

CHAPTER 8.06 SAN JUAN COUNTY CODE

RULES AND REGULATIONS

OF THE SAN JUAN COUNTY BOARD OF HEALTH

REGARDING WATER WELLS AND WATER SYSTEMS

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8.06.010 Purpose

The purpose of these rules and regulations is to protect the public health and groundwater resources and implement the goals and policies of the San Juan County Comprehensive Plan by:

- A. Overseeing the siting and construction of water wells, per Chapters 173-160 WAC and RCW

18.104;

- B. Providing standards for water supply pertaining to building permits for new structures requiring a source of potable water, per RCW 19.27.097 (State Building Code), and RCW 36.70A (State Growth Management Act);
- C. Providing standards for water supply for subdivision per San Juan County Unified Development Code Sections 18.60 and 18.70, and RCW 36.70(A) (State Growth Management Act), and RCW 58.17 (State Subdivision Statute);
- D. Establishing standards for approval of the construction and on-going operation of community water systems;
- E. Establishing standards for approval of the construction of individual water systems; and
- F. Establishing water resource standards and providing water resource management in conjunction with the Department of Ecology.

8.06.020 Authority

These rules and regulations are adopted by the San Juan County Board of Health under the authority and duties granted in RCW 70.05.060.

8.06.030 Adoption of State Regulations

WAC 246-290, WAC 246-291 (State Board of Health drinking water regulations) and WAC 173-160, RCW 18.104 (Department of Ecology well construction regulations) are hereby adopted by reference.

8.06.040 Water Program Jurisdiction

Responsibility and authority in the water program is shared between the San Juan County Department of Health and Community Services and the Washington State Department of Health and Department of Ecology. Areas of responsibility and authority are defined in interagency agreements between the Washington State Departments of Health and Ecology and the San Juan County Board of Health.

8.06.050 Administration

These rules and regulations shall be administered by the San Juan County Health Officer, under the authority granted in RCW 70.05.070.

8.06.060 Applicability

These rules and regulations shall apply to all new sources of water created after adoption of the rules and all sources for new construction, development permits, and land division; and to all new and existing public water systems.

8.06.070 Definitions

“*Adequacy*” means a sufficient amount of potable water for the intended use taking into consideration both average and peak demand, and source capacity. For public water systems adequacy includes delivery of a safe, reliable supply of water as demonstrated by compliance with monitoring, source protection, management, and operation requirements of these regulations.

“Adjacent community water system” means a system whose service area is within 1/4 mile of a proposed new well or proposed new water system boundary.

“Adjacent property” means neighboring property that is within the sanitary setback of a well or spring.

“Alternative water source” means any source of water for an individual single-family use other than a legally constructed well that produces more than 200 gallons per day per residence or an approved community water system that has the capacity to serve the intended use of the structure. These include but are not limited to: rainwater catchment, hauled water, seawater treatment, wells producing ≤ 200 gallons per day per residence, and well water requiring treatment or monitoring.

“Applicant” means the developer, purveyor, property owner or their representative applying for a permit.

“Average demand or daily use” means the average daily water use per day per residence.

“Capacity” means the ability of a water system to provide a safe and reliable source of potable drinking water to its current service connections and any future service connections approved in its water system design. The evaluation of capacity includes, but is not limited to: water supply source, water quality, water system infrastructure, and system management and operation.

“Certified operator” means a water system operator meeting the requirements of the Washington State Department of Health for the operation of a public water system.

“Community (or public) water system” means any water system serving water for human consumption, excluding a system serving one or two residences (on separate properties) or a system serving four or fewer residential structures all of which are located on the same farm.

“Compliance plan” means a plan developed by a public water system purveyor that details the methods to be used to correct a water system’s operating violation or public health hazard and contains a time frame for completion.

“Comprehensive System Evaluation (CSE)” means a review, inspection, and assessment of a public water system by a qualified professional for the purpose of ensuring that safe, adequate drinking water is being provided. A CSE may be required in response to water quality, operations, or capacity deficiencies in order to develop a compliance plan.

“Connection” (Group B water system purposes only) means a residence, commercial facility, campsite, or similar use, unless specifically stated otherwise in a water system’s ownership agreement. Detached accessory dwelling unit is considered one Equivalent Residential Unit unless the approved water system design supports a different amount.

“Conservation” means a reduction in the amount of water necessary to carry out a beneficial water use. Maximum efficiency of water use that results in a reduction of water that is wasted.

“Consolidated formation” means any geologic formation in which the earth materials have become firm and coherent through natural rock forming processes. An uncased well drill hole will normally remain open in these formations.

“Contaminant” means anything that impairs the quality of ground water to a degree that creates a potential hazard to the environment, public health, or interferes with a beneficial use.

“County Hydrogeologist” means a Washington State licensed hydrogeologist that either works for or has a contract with San Juan County.

“Critical Water Resource Area” means selected watersheds and critical aquifers where resources potentially are threatened by seawater intrusion or primary contaminants, or limited due to poor recharge. These areas may be designated by Resolution by the San Juan County Board of Health in response to recommendations by the Department of Health and Community Services based on studies conducted by the county or state, or by petition from community groups and community water systems.

“Cross Connection” means a physical arrangement connecting a potable water supply, directly or indirectly, with an unsafe water supply or other contaminating material, and capable of contaminating the potable water system.

“Equivalent Residential Unit (ERU)” means a system-specific unit of measure used to express the amount of water consumed by a typical full-time single family residence.

“gpm” means gallons per minute.

“Group A public water system” means a public water system serving 15 or more connections or an average of 25 or more people per day for 60 or more days within a calendar year.

“Group B public water system” means a public water system with a) more than two and less than 15 connections; or b) serving an average nonresidential population of less than 25 people per day for 60 or more days within a calendar year; or c) any number of people for less than 60 days within a calendar year. (Note: systems with 10 or more connections typically will become Group A water systems based on population)

“GWI” means ground water under the influence of surface water. Any water beneath the surface of the ground where natural conditions cannot prevent the introduction of surface water pathogens into the source at the point of withdrawal.

“Health Officer” means the duly appointed San Juan County Health Officer, or a representative authorized and under the direct supervision of the Health Officer.

“Hydrogeologic Site Evaluation” means a report that evaluates water resource availability prepared by a licensed professional who has training and experience in hydrogeology per WAC 308-15-057.

“Inactivation” means an existing water system that ceases operation as a public water system.

“Inadequate” means a water supply that does not meet the definition of adequacy, as defined in this section.

“Individual water system” means a water system serving no more than two single-family residences, or four or fewer residences meeting the definition under Same farm. (Note: a water system consisting of two main residences with ADUs is not defined as a Group B water system under this provision.)

“Owner” means owner of the proposed or existing well or water system.

“New public water system” means a water system created after the effective date of this ordinance.

“Peak demand” means the amount of water needed to supply maximum demand or meet extreme conditions, in compliance with WAC 246-290.

“Potable” means water safe for human consumption.

“ppm” means parts per million. Equal to milligrams per liter (mg/l).

“Project Actions” means an application for a land division, a new and/or expanding water system, and/or a certificate of water availability. Project actions do not include simple land divisions or building permit applications for structures that do not require certificates of water availability.

“Purveyor” means an agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or other entity owning or operating a public water system, or applying to create a public water system. Purveyor also means the authorized agent of these entities.

