

WATER RESOURCES

4

appendix



CONTENTS

- 1. State and County codes: 1**
- 2. State and County databases: 2**
- 3. Reports and plans:..... 3**
 - a. Water resource evaluation:.....3
 - County-wide studies:3
 - Studies of individual locations:3
 - b. Water Supply Reports and Water System Plans:.....4
 - c. Water resource management:.....5
 - d. Septic reports and plans:6
 - e. Marine:6
- 4. Monitoring: 7**
- 5. Water resource changes: 7**

APPENDIX 4. WATER RESOURCES

The following references are a compilation of resources created, provided, and maintained to support water resource management in San Juan County. They are organized by the type of resource (ex. database, code, plan) and the topic.

1. State and County codes:

Codes that regulate planning and development regarding water resource use.

Plats-Subdivisions-Dedications. RCW 58.17. (1981).

<https://app.leg.wa.gov/RCW/default.aspx?cite=58.17>

Rules and regulations of San Juan County Board of Health regarding water wells and water systems. RCW 8.06 (2013).

<https://www.sanjuancountywa.gov/DocumentCenter/View/809/Chapter-806-Drinking-Water-Rules-and-Regulations-PDF> (Revised from 1996).

Watershed Planning Act. RCW 90.82 (1997).

<https://apps.leg.wa.gov/rcw/default.aspx?cite=90.82>

On-site sewage systems. WAC 246-272A. (2005).

<https://apps.leg.wa.gov/wac/default.aspx?cite=246-272a>

San Juan County Health and Community Services. (2013). *Rules and Regulations of the San Juan County Board of Health regarding on-site sewage disposal*. RCW 8.16.

<https://www.sanjuancountywa.gov/DocumentCenter/View/832/Chapter-816-Rules-and-Regulations-PDF?bidId=> (Revised from 1999).

San Juan County Code. *Stormwater Utility*. Ord. 10-2018 § 1; Ord. 24-2009 § 2; Ord. 14-2005 § 1 (2024).

<https://www.codepublishing.com/WA/SanJuanCounty/html/SanJuanCounty13/SanJuanCounty1304.html>

2. State and County databases:

Searchable records of water rights, water systems, and water use.

National Agricultural Statistics Service. (2017). *2017 Census of agriculture- County Data*.

United States Department of Agriculture.

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Washington/st53_2_0001_0001.pdf

San Juan County GIS. (2024). *San Juan County Open Data: Comprehensive plan land use*. San

Juan County. [https://data2017-01-09t190539232z-](https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/9a206eae19294f83a6b0237d978f4fa5_6/explorate?location=48.598964%2C-122.987300%2C10.90)

[sjcgis.opendata.arcgis.com/datasets/9a206eae19294f83a6b0237d978f4fa5_6/explorate?location=48.598964%2C-122.987300%2C10.90](https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/9a206eae19294f83a6b0237d978f4fa5_6/explorate?location=48.598964%2C-122.987300%2C10.90)

San Juan County GIS. (2024). *San Juan County Open Data: Water System Boundaries*. San Juan

County. [https://data2017-01-09t190539232z-](https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/082a10235f2449cfa600be51bbe8aad0_1/explore?location=48.592370%2C-122.983450%2C10.87)

[sjcgis.opendata.arcgis.com/datasets/082a10235f2449cfa600be51bbe8aad0_1/explore?location=48.592370%2C-122.983450%2C10.87](https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/082a10235f2449cfa600be51bbe8aad0_1/explore?location=48.592370%2C-122.983450%2C10.87)

Washington State Department of Ecology. (2024). *Water Rights Search*.

<https://apps.wa.gov/ecology/waterrightstrackingsystem/WaterRights/default.aspx>

Division of Environmental Health Office of Drinking Water. (2024). *Find Water System*

database. Washington State Department of Health.

<https://fortress.wa.gov/doh/eh/portal/odw/si/FindWaterSystem.aspx>

Washington State Department of Ecology. (2024). *Washington state well report viewer*.

<https://apps.wa.gov/ecology/wellconstruction/Map/WCLSWebMap/default.aspx>

3. Reports and plans:

a. Water resource evaluation:

Studies of ground and surface water conditions regarding water recharge, storage, supply, and contamination to understand water resource quantity and quality.

