4

WATER RESOURCES

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ELEMENT 4. WATER RESOURCES

Introduction

San Juan County strives to achieve integrated water resources management throughout its jurisdiction. The County gained greater understanding of its water resources over the last 20 years through several plans and studies. These efforts focused on resource protection through common goals of non-degradation and conservation of all water types, including surface and storm waters, groundwater, and marine receiving waters. Managing for resiliency, in both water resources and our community, in the face of climate change is critical to minimizing the impacts of change on the hydrology and aquatic habitats we and other species rely upon.

San Juan County relies on precipitation as the only source of freshwater. Precipitation that falls on each island is the only source of recharge for surface and groundwater supplies, leaving the County especially vulnerable to drier conditions expected with climate change. The percentage of precipitation that actually becomes groundwater recharge is extremely low, often less than 10 percent.

The islands' geography is characterized by the rain shadow created by the Olympic Mountains to the south and Vancouver Island to the west, by predominantly steep terrain and bedrock geology, by small watershed catchment areas, and by extensive shoreline. These conditions result in lower rainfall than other areas of Western Washington, limited groundwater storage, and extensive runoff and drainage to the Salish Sea. The freshwater available on each island is isolated by the surrounding marine waters, which make our groundwater supplies near the shorelines at risk of seawater intrusion.

Wells vary widely in quality and quantity across the County. Generally, water systems with wells located away from the shoreline have good water quality. However, some areas are experiencing seawater intrusion at this time. How we manage our water use for domestic and agricultural purposes, as well as treat and manage our storm and surface waters, is critical to ensuring all of our water resources are of the highest quality and quantity possible.

Planning

Since 2000 San Juan County has been active in water resource planning, adopting the Watershed Management Action Plan in 2004 to address surface and groundwater quality and quantity issues, water rights, and existing water systems capacity to serve projected growth. The plan contained specific recommendations to address watershed contamination from several development, land use, and disposal related practices. Groundwater availability from exempt wells, alternative water supply options, and water source approval were discussed. The Plan was a springboard for future efforts by the Water Resource Management Committee, and its successor, the Clean Water Advisory Committee to evaluate water resources in the Islands.

In 2015, the County adopted its Stormwater Basin Plan to address storm water quality, drainage and flooding. In 2022, a comprehensive update to the San Juan County Chapter of the Puget Sound Chinook Recovery Plan was adopted by County Council, which included a focus on instream flows, enhancing fish habitat, and advancing understanding of local aquatic ecosystems. The San Juan Conservation Land Bank updated their strategic plan in 2024, which includes measures for protecting watersheds and aquifers on their lands. And the SJI Conservation District drafted the first drought plan in 2005; it supports annual and five-year plans that include water conservation measures. The entire list of plans can be viewed in Attachment A.

Critical Aquifer Recharge Areas

The entire County has been designated a critical aquifer recharge area because the County's aquifers are highly susceptible to contamination. The County has development requirements and voluntary programs, including the Voluntary Stewardship Program, to promote a safe and adequate water supply by protecting the quantity and quality of water available for recharge. Over the past decades, the County has adopted stricter regulations to ensure that new sources of potable water are safe and adequate. However, legacy issues that include groundwater contamination, inadequate well production, well interference, and insufficient potable water storage persist throughout the County and are dealt with on a case-by-case basis. Emerging contaminants in all our waters are addressed as they are discovered.

Coordinated Potable Water System Planning

With the goal of improving service and protecting a shared resource, the County worked with water purveyors to develop coordinated water system plans in three areas.

- The San Juan Island Critical Water Supply Service Area Coordinated Water System Plan was drafted in September 1990. The plan evaluated the existing water systems constructed at that time, including source capacity, storage, transmission, and shared facility potential. In addition, service areas for existing water systems were established allowing for the water systems to become the exclusive water service providers within those areas.

- In 2003, the *Lopez Village Abbreviated Coordinated Water System Plan* was adopted, establishing design guidelines for new and expanding water systems and outlining a process to direct new growth to existing public water systems in the area rather than creating new water systems. This supports the ability of existing water systems to continue to provide safe and reliable drinking water to their service areas. The Coordinated Water System Plan was adopted in response to the establishment of the Lopez Village Critical Water Supply Service Area in 2001. The Critical Water Supply service area was designated due to questions about whether water quantity and quality were adequate for the growth that was occurring in the area during that time.