“Residence” means the primary residence and accessory dwelling unit.

“Same farm” means a parcel of land or series of parcels that are connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes and does not qualify as a public water system.

“Sanitary easement” means a restrictive covenant recorded on the title of the property for a 50 - 200 foot radius (sanitary setback) around a well or spring.

“Sanitary setback or control area (SCA)” means a 50 - 200 foot radius around a well or spring where it is prohibited to construct or maintain sources of contamination. These include, but are not limited to: septic tanks and drainfields, sewerlines, underground storage tanks, vehicles, structures that include the use or storage of toxic materials, enclosures for maintaining livestock, or garbage of any kind or description.

“*Seawater intrusion*” means replacement of pumped fresh water by seawater in an aquifer.

“*Service area*” means an area identified by a public water system that includes existing and future areas that will be served by that water system.

“*Shallow well*” means a well completed in unconsolidated material with less than 6 feet of impervious material between the water table and the surface.

“*Source Capacity*” means the capacity of the water source that is proposed to serve a subdivision. For purposes of this chapter the minimum source capacity is 1000 gallons per day per connection.

“*Spring*” means a shallow source of water that emerges from the ground naturally. Generally this water flows just under the surface over clay or bedrock and may be seasonal.

“*Stabilize*” means less than 0.1 foot of drawdown fluctuation/hour in the last 4 hours of a pump test after normalizing for tidal and barometric influences.

“*Standard design*” means a design meeting San Juan County Department of Health & Community Services requirements for treatment, filtration, or storage.

“*Unconsolidated formation*” means any naturally occurring, loosely cemented or poorly indurated earth material such as uncompacted gravel, sand, silt, and clay.

“*Vulnerability assessment*” means evaluation of potential contamination for a specific area that could affect water quality in a well. This involves an inventory of activities such as: underground storage tanks, animal feedlots, landfills, septic tanks and drainfields, and urban runoff.

“*Water Well Report (well log)*” means the well record completed by the well contractor on the construction or alteration of a well.

“*Well*” means any excavation that is drilled, bored, driven, dug, or otherwise constructed when the intended use is the withdrawal of ground water.

8.06.080 Enforcement

When a public or private water system is out of compliance with these rules the Department of Health and Community Services may initiate appropriate enforcement actions, regardless of any prior approvals, including, but not limited to:

- A. Issuance of a compliance schedule;
- B. Issuance of departmental orders requiring submission of plans, design reports, and construction report forms;
- C. Issuance of departmental orders requiring specific actions or ceasing unacceptable activities within a designated time period. Copies of these orders will be sent to the San Juan County Prosecuting Attorney and Board of Health;
- D. Issuance of departmental orders to stop work and/or refrain from using any water system or improvements thereto until all written approvals required by statute or rule are obtained. The enforcement action will be reviewed with the San Juan County Board of Health;
- E. Imposition of civil penalties as authorized under chapter 70.119A RCW or local authority; and
- F. Legal action by the prosecuting attorney.

8.06.090 Designer Certification

Designer certification will be required for designs submitted for all community water systems. Group A public water systems, and Group B systems serving ten or more connections or providing fire flow or primary treatment, must be designed by a licensed engineer. Group B public water systems serving three to nine connections may be designed by a licensed engineer or certified designer and must comply with

state and county minimum design standards.

- A. Application for a water system designer's certificate of competency shall be made to the Health Officer. Satisfactory completion (70% or higher) of a written examination to demonstrate competency in the design and construction of individual and small public water systems will be required.
- B. The Department of Health and Community Services may suspend, revoke, or deny any water system designer's certification of competency for negligence, incompetency, misrepresentation, or failure to comply with these rules and regulations, WAC 246-290, WAC 246-291, and/or WAC 173-160 is established.
- C. Certification. The fee for water system designer certification shall be assessed according to the current San Juan County Health and Community Services fee schedule in effect at the time of application. Certification shall be in effect for the unexpired portion of the calendar year in which certification is obtained. The application for renewal and the appropriate fee must be submitted to the Health Officer prior to February first of the year in which renewal is desired. If the renewal fee is not submitted to the Health Officer prior to February first, the designer certification will be expired and the initial fee will be required for renewal.

8.06.100 Licensing of truck transportation of potable water

- A. All persons engaged in the commercial transporting potable water will be licensed by the Health Officer. This license will be granted based on compliance with Guidelines for the Truck Transportation of Potable Water Supply for Public Use (Appendix C).
- B. Certification. A fee shall be assessed according to the current San Juan County Health and Community Services fee schedule in effect at the time of application. Certification shall be in effect for the unexpired portion of the calendar year in which certification is obtained. The application for renewal and the appropriate fee must be submitted to the Health Officer prior to February first of the year in which renewal is desired. If the renewal fee is not submitted to the Health Officer prior to February first, the certification will be expired and the initial fee will be required for renewal.

8.06.110 Site Approval – Individual Wells.

- A. A Well Site Inspection Report must be filed with San Juan County Health & Community Services (H&CS) prior to drilling all new wells. This Report may be completed by the well driller, a certified designer, licensed engineer, or H&CS. This report will include a plot plan on a consistent and standard scale indicating: parcel number, well i.d. number, well location coordinates, property lines and easements, existing and proposed buildings, marine shorelines, bodies of fresh water (including seasonal streams), existing and proposed roads and driveways, existing and proposed septic systems, any potential or existing source of contamination, and adjacent public and private water sources.
- B. Well siting on lots utilizing an on-site sewage disposal system (OSS) shall contain a plot plan signed by the licensed well driller and an engineer or certified septic designer showing the proposed location of the OSS and well.
- C. Well siting must meet the following criteria, or comply with the variance procedures in subsection D of this section:
 - 1. Wells shall be located at least 100 feet from a drainfield and 1000 feet from a solid waste

- landfill. Wells shall be located at least 100 feet from a septic tank and components, unless additional surface seal (double seal) or other H&CS approved mitigation is used.
2. Wells shall be located at least 100 feet from the neighboring property line, except:
 - a. Nothing herein shall prevent a well from being located within 100 feet of the neighboring property line provide the neighboring property owner has signed and recorded a sanitary covenant restricting the placement of any potential sources of contamination within 100 feet of said well; or
 - b. H&CS may grant a variance to allow a well to be located no less than 50-feet from the property line. Said variance must be granted prior to drilling the well. The variance must be supported by a vulnerability assessment. Variance requests and vulnerability assessments must be submitted by a qualified water system designer, well driller, or engineer and contain proposed mitigation measures.
 3. Wells completed with 6 feet or more of impermeable material between the surface and water table must have a 100-foot *sanitary setback*, unless a variance is supported by a *vulnerability assessment*. A variance may be granted for no less than a 50-foot radius.
 4. Wells completed with less than 6 feet of impermeable material must have a 100-foot sanitary setback. A variance to setback requirements may be issued by the Department of Ecology.
 5. *Shallow wells* and *springs* must have a 100 foot sanitary setback and submit an inventory of all potential sources of contamination within 600 feet.
 6. If the sanitary setback affects an adjacent property, the owner must obtain a *sanitary easement*, recorded with the Auditor's Office, prior to well construction.
- D. If the siting requirements cannot be met the applicant must submit a vulnerability assessment by a qualified water system designer, well driller, or engineer, with proposed mitigation measures.
- E. Failure to meet siting requirements will result in denial of any county permits requiring demonstration of potable water.