County-wide studies:

Russell, R. (1975). *Geology and water resources of the San Juan Islands, San Juan County Washington* (Water Supply Bulletin No. 46). Washington Department of Ecology, Office of Technical Services.

<https://apps.ecology.wa.gov/publications/documents/wsb46.pdf>

Whiteman, K.J., Molenaar, Dee, Bortleson, G.C., and Jacoby, J.M. (1983). *Occurrence, quality, and use of ground water in Orcas, San Juan, Lopez and Shaw Islands, San Juan County, Washington*. U.S. Geological Survey Water-Resources Investigations Report 83-4019, 1-12 pls. <https://pubs.usgs.gov/publication/wri834019>

United State Geological Survey. (2002). *Estimates of ground-water recharge from precipitation to glacial-deposit and bedrock aquifers on Lopez, San Juan, orcas and Shaw Islands, San Juan County, Washington*. (Water-resources investigation report 02-4114).

<https://www.sanjuancountywa.gov/DocumentCenter/View/29457/2002-SJC-Estimates-of-Ground-Water-Rescharge-from-Precipitation>

Mayo R. (2009). *The current status of desalination systems in San Juan County, Washington executive summary and technical supplement*.

<https://www.sanjuancountywa.gov/DocumentCenter/View/861/Current-Status-of-Desalination-Systems-in-San-Juan-County-PDF>

Studies of individual locations:

United States Geological Survey. (2000). *Is seawater intrusion affecting ground water on Lopez Island, Washington?* San Juan County & San Juan Islands Conservation District.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29461/Is-Seawater-Intrusion-Affecting-Ground-Water-On-Lopez-Island-Washington-USGS>

Montgomery Water Group, Inc. (2004). *Multi-Purpose surface water storage assessment WRIA 2*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/867/Multi-Purpose-Surface-Water-Storage-Assessment-2004-PDF>

Water Resources Consulting LLC. (2006). *Ground water investigation 2006 update, Waldron Island, WA*. San Juan County. p. 3-24.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29462/2007-Waldron-Water-Study>

Pacific Groundwater Group. (2008). *Interim aquifer protection report Eastsound, San Juan County, WA*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/864/Eastsound--Interim-Aquifer-Protection-Report-PDF>

San Juan County Health and Community Services. (2011). *San Juan County groundwater basin delineation: San Juan Island water right and water use characteristics*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29460/2011-SJI-Groundwater-Basin-Report>

RH2 Engineering, Inc. (2015). *San Juan County East Orcas water budget study (April 2007 through March 2008)*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/862/East-Orcas-Water-Budget-Study-2007-2008-PDF?bidId=>

b. Water Supply Reports and Water System Plans:

San Juan County is designated a Critical Aquifer Recharge Area with a high susceptibility to contamination. These studies and plans coordinate and guide water use in critical water supply service areas to ensure a safe and adequate water supply.

San Juan Island Water Utilities Coordinating Committee. (1997). *San Juan Island critical water supply service area coordinated water system plan*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/866/Lopez-Water-Supply-Report-and-Recommendations-1997-PDF>

Lopez Village Planning Committee. (2003). *Lopez Village water supply report and recommendations & abbreviated coordinated water system plan*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/866/Lopez-Water-Supply-Report-and-Recommendations-2003-PDF>

East Orcas Water Supply Planning Committee. (2006). *The East Orcas water supply report and recommendations*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/863/East-Orcas-Water-Supply-Report-and-Recommendations-2006-PDF>

Eastsound Water Supply Coordinating Committee. (2008). *Eastsound water supply report and recommendation & abbreviated coordinated water system plan*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/865/Eastsound-Water-Supply-Report-and-Recommendations-PDF>

c. Water resource management:

County-wide management reviews and plans.

San Juan County Watershed Management Committee. (2000). *San Juan County watershed management action plan and characterization report*.