- The *Eastsound Water Supply and Abbreviated Coordinated Water System Plan* was adopted in 2008. This established Eastsound Water Users Association (EWUA) as the sole water purveyor within their service area and set standards for timely and reasonable service. This plan ensured that all new development within the EWUA service area is served by that water system and not by individual or smaller water systems in the area.

Climate Change Considerations

Based on the University of Washington report published in 2015, State of Knowledge, Climate Change in Puget Sound, the regional trend indicates that summer precipitation is likely to slightly decrease over time, with warmer, drier summers expected. However, periods of heavy rain may intensify during the spring months from March through May. The precipitation during these spring months from 1895-2014 has increased twenty-seven percent for the region.

With ground and surface water resources dependent solely on precipitation to recharge, increasing periods of extended drought will require planning to ensure that adequate

water supplies are available. Some large water systems in the County are implementing water use efficiency and conservation measures and have served more users with less water. Implementation of such measures Countywide has the potential to ease demand on County water resources.

The consequences of changes in the regional hydrologic cycle due to climate change include increased risks of flooding, erosion, and impacts to public and private infrastructure due to heavy rains and sea level rise, as well as insufficient water availability and quality in the summer and fall. Sea level rise will increase saltwater intrusion into shoreline wells and result in failed septic systems in low-lying shoreline locations. Streams, wetlands, and riparian areas, and the aquatic and terrestrial species who depend on them for survival, are at risk of inadequate water availability. Warmer temperatures also impact the quality of the water, which can become oxygen depleted and/or at greater risk of elevated harmful or toxic algal growth. Ensuring collective management of water resources to support all needs in a changing climate will be an ongoing challenge throughout the Islands.

Water Sources and Water Use Overview

Drinking Water Sources

San Juan County's potable water needs are served by a large variety of public water systems and private exempt wells. Approximately forty percent of the County's population is served by Group A water systems (more than 14 connections), forty percent are served by private exempt wells, and the remaining twenty percent are connected to Group B water systems (3 to 14 connections).

The predominant fresh water source in San Juan County is groundwater. There are over 5,000 wells in the County. Between fifty-five and sixty percent of the county population is served by groundwater pumped from wells. Because of its heavy reliance on local precipitation and infiltration for freshwater resources, the entire County is designated a Critical Aquifer Recharge Area.

Approximately thirty-five percent of the County's population relies upon surface water for their drinking water supply. The two largest community water systems in the County are the Town of Friday Harbor, which is supplied solely by surface water, and Eastsound Water Users Association, which utilizes a combination of surface and groundwater. A table listing the County's largest water systems by connections is shown in Table 4.3.1 below.

Table 4-1
San Juan County's Largest Water Systems

	Water System	Island	Ownership	2024 Reported Connections
1	Friday Harbor, Town of	San Juan	Town	1899
2	Eastsound Water Users Association	Orcas	Association	1265
3	Roche Harbor Water System Inc.	San Juan	Investor	626
4	Doe Bay Water Users Association	Orcas	Association	290
5	Rosario	Orcas	Investor	236
6	Fisherman Bay Water Association	Lopez	Private	169
7	Cape San Juan Water District	San Juan	Special District	159
8	Center Island Water System	Center	Private	145
9	Olga Water Users Inc/	Orcas	Private	130
10	Blakely Is. Maintenance Commission	Blakley	Private	120
11	Orcas Highlands Association, Inc.	Orcas	Association	117
12	Decatur Northwest	Decatur	Private	88
13	The Oaks Mobile Home Park	San Juan	Private	80
14	Spring Point	Orcas	Association	70

Source: WA Department of Health, Sentry Drinking Water Database

Besides the number of connections, water systems are also classified by the number of temporary or transient users that are served. Notably, Mountain and Cascade Lakes together in 2017 supplied surface water for approximately 800,000 temporary users of the Moran State Park, Rosario, and Doe Bay water systems.

There are over a dozen desalination facilities creating potable water in San Juan County, serving approximately 500 connections. In addition, San Juan County has historically approved new single family home development utilizing hauled water and rainwater catchment. Catchment is commonly used to augment a groundwater source. However, the use of hauled water for new construction needs review based on current concerns about water availability and climate impacts.