8.06.115 Site Approval – Community Supplies

- A. A Well Site Inspection Report must be filed with the Department prior to drilling a new community water system well. The report may be completed by the well driller, a certified designer, licensed engineer, or the Department. This report will include a plot plan on a consistent and standard scale indicating: parcel number, well i.d. number, well location coordinates, property lines and easements, existing and proposed buildings, marine shorelines, bodies of fresh water (including seasonal streams), existing and proposed roads and driveways, existing and proposed septic systems, any potential or existing source of contamination, and adjacent public and private water sources.
- B. Well siting must meet the criteria as outlined in the Washington Administrative Code (WAC) 246-290 (Group A Systems) or WAC 246-291 (Group B Systems).

8.06.120 Construction Standards

Well construction or modification must comply with standards in Chapter 173-160 WAC, Minimum Standards for Construction and Maintenance of Wells, and meet the standards below:

- A. All wells shall have a permanent identifying tag attached with a unique number that conforms with Department of Ecology requirements. This number shall be recorded on the water well report.
- B. All wells shall be equipped with a functioning water meter.
- C. Shallow wells and springs must be constructed according to the standards in EPA Manual of Individual and Non-Public Water Supply Systems and Chapter 173-160 WAC, Minimum Standards for Construction and Maintenance of Wells.
- D. In areas where seawater intrusion is indicated no well drilling activity shall go deeper than the fresh ground water layer. Where these activities encounter potential seawater intrusion, the driller must construct the well to minimize the impact or decommission the well.

8.06.130 Construction in a Public System Service Area or urban growth area

No new well shall be constructed within the service area of an existing public water system without written notice to the system purveyor. Well construction must comply with covenants and restrictions, and/or provisions of the approved water system's plan or design.

New development inside a Group A service area or an urban growth area may not develop a new well to serve existing or proposed lots if the designated service provider has the willingness and capacity to serve. This provision is subject to the water system's capacity to provide timely and reasonable service based on their water system plan, or within 120 days, but does not limit the right of the purveyor to require conditions and payment of fees and costs associated with new service connection.

8.06.140 Certificate of Water Availability - Building Permits

- A. Applicants for building permits for construction of new structures that contain plumbing fixtures dependent on potable water for their operation must obtain a certificate of water availability. Applications for "After the Fact" building permits shall be treated as a "new structure" for the purpose of requiring a certificate of water availability.
- B. Applicants for a building permit to remodel or expand an existing structure shall obtain a certificate of water availability when any of the following conditions exist:
 - 1. When the remodel/addition results in a change of use from a residence to a commercial structure or conversion of an accessory structure to a residential use.
 - 2. When the remodel/addition results in the creation of an accessory dwelling unit.
- C. The applicant for any building permit which requires a certificate of water availability shall provide sufficient information to allow the health officer to make a determination of water availability. Sufficient evidence shall consist of one of the following:
 - 1. Written notice from a community water system purveyor that service will be provided to the proposed structure. This water system must meet state or county requirements for compliance as defined in WAC 246-290, WAC 246-291, and these regulations.
 - 2. An individual well meeting the standards of this chapter.
 - 3. Alternative water sources. Alternative water sources will be permitted for single-family residential use. A combination of sources and systems may be used to fulfill the quantity and quality requirements for a single-family residential building permit. There must be no cross-connection between potable and non-potable water supplies.

Alternative sources will not be allowed for subdivision approval, except seawater treatment. Alternative water sources must be approved by the Health Officer. These sources include:

- a. Shallow wells and springs with unsatisfactory bacteriological tests, but absent E. coli or fecal coliform. Applicant must submit a design for treatment by a qualified engineer, water system designer, or meeting design standards established by the Department of Health and Community Services (see Appendix A) and record on the property title a statement that the system is alternative and a description of operation and maintenance requirements.
- b. Individual water systems which have a well log and pump test with yields less than 200 gallons per day per residence. Applicant must submit plans for storage, supplemental water sources or water use reduction (see Appendix A) to the Department of Health and Community Services and record on the property title a statement that the system is alternative and a description of operation and maintenance requirements.
- c. Hauled water storage design meeting county guidelines (Appendix A). If the water is intended for domestic use the applicant must submit a design by a qualified engineer, water system designer, or meeting design standards established by to the Department of Health and Community Services that includes treatment and record on the property title a statement that the system is alternative and a description of operation and maintenance requirements.
- d. Rainwater catchment design meeting county guidelines (Appendix A). If the water is intended for domestic use, the applicant must submit a design by a qualified engineer or water system designer, and record on the property title a statement that the system is alternative and a description of operation and maintenance requirements. An owner may design a system for their own use.
- e. Seawater treatment systems designed by a qualified engineer and meeting all applicable local, state, and federal requirements. Applicant must submit plans to the Department of Health and Community Services and record on the property title a statement that the system is alternative and a description of operation and maintenance requirements.
- f. Wells receiving arsenic, barium and/or fluoride treatment meeting the county guidelines (Appendix A). The applicant must submit a design by a qualified engineer. The design must meet standards approved by the Department of Health and Community Services that includes treatment, monitoring and recording on the property title a statement that the system is alternative and a description of operation and maintenance requirements.

D. The health officer may revoke or deny a certificate of water availability for due cause. Examples include, but are not limited to:

1. Misrepresentation or concealment of a material fact in the information submitted; or
2. Changes in site or well conditions resulting in a failure to comply with the regulations; or
3. Failure to provide evidence of water availability or meet conditions of the certificate of water adequacy or related regulations.

8.06.150 Subdivision

Applicants for short subdivisions, long subdivisions, and subdivision alterations shall demonstrate an adequate, potable source of water for each new parcel in the proposed subdivision. For purposes of this

section, new parcel shall include all parcels created except parcels containing existing residential structures served by existing water supplies. Minimum source capacity for individual and community supplies shall be 1000 gallons per day/connection. The minimum water quality testing parameters for individual and/or community water system sources shall be a complete inorganic chemical analysis and a recent (<6 months) bacteriological sample. All water quality tests must comply with drinking water standards in WAC 246-290, WAC 246-291. See San Juan County Code 13.08 for fire flow requirements.

A. Community Water Supplies:

1. For a new community system with groundwater as the proposed source, the yield of the well(s) shall be demonstrated by a pump test as outlined in Section C below. In addition, the well(s) must have complete water quality tests (Inorganic Chemical Analysis & Bacteriological sample) submitted prior to preliminary approval.
2. If the applicant proposes to connect to an existing community water system, the water system must demonstrate to the Department of Health and Community Services the ability to provide water to the proposed parcels and compliance with current regulations. Prior to final approval the applicant must provide proof of authorization for service connection for the proposed lots.
3. The community water system or expansion of an existing system must be approved, constructed, and a water service installed to the property line of each lot prior to final plat approval.

B. Individual Wells

1. If water is to be provided by private wells, in order to provide proof of adequate supply for preliminary approval, a well (or wells) with sufficient capacity to serve the proposed lots as a community system must be drilled and tested, or individual wells must be drilled and tested and approved on each lot.
2. Individual wells must comply with the community water supply standards for siting, testing, and source capacity. Said well(s) must be pump tested as outlined in Section C below. Any conditions of approval for the wells will be incorporated as conditions of final plat approval.