<https://www.sanjuancountywa.gov/DocumentCenter/View/30895/SJC-Watershed-Management-Action-Plan-2000?bidId=>

Pacific Groundwater Group (2002). *WRIA 2 phase 2 basin assessment*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29459/2002-San-Juan-Basin-Assessment-WRIA-2>

San Juan County Water Resource Management Committee. (2004). *San Juan County water resource management plan WRIA 2*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/20773/SJC-Water-Resources-Management-Plan-2004>

San Juan County. (2005). *San Juan County (WRIA 2) Implementation plan ecology review draft*.

<https://www.sanjuancountywa.gov/DocumentCenter/View/868/San-Juan-County-WRIA-2-Implementation-Plan-2006-PDF>

Herrera Environmental Consultants, Inc. (2014). *San Juan County stormwater basin planning: Volume 1 county overview*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/20777/San-Juan-County-Stormwater-Basin-Planning--Vol-1-County-Overview-2014-06-26>

Herrera Environmental Consultants, Inc. (2015). *San Juan County stormwater basin planning: Volume 2 priority watershed planning San Juan County, Washington*. San Juan County. <https://www.sanjuancountywa.gov/DocumentCenter/View/20778/San-Juan-County-SW-Basin-Planning-Vol-2-Priority-Watersheds-2015-06-19>

Washington State Department of Ecology. (2024). *2024 Stormwater management manual for Western Washington*. <https://apps.ecology.wa.gov/publications/SummaryPages/2410013.html>

d. Septic reports and plans:

The Chazen Companies. (2010). *Septic system discharge assessment Eastsound sewer & water district Orcas Island, San Juan County, Washington*. Eastsound Sewer & Water District. <https://www.sanjuancountywa.gov/DocumentCenter/View/29456/2010-Eastsound-Nitrate-Study>

San Juan County Board of Health. (2007). *San Juan County Health & Community Services on-site sewage system operation & maintenance program plan*. San Juan County. <https://www.sanjuancountywa.gov/DocumentCenter/View/841/On-Site-Sewage-System-Operation-and-Maintenance-Program-Plan-PDF?bidId=>

e. Marine:

San Juan County was designated a Marine Stewardship Area due to the islands' unique and vulnerable marine resources. The quality of marine waters is influenced by freshwater runoff. These reports provide recommendations to foster restoration and protection of marine habitats and species.

San Juan County Marine Resources Committee. (2007). *San Juan County marine stewardship area plan*. San Juan County. <https://www.sjcmrc.org/media/17909/final-msa-plan.pdf>

San Juan County Marine Resources Committee. (2024). *State of the San Juan County Marine Stewardship Area*. San Juan County. <https://www.sjcmrc.org/media/5iapjp32/state-of-the-msa-2024-1.pdf>

4. Monitoring:

Groundwater is tested via a network of well locations in high priority areas for water quality and water level. These reports summarize the most recent conditions.

Pacific Groundwater Group. (2009). *San Juan County annual groundwater monitoring report*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29454/2009-San-Juan-County-Groundwater-Monitoring-Report>

Pacific Groundwater Group. (2013). *San Juan County groundwater monitoring report July 2011 to July 2013*. San Juan County.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29455/2013-San-Juan-County-Groundwater-Monitoring-Report>

Mott MacDonald (2023). *Groundwater monitoring network report October 2021 to October 2022, Lopez Island, San Juan County, WA*. San Juan County Department of Health and Community Services.

<https://www.sanjuancountywa.gov/DocumentCenter/View/29448/2022-Lopez-Groundwater-Monitoring-Report>

5. Water resource changes:

Reports analyzing the impacts of climate change on water availability.

Climate Impacts Group. (2015). *State of knowledge: Climate change in Puget Sound*. University of Washington College of the Environment.

https://data.cig.uw.edu/picea/mauger/ps-sok/PS-SoK_2015.pdf

Islands Climate Resilience. (2017). *Working toward climate resilience in the San Juan Islands*.

https://static1.squarespace.com/static/5f77a7892e4d29341c5b3723/t/5f8e050377677410c8953c3a/1603143371971/SJI_WorkingTowardClimateResilience_lowres.pdf

San Juan Islands Conservation District. (2016). *Drought conservation plan San Juan Islands*. San Juan County Water Resources Advisory Committee.

<https://www.sanjuancountywa.gov/DocumentCenter/View/30760/DRAFT---Drought-Conservation-Plan-2016?bidId=>