Source Approval

San Juan County Code (SJCC) Chapter 8.06, administered by Health & Community Services (H&CS) contains minimum requirements for demonstrating a potable water source; as well as groundwater resource protection. The code applies to all potable water systems proposed for building permits and subdivisions. SJCC Chapter 8.06 complies with Growth Management Act (GMA) requirements for verification of water availability for building permits (RCW 19.27) and for subdivisions (RCW 58.17).

Water Requirements for Building

Prior to building permit approval, evidence of an adequate water supply must be provided in the permit application.

1. Community Water Systems - A written notice from the community water system purveyor is required verifying that a water connection is available.
2. Individual Wells - For individual well approvals, a water well report verifying well construction, water quality testing, and well yield testing are required. In addition, a water meter is required at the wellhead, and a 100-foot radius around the well establishing a sanitary control area. The following may also be required:
    a. A seawater intrusion risk assessment is required where location and/or groundwater criteria indicate the potential for seawater intrusion.
    b. If necessary, a hydrogeologic site evaluation performed by a Licensed Hydrogeologist is required.
3. Alternative water sources - Sources other than an individual well or connection to a public water system are also approved for a single-family residential building permit. Alternative sources require a recorded Operation and Maintenance covenant to be filed with the County Auditor. Alternative sources include shallow wells with unsatisfactory bacteriological tests; water systems yielding less than 200 gallons/day; hauled water systems; rainwater catchment; desalination; and wells needing treatment for arsenic, barium, manganese or fluoride.

Subdivision Requirements

An adequate water source for each new parcel is required prior to subdivision approval, such as:

1. Connection to Community Water System. A written notice from the community water system purveyor is required to be submitted with the subdivision application. The letter must verify that a water connection is available. Water services must be installed to the property line prior to subdivision approval.
2. New Community Water System or Individual Well. Applicants must demonstrate a minimum capacity of 1,000 gallons per day/connection, provide a current bacteriological sample and a complete inorganic chemical analysis. Wells must be drilled and tested to ensure that water is available prior to the creation of new lots.

Public Water Systems

Public water systems are those that serve more than three residential connections. They can also consist of water systems serving one connection if the public has access to water (i.e. restaurant, store, or church). In order to protect water resources, the County has established stringent minimum requirements when developing new water supplies to serve new subdivisions.

The San Juan County Board of Health adopted the first local drinking water code in August 1996, establishing rules and regulations for individual water wells and public water systems. There have been six revisions of the code since then, resulting in the current SJCC Chapter 8.06 Water Wells and Water Systems. This code adopts state drinking water and well construction rules by reference establishing standards for resource protection, monitoring, and management. This is a climate change mitigation measure to hold smaller systems to the high standards of state regulations.

Requirements for new public water systems are:

- Proposed sources of groundwater for public water systems within one-quarter mile of an existing water system service area must apply to that system for service prior to drilling;
- All new public water systems using groundwater must demonstrate a source capacity of 1,000 gallons per day (gpd)/connection, but can design the system based on 350 gallons per day (gpd)/connection; and
- Water systems in areas designated as critical water resource areas, as part of their water system plans, must include resource protection including:
    - A conservation plan;
    - A water shortage contingency plan; and
    - Watershed control and management strategies such as monthly meter readings, static level measurements, comprehensive monitoring, and coordination of well pumping with other water systems.

Industrial Water Use

Industrial water uses currently consist of gravel mining operations and concrete manufacturing. It is presumed that the sources for these operations are groundwater. There is limited data on the quantity of water being used for manufacturing in the County.

Agriculture Water Use

Forage production and livestock are the dominant agricultural practices in San Juan County. Small farm production of both vegetable and fruit crops is increasing. Over 13,000 acres has been designated as Agricultural Resource land. Without adequate water, this designation is tenuous.

San Juan County's agricultural sector relies on surface water from ponds, streams, and groundwater for irrigation, livestock water, and livestock processing. According to the USDA Ag Census (2022), there are 473 acres of irrigated farmland in San Juan County out of the total 19,571 actively farmed acres. The Washington State Department of Ecology maintains

a database of water rights which includes agricultural use. There is limited available data on the quantity of water resources being used for irrigation and agriculture in the County. Irrigation requirements are estimated to be approximately 1 acre foot during the growing season for grass pasture and for vegetable production.