C. Seawater treatment. Desalination of seawater must be designed by a qualified, licensed engineer and meet applicable local, state, and federal requirements. Designs shall comply with Washington State Health Department guidelines.

D. Pump Test Protocol. All new groundwater supplies shall be pump tested in accordance with DOE's WRIS Bulletin 30, Aquifer Test Procedures. The developer shall complete and submit a pump test protocol to be reviewed by the County Hydrogeologist prior to testing. Minimum requirements for conducting the pump test include:

1. Pump tests shall be conducted between mid-July and mid-October or as defined by the County Hydrogeologist.
2. At least one monitoring well must be used, if available.
3. The developer shall be responsible for costs associated with the aquifer test.
4. At a minimum, the following steps should apply:

- a) A step-drawdown test to determine the pumping rate and recovery data,
 - b) A 24-hour sustained-rate pump test using an automatic recording device, and
 - c) If the water level does not stabilize or chloride levels increase (> 20mg/L on field samples), continued pumping for 72 hours.
- E. Minimum Review Requirements. All new groundwater supplies shall be reviewed and include an evaluation of long-term well capacity and impact on the local aquifer. The County Hydrogeologist will determine whether all or part of a Hydrogeologic Site Evaluation (Section F below) will be required. The County Hydrogeologist will review the initial information and other relevant data and either make a decision regarding the proposal or provide detailed additional testing and analysis requirements needed to evaluate the impacts the proposed withdrawal will have on local groundwater resources. A Hydrogeologic Site Evaluation will be required for projects that have potential for groundwater contamination or impairment. Information required to be submitted for initial review include:
- 1. well site approval,
 - 2. water quality tests for complete inorganic chemical analysis,
 - 3. surveyed wellhead elevation,
 - 4. location coordinates,
 - 5. proposed use,
 - 6. layout of plat,
 - 7. pump test results.
- F. Hydrogeologic Site Evaluation: If required, a hydrogeologic site evaluation shall be prepared and address resource availability in relationship to the scope of the project. The hydrogeologic site evaluation must address requirements as specified by the County Hydrogeologist which may include but is not limited to the following:
- 1. Hydrogeologic Setting:
 - a) Description of the geologic setting of the site illustrated with geologic and soil maps.
 - b) Description of the occurrence and movement of groundwater in the area, including a general discussion of the aquifers present in the area.
 - c) General discussion of groundwater availability in the area, including a discussion of historic problems such as well failures or seawater intrusion.
 - d) A scaled map showing location of wells and springs within 1000 feet of the site or as required by the County Hydrogeologist.
 - 2. Site-Specific Resource Availability:
 - a) An aquifer test conforming to the guidelines found in WRIS Bulletin No. 30. The test should be analyzed to determine the hydraulic properties of the aquifer (storativity and transmissivity), and to the degree possible, the spatial variability of these properties.

- b) A map(s) showing static water level elevations for the aquifer(s) proposed for use for the project.
 - c) An evaluation of theoretical changes to water level elevations resulting from the proposed withdrawal, and the method that was used.
 - d) An evaluation of the potential to induce or exasperate seawater intrusion in the aquifer.
- G. Project actions that cannot mitigate potential impacts that degrade or impair the groundwater source will be denied.

8.06.155 Simple Land Divisions

Applicants completing simple land divisions must document water availability and adequacy on each new parcel, as outlined, below.

A. Community Water Supplies:

Obtain written notice from a community water system purveyor that service is available and will be provided to the lot(s). Said system must be in compliance with current regulations; or

B. Individual Wells

Well(s) with sufficient capacity to serve the proposed lots must be drilled, tested and approved on each new parcel. Individual wells must comply with the community water supply standards for siting, testing, and source capacity (1000 gallons per day per connection). Any conditions of approval for the well(s) will be incorporated as conditions of approval.

C. Special Conditions:

Record a disclosure statement that proof of potable water was not demonstrated, warning all purchasers of lots or parcels within the simple land division that a potable water supply has not been demonstrated and no building permit will be issued by San Juan County without first satisfying the requirements for proof of potable water of the Department of Health and Community Services.

8.06.170 Public Water System General Requirements

- A. *Group A public water systems* fall under the jurisdiction of the Washington State Department of Health, pursuant to the Joint Plan of Responsibilities with San Juan County Board of Health. Group A systems must comply with provisions of these rules and regulations pertaining to well siting, design standards, and monitoring requirements for seawater intrusion and primary contaminants. All other requirements for approval of the public water system shall be determined by the Washington State Department of Health under WAC 246-290.
- B. Jurisdictional authority for Group B water systems is established under WAC 70.05.060 and through a joint plan of responsibility with the Washington State Department of Health Office of Drinking Water. Group B systems must comply with provisions of these rules and regulations pertaining to well siting, design standards, managerial, operation and maintenance, and

monitoring requirements. Other requirements for approval shall be determined by the Department of Health and Community Services under these regulations.

- C. In addition to the requirements under federal and state law, the standards and requirements of this chapter represent the minimum standards and requirements established to be protective of public health.
- D. At the determination of the health officer, more protective measures may be required than those contained within this chapter, when necessary to protect public health.
- E. The health officer may declare a public health emergency as provided in RCW 70.119A.030. Water systems under an emergency declaration that are in violation of regulations in this chapter shall be subject to enforcement under 8.06.080.
- F. Water systems with only two residential services (2-party systems) are exempted from all requirements of Chapter 246-291 WAC and this section of County Code.
- G. For water systems serving commercial establishments that provide water to less than 25 customers and/or employees per day, minimum requirements for approval shall apply, unless otherwise determined by the Department of Health and Community Services. Minimum requirements include:
 - 1. A well log or pump test showing adequate capacity for the proposed use.
 - 2. A simple design involving a well pump and pressure tank, with no treatment.
 - 3. Initial Complete Inorganic Chemical and bacterial testing and then yearly testing for bacteria.
 - 4. Well site approval and a recorded sanitary setback.
 - 5. A completed Water Facilities Inventory Form.
- H. All proposed new sources of groundwater for public water systems within 1/4 mile of a water system service area must apply to that system for service prior to drilling a well.
- I. All new public water systems using groundwater must be capable of producing 1000 gallons per day per connection.
- J. Community water systems in areas designated as *Critical Water Resource Areas* must develop water system plans as per WAC 246-290-100, WAC 246-291-140, and this regulation. These plans shall include:
 - 1. Resource protection, including water conservation plans, Water Shortage Contingency Plans, watershed control, and policies for cooperation with other public and private systems in the area, and management strategies such as: monthly meter readings, static level measurements, comprehensive monitoring, coordination of withdrawal (pumping times);
 - 2. Policies for expansion. Response to persons intending to drill a new public supply well within 1/4 mile of the water system service area, including:
 - a. Conditions under which service will be offered,
 - b. Conditions under which a hydrogeologic site evaluation will be required.
 - 3. Policies for denying approval of a private well within the system's service area.

8.06.____ Design report approval for Group B water systems.

The standards in Chapter 8.06.____ through 8.06.____ of this ordinance apply to Group B water systems.

