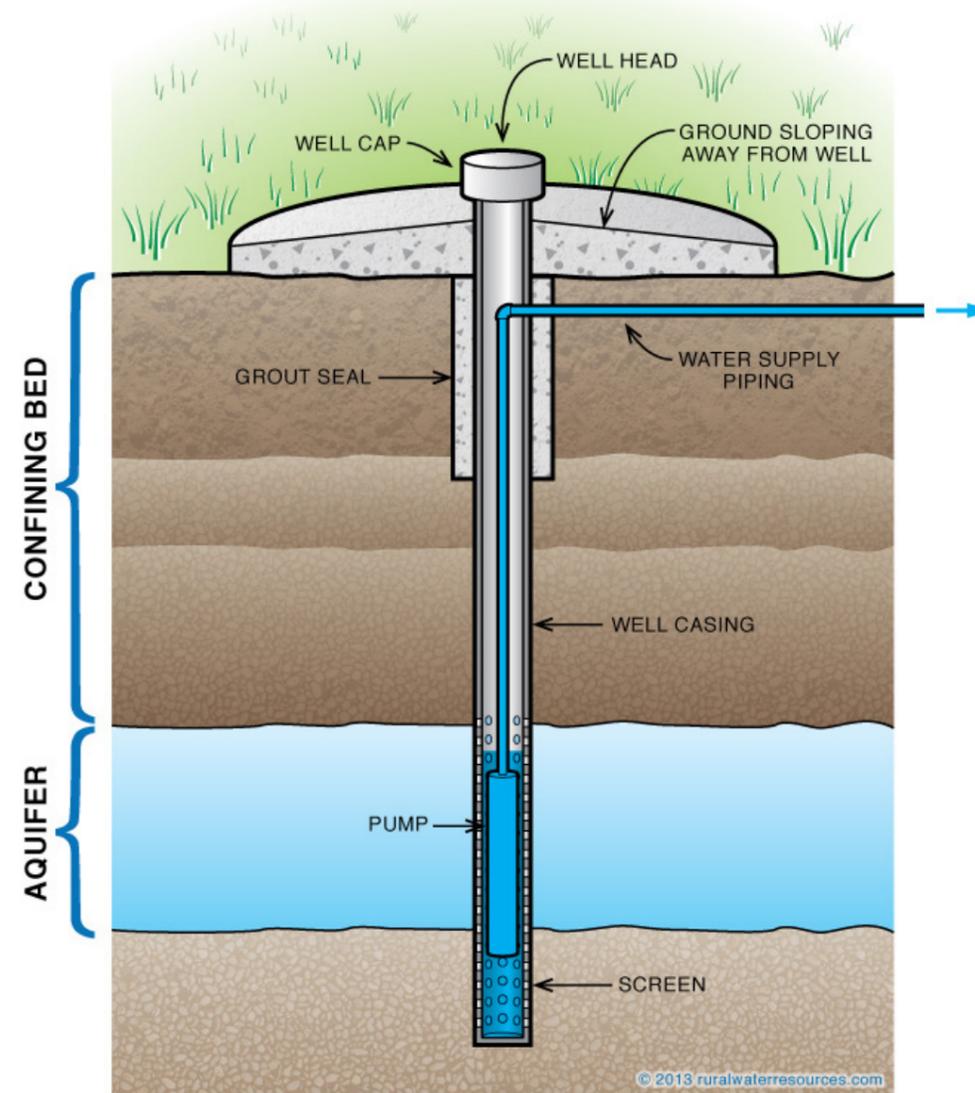
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# Managing Your Private Drinking Water Well

## Minimizing the Risks

- Testing of private drinking water wells is recommended to ensure water quality.
- The National Ground Water Association recommends well owners test their water at least annually for contaminants, including bacteria and nitrates.
- More frequent testing is recommended if your water changes in taste, odor, or appearance.
- If using water conditioner (aka, “water softener”) equipment, it should be maintained and kept in working order.
- Do not dispose of or store hazardous materials or chemicals near your well.

## Typical Well Design



Information gathered from Sonoma County Dept. of Health Services

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