To support the protection and enhancement of water resources, critical areas, and agricultural viability, San Juan County adopted the Voluntary Stewardship Program, which is managed by the SJI Conservation District. The program uses an incentive-based approach to protect aquifer recharge, critical areas, promote agricultural viability, and encourage cooperation among diverse stakeholders.

With proper management and an understanding through monitoring/metering, our intensively managed farmland and pasturelands provide ecosystem services such as water filtration and wildlife habitat. In light of these benefits, as well as social assets including food security, cultural history, and pastoral views, agricultural water usage must be factored into County water planning.

As the islands' populations have increased, the demands on groundwater have increased and will continue to do so with additional growth. The future of farming and food security in San Juan County will depend upon the continued access to, and wise use of, water.

Well Inventory

The County well inventory is quantified by the number of water well reports (well logs) on file. Well logs are available at H&CS or through the Department of Ecology website. Ecology has a record of approximately 5400 water well logs on file. All new wells must meet well site criteria to ensure that they are not impacted by potential sources of contamination.

Ground and Surface Water Protection

On-Site Sewage System Permitting and Operation & Maintenance

Health and Community Services (H&CS) implements SJCC Chapter 8.16 On-Site Sewage System (OSS) Disposal to protect public health by minimizing exposure to untreated sewage. This includes inadequately treated discharges from OSS that can affect surface and ground water. Permitting requirements for on-site sewage systems include vertical separation to groundwater and horizontal separation to surface water adopted by reference from WAC 246-272A. In addition, H&CS administers an Operation and Maintenance (O&M) program that exceeds the requirements outlined in WAC 246-272A by requiring ongoing O&M inspections county wide, increasing the frequency at which

inspections are required for food service establishments, and requiring O&M upgrades to be installed at the time of property sale.

There is also potential for an increased threat to freshwater and marine receiving waters due to septic system failures as a result of rising sea levels, increased flooding, and seawater intrusion in waterfront lots in a changing climate.

Seawater Intrusion

In 2007, the San Juan County Board of Health revised SJCC Chapter 8.06 to include a Seawater Intrusion Protection section. This ensures that projects that have a potential to cause or contribute to seawater intrusion are evaluated to determine their impacts on the groundwater resource prior to a project decision being made. If the project is determined to have an impact on groundwater, the Health Officer will approve with conditions designed to prevent degradation. Projects that cannot mitigate the impact of seawater intrusion on the groundwater resource may be modified or denied.

Water Monitoring

H&CS established groundwater quality monitoring networks in high priority areas in 2008 utilizing grant funding. A monitoring network on Lopez is monitored and maintained by H&CS staff at a low level with available staff and funding. The monitoring networks consist of data loggers installed in multiple wells, which gather static water level information. In addition, nitrate, chloride and conductivity parameters have been analyzed periodically since 2008 to assess impacts from seawater intrusion and human related nitrate loading to the aquifers. Ongoing monitoring is informative for the County. For example, the recent analysis of North Lopez data showed elevated chloride in some wells. This demonstrates that seawater intrusion is not just a speculation; it is being observed and is likely to increase with increased groundwater pumping and sea level rise.

Individual wells are required to monitor for water quality and submit that information to H&CS in order to obtain water availability approval for a building permit. The water quality sample results are scanned with the water availability application and maintained by H&CS.

Storm and Surface Water Management

The County established a Stormwater Utility (Utility) in 2005 (now called the Clean Water Utility) to administer programs and projects to protect and improve water quality, water quantity management, and aquatic habitats. The Utility initially focused on drainage planning, monitoring, and conveyance projects. In 2018, the Utility began to fully address its Council adopted charter per SCJCC Chapter 13.04 to address water resources management throughout the County. The Clean Water Utility supports work in surface and

groundwater availability, water quality and aquatic species monitoring, aquifer protection, and protection of fish habitat. This is in addition to its traditional stormwater planning, permitting, monitoring, maintenance, treatment and conveyance outside the road right of way, to minimize property damage, and to promote and protect public health, safety and welfare. The Clean Water Utility also implements riparian and wetland restoration as green infrastructure/low impact development strategies to protect and improve water quality, reduce the risk of harmful algal blooms, limit channel erosion and flooding, and address climate resiliency.