- A. A purveyor shall receive written H&CS approval of a design report prior to:
1. Installing a new Group B system; or
 2. Providing service to more than the current approved number of service connections.
- B. To obtain design report approval for a Group B system, a purveyor shall provide a copy of the following, at a minimum, to the H&CS:
1. Documentation that creating a new system or expanding an existing system does not conflict with any applicable coordinated water system plan adopted under chapter 246-293 WAC, or with requirements of this chapter;
 2. Documentation that creating a new system complies with the SMA requirements under RCW 70.119A.060(2);
 3. Source approval under Chapter 8.06.____ of this code;
 4. Hydrogeologic Site Evaluation when required;
 5. Documentation that all requirements under WAC 246-291-140 are met;
 6. A system design that complies with the requirements under WAC 246-291-200 including, but not limited to:
 - a. Drawings of each project component, including:
 - i. Location;
 - ii. Orientation;
 - iii. Size; and
 - iv. Easements for:
 - a. Future access and maintenance of distribution system pipelines located on private property, or franchise agreements necessary for distribution system pipelines located within public right of way; and
 - b. Other system components, including access and maintenance of reservoirs, wells, and pumping stations.
 - b. Material specifications for each project component;
 - c. Construction specifications and assembly techniques;
 - d. Testing criteria and procedures; and
 - e. A description of disinfection procedures as required under WAC 246-291-220.
- C. The design report shall be prepared, sealed, and signed in accordance with chapter 196-23 WAC by a professional engineer who:
1. Is licensed in the state of Washington under chapter 18.43 RCW; and
 2. Has specific expertise regarding design, operation, and maintenance of public water systems.
- D. A licensed engineer or a licensed designer certified under SJCC 8.06.090 may submit designs for Group B systems that:
1. Do not require treatment for primary MCLs or seawater treatment, except simple chlorination with liquid sodium hypochlorite;
 2. Do not provide fire flow;
 3. Do not have special hydraulic considerations, such as, multiple pressure zones;

4. Do not have atmospheric storage in which the bottom elevation of the storage reservoir is below the ground surface; and
 5. Serve fewer than ten service connections.
- E. A purveyor shall submit a "Construction Completion Report for Public Water System Projects" to the Washington State Department of Health or H&CS on a form approved by the Washington State Department of Health or H&CS officer within sixty days of construction completion, and before use of any approved Group B system. The form must:
1. Be signed by a professional engineer or a licensed designer certified under SJCC 8.06.090;
 2. Include a statement that the project is constructed and completed according to the design report requirements under this chapter; and
 3. Include a statement that the installation, testing, and disinfection of the Group B system is completed in accordance with this chapter.
- F. All design changes, except for minor field revisions, must be submitted in writing to, and approved by, H&CS.

8.06. Source approval for Group B water systems.

- A. Groundwater sources submitted to H&CS for design approval under Chapter 8.06. of this code must comply with the following requirements:
1. Drinking water shall be obtained from the highest quality source feasible.
 2. No new source, previously unapproved source, or change to the design of an existing approved source shall be used as drinking water without H&CS approval.
 3. New and expanding water systems will not be approved with shallow unconfined wells, springs, or surface water.
 4. All permanent groundwater sources must:
 - a. Be designed to be physically connected to the distribution system;
 - b. Be a drilled well, constructed in accordance with chapter 173-160 WAC; and
 - c. Meet water quality requirements under Chapter 8.06. of this code.
 5. All new and expanding water systems with a groundwater source that cannot meet primary MCL standards must provide a design for appropriate treatment by a qualified, licensed engineer.
 6. H&CS shall not approve a design for a new or expanding Group B system using a potential GWI source until a hydrogeologic evaluation is completed by a licensed hydrogeologist or engineer that determines the source is not GWI. The GWI evaluation and determination must be completed before H&CS will review the Group B design report.
 7. All new and expanding water systems using fractured bedrock wells shall employ continuous disinfection, unless evidence can be provided showing effective, natural protection from the introduction of surface water into the source.
- B. Before pursuing source approval under this section, a purveyor shall contact H&CS to identify any additional requirements.

C. A purveyor shall provide a copy of the following to H&CS to obtain groundwater source approval:

1. The water right permit, if required, for the source, quantity, type, and place of use;
2. The water well report, as required under WAC 173-160-141;
3. The well site inspection report form completed by H&CS;
4. A map showing:
 - a. The project location;
 - b. A six hundred foot radius around the well site designating the preliminary short-term groundwater contribution area; and
 - c. The perimeter of a one hundred foot SCA, meeting the requirements in subsection (E) of this section.
5. A map showing topography with a minimum of 10-foot or smaller contours, a surveyed wellhead location and elevation, distances to the well from existing property lines, buildings, potential sources of contamination within the six hundred foot radius around the well, and any other natural or man-made features that could affect the quality or quantity of water;
6. The recorded legal documents for the SCA;
7. Results from an initial analysis of raw source water quality from a certified lab, including, at a minimum:
 - a. Coliform bacteria;
 - b. Inorganic chemical and physical parameters under WAC 246-291-170, Tables 2, 3, and 4; and
 - c. Other contaminants, as directed by H&CS in areas where it determines that other contamination may be present.
8. Pump test data establishing groundwater source capacity including, but not limited to:
 - a. Static water level;
 - b. Sustainable yield;
 - c. Drawdown;
 - d. Recovery rate; and
 - e. Duration of pumping.
9. Additional pump testing in locations where water resource limitations or known seasonal groundwater fluctuations may affect future reliability as directed by H&CS.

D. Groundwater source capacity.

1. A new groundwater source for a Group B system with residential connections must be pump tested to determine if the well(s) and aquifer are capable of reliably supplying water that meets the minimum requirement of 1000 gallons per day per connection.
2. A groundwater source must be pump tested to determine if the well(s) and aquifer are capable of supplying water at the rate required to provide the water volume as determined under WAC 246-291-200 for a source supplying a Group B system with:
 - a. Nonresidential service connections; or
 - b. Both residential and nonresidential service connections.
3. For purposes of determining water rights for a new Group B system a peak day demand of 350 gallons per day per connection shall be used. Water use records will be used for determining existing system daily demand.

E. Sanitary Control Area (SCA).

1. A purveyor shall establish the SCA around each groundwater source to protect it from contamination.
2. The SCA must have a minimum radius of one hundred feet, unless technical justification submitted by a licensed hydrogeologist or engineer to the Washington State Department of Health or H&CS supports a smaller area. The justification must address geological and hydrogeological data, well construction details, and other relevant factors necessary to provide adequate sanitary control.
3. The Washington State Department of Health or health officer may require a larger SCA if geological and hydrological data support such a decision.
4. A purveyor shall own the SCA, or the purveyor shall have the right to exercise complete sanitary control of the land through other legal provisions.
5. A purveyor shall record a restrictive covenant to the title of each property that is sited partially or completely within the SCA to protect the SCA in perpetuity.

F. A purveyor submitting a new or expanding Group B system design for approval using a nonemergency intertie source shall meet the requirements of WAC 246-291-135.

G. Purveyors of all new and expanding water systems proposing to use desalination of seawater must provide a design by a qualified, licensed engineer and meet all applicable local, state, and federal requirements.

H. When design approval for existing, unapproved public water systems is required under Chapter 8.06.____ of this code, purveyors with sources that do not meet the requirements of this chapter will provide H&CS with adequate information to evaluate the source as determined by the health officer. The water system may be required to submit a mitigation plan for source protection and/or treatment.

8.06.____ Groundwater quality for approval of Group B water systems.

A. All water quality samples collected under this section must be:

1. Collected without chlorine, ultraviolet light, ozone, or other disinfectant in use to treat the source;
2. Collected after the well has been pumped long enough to allow for collection of a representative sample of the aquifer, as described in the Group B Water System Design Guidelines (2012); and
3. Analyzed by a certified lab.

B. To meet the requirements for design approval under Chapter 8.06.____ of this code, a purveyor shall obtain, at a minimum:

1. Satisfactory results from two raw source water samples analyzed for coliform bacteria, taken at the middle and end of the pump test;
2. Results from one raw water sample for a heterotrophic plate count (HPC);

3. Results from one raw source water sample for inorganic chemical analysis from Table 2, 3 and 4; and
 4. In areas known or suspected to have contaminants of public health concern, one raw source water sample analyzed for the contaminant(s) as directed by H&CS.
- C. A purveyor shall collect three additional raw source water samples taken 90 days apart and have the sample analyzed for each parameter that exceeded the MCL in the initial sample, if:
1. An analysis exceeds a primary MCL in Table 2 of this section; or
 2. A contaminant of public health concern under subsection (2)(c) of this section exceeds the primary MCL under WAC 246-290-310.
- D. H&CS shall not approve the proposed source unless treatment to meet primary MCL standards is approved in the Group B design, when the average concentration from four quarterly samples for each substance taken under this section exceeds a primary MCL in Table 2 of this section;
- E. When an analysis exceeds a secondary MCL in Table 3 or 4 of this section, a purveyor shall include treatment in the Group B system design under WAC 246-291-200 so that drinking water delivered to consumers does not exceed a secondary MCL.

Table 2
Primary Inorganic Chemical Contaminants

| Substance | MCL (mg/L) |
|----------------|------------|
| Antimony (Sb) | 0.006 |
| Arsenic (As) | 0.010 |
| Barium (Ba) | 2.0 |
| Beryllium (Be) | 0.004 |
| Cadmium (Cd) | 0.005 |
| Chromium (Cr) | 0.1 |
| Cyanide (HCN) | 0.2 |
| Fluoride (F) | 4.0 |
| Mercury (Hg) | 0.002 |
| Nitrate (as N) | 10.0 |
| Nitrite (as N) | 1.0 |
| Selenium (Se) | 0.05 |
| Thallium (Tl) | 0.002 |

Table 3
Secondary Inorganic Chemical Contaminants

| Substance | MCL (mg/L) |
|---------------|------------|
| Chloride (Cl) | 250.0 |
| Fluoride (F) | 2.0 |
| Iron (Fe) | 0.3 |

| | |
|----------------|-------|
| Manganese (Mn) | 0.05 |
| Silver (Ag) | 0.1 |
| Sulfate (SO4) | 250.0 |
| Zinc (Zn) | 5.0 |

**Table 4
Secondary Physical Characteristics**

| Substance | MCL |
|------------------------------|----------------|
| Color | 15 color units |
| Specific conductivity | 700 umhos/cm |
| Total dissolved solids (TDS) | 500 mg/L |

8.06.____ Design standards for Group B water systems.

- A. A purveyor submitting a new or expanding Group B system design for approval shall use good engineering practices and apply industry standards in the design, such as those in:
 - 1. The Washington State Department of Health guideline titled Group B Water System Design Guidelines (2012);
 - 2. Water Systems Council PAS-97(04) Pitless Adapters and Watertight Well Caps (2004);
 - 3. Standard specifications of the:
 - a. American Public Works Association;
 - b. American Society of Civil Engineers;
 - c. American Water Works Association; and
 - d. American Society for Testing and Materials.
 - 4. Minimum standards for construction and maintenance of wells, chapter 173-160 WAC;
 - 5. Recommended Standards for Water Works, A Committee Report of the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers (2007) (Ten State Standards);
 - 6. Standard Specifications for Road, Bridge and Municipal Construction (WSDOT/APWA 2012);
 - 7. USC Manual of Cross-Connection Control, 10th edition (October 2009);
 - 8. PNWS-AWWA Cross-Connection Control Manual, sixth edition (1996);
 - 9. International Building Code (IBC) (2012); and
 - 10. Uniform Plumbing Code (UPC) (2012).

- B. A purveyor submitting a new or expanding Group B system design for approval shall:
 - 1. Calculate residential population by using 2.5 persons per dwelling unit;
 - 2. Calculate peak day use; and
 - 3. Use planning, engineering and design criteria under WAC 246-290-100 through 246-290-250 if the system is being designed to serve ten to fourteen residential service connections.

- C. A purveyor submitting a design for an expanding Group B system shall use the standards in WAC 246-290-221 to calculate water demand.

- D. A new or expanding Group B system must be designed with the capacity to deliver the peak hourly demand (PHD) at 30 psi (210 kPa) measured along property lines adjacent to distribution mains, including:
 - 1. When all equalizing storage has been depleted, if the system is designed to supply PHD in part with equalizing storage; and
 - 2. At the "pump-on" pressure setting for the pump directly supplying the distribution system, when the water system is designed to supply PHD without any equalizing storage.
- E. If the design PHD exceeds the total source pumping capacity, then sufficient equalizing storage must be provided.
- F. The minimum design flow and duration required for fire flow and fire suppression storage, if provided, shall be determined by:
 - 1. The local fire protection authority; or
 - 2. As required under chapter WAC 246-293 for Group B systems within the boundaries of a designated critical water supply service area.
- G. In the design of a new or expanding Group B system that does not have to comply with minimum fire flow standards, a purveyor shall coordinate with the local fire protection authority to assess if any hydrants create adverse pressure problems as a result of expected fire suppression activities, and address any pressure problems in the design.
- H. If fire flow is provided, the distribution system must be designed to provide the maximum day demand (MDD) for the entire Group B system and the required fire flow at a pressure of at least 20 psi (140 kPa) at all points throughout the distribution system when the designed volume of fire suppression and equalizing storage has been depleted.
- I. The Group B system design must contain a water meter that measures the water use of the entire water system (totalizing source meter), service meters at each connection, and a source sample tap.
- J. The use of individual service booster pumps to meet the requirements of this section is prohibited.
- K. A purveyor shall equip a new or expanding Group B system with a generator disconnect switch.
- L. A purveyor shall use generally accepted industry standards and practices in the elimination or control of all cross-connections, such as:
 - 1. USC Manual of Cross-Connection Control, Tenth Edition, October 2009; and
 - 2. PNWS-AWWA Cross-Connection Control Manual, Sixth Edition (1996).
- M. A pitless unit, pitless adaptor, and vented sanitary well cap must conform with the product, material, installation, and testing standards under the Water Systems Council PAS-97(04) Pitless Adapters and Watertight Well Caps (2004).

8.06._____ Drinking water materials and additives for Group B water systems.