Watershed-scale storm and surface water system planning was completed in 2015 and is used, along with other technical and scientific information, to guide the Utility's Capital Improvement Program (CIP) for infrastructure upgrades to storm and surface waters. The projects are designed to retain fresh water on the landscape for groundwater recharge, manage excessive runoff, reduce bacteria and nutrient loading, and maintain cooler waters to buffer the impacts of climate change on water quality and cold water habitat. High precipitation events in the fall, winter, and spring have the potential to cause inundation, erosion, and damage to infrastructure. Appropriate drainage systems in urban, rural and agricultural lands are needed in response to climate change, in order to reduce the potential for water quality contamination from eroding sediment, nutrients, pathogen runoff, and preserve the viability of agricultural production.

The Utility works to ensure the storm water system is adequately maintained and functional to reduce flood damage from runoff. Storm water runoff from impervious surfaces also picks up contaminants that can impact our water quality if not properly treated. Storm water from impervious surfaces must be pre-treated before discharge to natural surface waters (wetlands, streams, ponds, and marine waters). The County uses development design standards for storm water that follow the Department of Ecology's latest guidance, adapted and upgraded for conditions specific to San Juan County. Regular street sweeping and catch basin cleaning in dense "urban core" areas and ferry landings helps to reduce contaminant loads entering waterways. The Clean Water Utility also periodically monitors storm water runoff to check pollution levels. Protection and maintenance of the storm and surface water system also helps to reduce the risk of flooding of structures and roadways, while encouraging water retention on the Islands. Storm water infiltrates into groundwater, and drains to surface waters (streams, wetlands, ponds and their associated riparian areas) before entering the marine environment.

Natural Resources

Fish, Wildlife, and Native Habitat

The complex geology of the San Juan Islands supports a diverse land cover that, in conjunction with our streams, wetlands and nearshore areas, supports a wide array of plants and animals. Our habitats consist of many islands that are in some cases small, disconnected, and often rocky. For many of them protection is either recommended or is required by State or Federal law.

A stated goal of previous planning efforts is to use Best Available Science to ensure there is no net loss of the functions and values of wetlands and fish and wildlife habitat. In 2022 the state and federal governments adopted the County's Salmon Recovery and multi-species conservation plan which has specific strategies, goals and implementation targets to protect and restore anadromous (migratory) and native fishes.

Climate change poses a threat to native habitats, impacting our fish and wildlife. Some of the potential impacts of climate change include: increased erosion due to flooding, storm surge, and sea level rise; loss of beaches and wetlands resulting from sea level rise coupled with armoring and development that prevents those habitats from being able to move further inland; and harmful algal blooms resulting from warmer water temperatures and excessive nutrients. There are also instream flow and fish migration challenges caused by impoundments and water withdrawals from streams.

Marine Waters - San Juan County Marine Stewardship Area

The marine waters of San Juan County were designated a Marine Stewardship Area (MSA) in 2004. The designation is designed to protect the unique and valuable marine resources of the islands, while allowing sustainable use to occur. A Marine Stewardship Area Plan, completed by the Marine Resources Committee in 2007 and subsequently updated as the State of the MSA Report in 2023, assessed conditions and recommended strategies to protect and improve resource conditions. The work is consistent with some of the Shoreline Master Program development standards currently in place.

The Marine Stewardship Area designation includes the Islands' uplands, shorelines and marine waters throughout the County. The quality of the marine waters is influenced by the freshwater runoff from the Islands as well as boating and vessel traffic, and activities of neighboring jurisdictions.

The County's Salmon Recovery Program, updated in 2022 identifies surface water management for habitat benefits to aquatic species. Restoration and protection actions for salmonid and native freshwater fish are currently underway in high priority watersheds.

Climate change poses a threat to marine ecosystems with potential impacts such as harmful algal blooms and intertidal die-offs as a result of excessive heat during low tides. These and other impacts of climate change are highlighted in the State of the MSA Report (2023) and the Salmon Recovery Plan Chapter Update 2022.

Goals and Policies

Goal WR 1
Manage water quantity for the benefit of all species, habitats, and uses.

Policy WR 1.1
Maintain or enhance the infiltration of precipitation throughout watersheds to ensure adequate recharge to streams, wetlands, lakes, ponds, and aquifers, and nearshore flow to marine waters.