- A. In the design of a new or expanding Group B system, all materials in contact with potable water shall conform to the ANSI/NSF Standard 61.
- B. Pipes, pipe fittings, fittings, fixtures, solder, or flux used in the design of a new or expanding Group B system shall be lead-free. For the purposes of this section, lead-free means:
 - 1. Not more than a weighted average of twenty-five one-hundredths of one percent lead for wetted surfaces of pipes and pipe fittings; and
 - 2. No more than two-tenths of one percent lead in solder and flux.
- C. Any chemicals specified for use in the design of treatment for secondary MCLs in Table 3 under WAC 246-291-170, with the exception of unscented commercial grade hypochlorite compounds, shall comply with ANSI/NSF Standard 60. The design dosage shall not exceed the maximum application dosage recommended for the product as certified by the ANSI/NSF Standard 60.
- D. H&CS may review and approve the use of materials or additives that are not ANSI/NSF Standard 60 or 61 certified on a case-by-case basis.

8.06._____ Distribution systems for Group B water systems.

- A. Storage reservoirs shall be designed to:
 - 1. Prevent entry by birds, animals, insects, excessive dust, and other potential sources of external contamination;
 - 2. Include:
 - a. A weathertight roof;
 - b. A lockable access hatch;
 - c. A screened roof vent;
 - d. An overflow pipe with atmospheric discharge or other suitable means to prevent a cross-connection;
 - e. A sample tap;
 - f. A drain to daylight, or an alternative design approved by the Washington State Department of Health or H&CS that is adequate to protect against cross-connection;
 - g. Tank isolation in order to perform maintenance procedures; and
 - h. Other appurtenances appropriate for the protection of stored water from contamination;
 - 3. Be above normal ground surface level. If the bottom elevation of a storage reservoir must be below normal ground surface:
 - a. The storage reservoir must be placed above the groundwater table; and
 - b. The top of a partially buried storage reservoir must be at least two feet above normal ground surface.
- B. A Group B system designed to supply fire hydrants must have a minimum distribution main size of six inches (150 mm) supplying each hydrant.

8.06.____ Group B system disinfection.

- A. A purveyor shall disinfect a Group B system before providing service to any consumer.
- B. The water system disinfection procedures must conform to the appropriate standard:
 - 1. AWWA C651-05 or APWA/WSDOT (2010 revision), for water main disinfection;
 - 2. AWWA C652-02, for reservoir disinfection; or
 - 3. AWWA C654-03, for well disinfection.

8.06.____ Reliability for Group B water systems.

- A. All public water systems shall provide an adequate quantity and quality of water in a reliable manner.
 - 1. In determining whether a proposed public water system or an expansion or modification of an existing system is capable of providing an adequate quantity of water, H&CS shall consider the immediate as well as the reasonably anticipated future needs of the system's consumers.
 - 2. In determining whether an existing public water system is providing an adequate quantity of water, H&CS shall consider the needs of the system's existing consumers exclusively, unless, in H&CS discretion, consideration of the needs of potential consumers is in the public interest.
- B. The owner shall ensure the system is constructed, operated, and maintained to protect against failures. New and expanding systems shall be equipped with a generator disconnect. Security measures shall be employed to assure the water source, water treatment processes, water storage facilities, and the distribution system are under the strict control of the owner.
- C. Where fire flow is required, under fire flow conditions, a minimum of 20 psi shall be maintained throughout the system and positive pressure at the fire hydrant.
- D. Water pressure at the customer's service meter shall be maintained at the approved design pressure under peak hourly design flow conditions.
- E. No intake or other connection shall be maintained between a public water system and a source of water not approved by H&CS (cross connection).
- F. Owners shall provide H&CS with the current names, addresses, and telephone numbers of the owners, operators, and emergency contact persons for the system, including any changes to this information. The owner shall ensure that customer concerns and service complaints are responded to in a timely manner.

8.06.____ Continuity of service for Group B water systems.

- A. No owner shall transfer system ownership without providing written notice to H&CS and all customers. Notification shall include a time schedule for transferring responsibilities,

identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered agent shall also be provided.

- B. The system transferring ownership shall ensure all health-related standards are met during transfer and shall inform and train the new owner regarding operation of the system.
- C. No owner shall end utility operations without providing written notice to all customers and H&CS at least one year prior to termination of service.
- D. Nothing in these rules shall prohibit an owner from terminating service to a specific customer if the customer fails to pay normal fees for service in a timely manner or if the customer allows or installs an unauthorized service connection to the system.
- E. Where this section may be in conflict with existing state statutes, the more stringent statute shall prevail.

8.06.__ On-going Routine Monitoring Requirements for Group B water systems

- A. H&CS may require additional monitoring when it determines contamination is present or suspected in the water system or when it determines the source may be vulnerable to contamination.
- B. The purveyor shall ensure samples collected under this section are collected, transported and submitted for analysis according to approved methods. Samples must be analyzed in a certified lab.
- C. The purveyor shall ensure the collection and submittal of a sample for coliform analysis at least once every twelve months from the distribution system or as directed by H&CS. The purveyor must submit the results of the coliform analysis to H&CS in accordance with Chapter 8.06.__ of this code.
- D. When coliform bacteria are present in a routine sample the purveyor shall take each of the following actions:
 - 1. Analyze the sample for fecal coliform or E. Coli;
 - 2. Notify H&CS in accordance with Chapter 8.06.__ of this code;
 - 3. Collect and submit a minimum of three follow-up samples for coliform analysis from the following locations:
 - a. The same location as the routine sample;
 - b. The system source(s);
 - c. Storage tank, and, if required;
 - d. Additional locations based on the system design.
 - 4. Undertake any further action directed by H&CS.
- E. The purveyor shall ensure the collection and submittal of at least one nitrate sample from each source or well field once every twelve months or as directed by H&CS. The purveyor must submit the results of the nitrate analysis to H&CS in accordance with Chapter 8.06.__ of this

code. H&CS may determine a reduced frequency of sampling based on results of the nitrate testing.

- F. When treatment is provided for one or more inorganic chemical or physical contaminant, the purveyor shall collect and submit samples for the specific contaminants before and after treatment. H&CS shall determine the frequency of sampling.
- G. Where continuous chlorination is required, the purveyor shall check the free chlorine residual daily, or at a frequency determined by H&CS.
- H. Where seawater treatment is used, the purveyor shall monitor as required by Washington State Department of Health.

8.06. __ Operation and maintenance requirements for Group B water systems

- A. It is the responsibility of the purveyor to comply with the requirements of this chapter and to provide a safe, reliable supply of water to the system's consumers.
- B. All water systems purveyors will develop and keep current an operation and maintenance plan, submitted at the time of design approval, that includes, at a minimum:
 - a. Service area and facility map
 - b. Standard operating procedures
 - c. Water quality monitoring requirements and sample plan
 - d. Operating permit information
 - e. Water quality results
 - f. Cross connection control assessment
 - g. Water production and use records
 - h. System management and financial plan
 - i. Ownership (water users) agreement
 - j. Operator requirements
- C. All new and expanding water systems must be managed and/or operated by a Washington State approved satellite management agency or, if a SMA is unable to manage and/or operate the water system then a state certified water system operator.
 - 1. Any required contract between the water system purveyor and approved SMA shall include, but not be limited to, the following :
 - a. Provisions to take required water quality monitoring samples;
 - b. Provisions to collect funds sufficient to manage the financial needs of the water system;
 - c. Provisions to deal with emergencies that impact water supply or water quality;
 - d. Provisions to provide regularly and timely ongoing system maintenance; and
 - e. Any management and operations process required by the health officer as necessary to provide a safe and reliable supply of drinking water.
 - 2. The contract between the purveyor and SMA shall not be altered, interrupted, suspended, or ended without prior H&CS notification.
 - 3. In those instances when a contract between a purveyor and SMA is terminated, the contract

must remain in force until such time as the purveyor has entered into a new contract meeting the minimum requirements above.