Policy WR 1.2
Ensure surface and ground water rights and instream flows are appropriately allocated to support viable agricultural and other uses consistent with policies to protect fish and wildlife habitat and other users.

Policy WR 1.3
Manage stormwater to reduce the impacts of severe flooding, retain waters on the land, and capture for reuse.

Policy WR 1.4
Ensure that the County is in compliance with the laws set forth in the Native American Graves Protection and Repatriation Act.

Goal WR 2
Protect and improve water quality for the benefit of all species, habitats, and uses.

Policy WR 2.1
Ensure County code addresses new information on seawater intrusion, contaminants of concern, new and alternative water sources, and Group A/B system oversight and support.

Policy WR 2.2
Maintain stream, shoreline, and wetland buffers, stormwater treatment facilities, agricultural best management practices and other mitigation measures to remove contaminants in order to protect water quality and habitat.

Policy WR 2.3
Maintain and improve the onsite septic system program and ensure septic and water systems vulnerable to sea level rise and increased flooding are adequately addressed to protect water quality.

Goal WR 3

Monitor and track water resource quantity, quality, and use.

Policy WR 3.1

Develop a robust, integrated water quantity monitoring and reporting program through a combination of metering of public and private water systems, wells, and surface water withdrawals to improve understanding of water use volumes and timing relative to water availability across each Island.

Policy WR 3.2

Support the establishment of localized water budgets using current hydrogeologic surveys and surface water hydrologic analysis, to inform water conservation prioritization, use efficiency, and infrastructure planning.

Policy WR 3.3

Update and map critical water resources assets (source watersheds, systems, wells, surface waters, storage facilities, on-site septic systems, etc.) and support a public database of water resource information on the County website.

Policy WR 3.4

Develop an integrated program to monitor water quality (in all water types) on a consistent basis to address issues that can impede water use, including emerging contaminants such as PFAS, toxic algal blooms, seawater intrusion.

Goal WR 4

Reduce impacts of development and agriculture on water resources.

Policy WR 4.1

Ensure new and existing development has adequate water availability and discharge/treatment systems prior to permit approval to prevent impairment of existing users including neighboring wells, downstream/ gradient landowners, and fish and wildlife that rely upon freshwater habitats.

Policy WR 4.2

Encourage best practices to slow storm water and support aquifer recharge including: the retention of healthy native soils, vegetation and forest, water quality swales, green roofs, rain gardens, artificial recharge, permeable surfaces and use of gray water for irrigation.

> *Artificial recharge is the process of intentionally adding water to groundwater aquifers, typically to replenish them and address issues like low water levels or salinity intrusion.*

Policy WR 4.3

Promote agricultural best management practices, water conservation programs, and the Voluntary Stewardship Program to protect water quality, conserve water and soils, and support fish and wildlife habitat corridors.

Goal WR 5

Preserve and restore water resources through projects and programs.

Policy WR 5.1

Work cooperatively with agencies and landowners to coordinate protection and management of water resources and fish and wildlife habitat in the County.

Policy WR 5.2

Protect, restore, and enhance wetlands, streams, shorelines, and their associated buffers.

Policy WR 5.3

Support projects that foster cross sector collaboration such as water banks, irrigation modernization, and other mechanisms to ensure sufficient water supply for all.

Goal WR 6

Support funding for integrated water resources management in the County.

Policy WR 6.1

Support and expand County funding and partnerships for water resource management throughout the Islands to address water quantity, water quality management, and fish and wildlife habitat.

Policy WR 6.2

Continue to utilize the state and federal funded programs to protect water resources such as the Voluntary Stewardship Program for agriculture and critical areas, and the Salmon Recovery Program for fish habitat.

Goal WR 7

Continue inclusive water resources planning and education.

Policy WR 7.1

Ensure coordinated water resources planning and protection efforts across County departments, with established timelines and skilled staff to implement policies included in this Element.

Policy WR 7.2

Support staff and professional services who provide technical assistance (hydrogeologists, stormwater engineering, irrigation specialists, hydrologists, biologists) to address water resources management for the benefit of all.

Policy WR 7.3

Promote and incentivize water conservation and use efficiency for homes, business uses, agricultural irrigation, and lawn care, among other uses.

Policy WR 7.4

Encourage voluntary data collection (static water, water quality, etc.) from wells, supporting automated retrieval of data to encourage participation in monitoring activities.