4. When an SMA or certified operator is forced to cease services due to lack of payment, the purveyor will be considered in violation of this chapter and the water system classified as an inadequate water supply.

- D. H&CS may require existing water systems not in compliance with this chapter to contract with a SMA or a state certified operator.

8.06. Recordkeeping and reporting for Group B water systems.

- A. The owner shall ensure that the following records of operation and water quality analyses are kept on file:

1. Records of bacteriological analysis shall be kept for five years. Records of chemical analyses shall be kept for as long as the system is in operation.
2. Where applicable, records of operation and analyses shall include the following:
 - a. Daily chlorine residual;
 - b. Water treatment plant performance including, but not limited to:
 - i. Type of chemicals used and quantity;
 - ii. Amount of water treated; and
 - iii. Results of analyses.
 - c. Daily turbidity;
 - d. Monthly water use readings from totalizing source meters;
 - e. Static level readings; and
 - f. Other information as specified by H&CS.

- B. Reporting.

1. The owner shall ensure that reports, tests, measurements, and analytic reports required by this chapter are submitted to H&CS when requested by H&CS or as otherwise required by this section.
2. Water facilities inventory and report form (WFI).
 - a. Owners shall ensure the submittal of an updated WFI to H&CS annually or as requested; and
 - b. The owner shall also ensure the submittal of an updated WFI to H&CS within thirty days of any change in name, number of connections, ownership, or responsibility for management of the water system.
3. System evaluation
 - a. The purveyor shall submit a copy of the water system management and operation self-assessment checklist annually; and
 - b. The purveyor shall submit a copy of the comprehensive system evaluation by a state certified operator, or sanitary survey by a health department specialist, every five years.
4. Bacteriological.
 - a. The owner shall ensure that H&CS is notified of the presence of:
 - i. Coliform in a sample, within one day of notification by the laboratory; and

- ii. Fecal coliform or E. coli in a sample, by the end of the business day in which the owner is notified by the laboratory or as soon as possible.
 - b. When a coliform MCL violation occurs, the owner shall ensure that the following notifications are made:
 - i. Notification of H&CS before the end of the next business day when a coliform MCL is determined; and
 - ii. Notification of the water system users within 14 days, including a simple explanation of the violation, steps the consumer should take, and steps the purveyor is taking to remedy the situation.
- 5. Water use data shall be reported upon request of H&CS.

8.06.____ Existing Group B water systems

- A. A purveyor of an existing Group B system shall apply for and obtain design approval under Chapter 8.06.____ of this code before the system:
 - 1. Expands to serve a new service connection needing potable water; or
 - 2. Provides potable water for a new use of an existing service connection if a local permitting authority requires an approved public water supply as a condition of an approval of the new use.
- B. A purveyor of a Group B system approved prior to January 1, 2014, may provide potable water to additional service connections provided that:
 - 1. The expanded use is consistent with the existing design approval;
 - 2. The expanded use does not exceed the number of approved service connections; and
 - 3. The purveyor complies with this chapter.
- C. H&CS may determine an existing Group B system constructed before January 1, 2014, without design approval under this chapter, to be adequate for existing connections if, at a minimum, the following requirements are met:
 - 1. The system's source(s) meet well construction standards under chapter 173-160 WAC;
 - 2. A well site inspection completed by H&CS or designee has documented that there are no sources of contamination in the SCA that could create a public health risk;
 - 3. The system meets water quality standards under Chapter 8.06.____ of this code; and
 - 4. The system is capable of maintaining a minimum 20 psi at all points throughout the distribution system during peak demand.

8.06.____ Approval status and compliance for Group B water systems

- A. Adequacy determinations for Group B water systems regulated under this chapter shall be based on the following criteria:
 - a. Design approval;
 - b. Compliance with annual permit requirements;
 - c. Compliance with requirements for an annual self-assessment or sanitary survey every

- five years;
- d. Compliance with monitoring and treatment reporting requirements; and
- e. Where required, compliance with requirements to contract with a certified operator.

B. Water systems regulated under this chapter shall maintain the level of service, operation and management, and water quality required to provide for approved service connections. Systems that are inadequate or out of compliance will be required to develop a compliance plan and contract with a SMA or a state certified operator.

8.06.173 Permit – Required

No purveyor may operate any Group B water system without having first obtained from San Juan County Health and Community Services, in such form as H&CS may require, a permit to operate such water system. All such permits, including those valid permits in force on the effective date of this ordinance, shall be valid through May 31st, unless sooner revoked as provided in this chapter. Every permit shall expire as stated in the permit, and it may be suspended for cause by the health officer. Applications for renewal of permits shall be submitted to the health officer 30 days prior to the permit expiration date.

8.06.175 Permit – Fee

Any individual person, firm or corporation desiring to operate a Group B water system in the County shall first apply for and obtain from San Juan County Health and Community Services a permit to operate such water system as provided in this chapter. An application shall be accompanied by a fee in an amount to be established by the San Juan County Board of Health.

8.06.177 Permit – Nontransferable

Permits shall be nontransferable in ownership or location of operation. New owners of existing permitted water systems or a change in water system name will require a change in ownership application and payment of the appropriate fee as adopted in the fee schedule.

8.06.180 List of Appendices

The following appendices contain standards used by H&CS in implementing and enforcing this code. Copies of all appendices will be kept on file at H&CS. Appendices A through E shall be modified by resolution of the board of health.

- A. Minimum Design Standards for Alternative Individual Water Systems
- B. Minimum Design Standards for Group B Public Water Systems.
- C. Guidelines for Truck Transportation of Potable Water
- D. Pump Test Requirements
- E. Standards for seawater treatment

8.06.190 Severability

If any section, sentence, clause, or phrase of this chapter should be held invalid, the invalidity thereof shall not affect the validity of any other section, sentence, clause, or phrase of this chapter.

8.06.200 Effective Date

This chapter is necessary for the preservation of the public health, safety, and welfare of the inhabitants of San Juan County and shall take effect upon adoption.

8.06.210 Seawater Intrusion Protection

This section applies to all existing and proposed groundwater wells and associated water systems in San Juan County.

- A. Project Actions that have a potential to cause or contribute to seawater intrusion shall be evaluated by the Health Officer to determine their impacts on the groundwater resource.
- B. The San Juan County health department will identify areas of the county at risk for seawater intrusion based on existing groundwater wells with chloride data and proximity to shoreline, as depicted in the existing San Juan County Seawater Intrusion Risk Area map and hereafter amended. Risk assessment parameters are listed in Table 1, below.

Table 1. Assessment Criteria

| Location criteria | Groundwater Criteria |
|--|---|
| 1. Within 1000 feet of the shoreline, or 2. Within 1000 feet of wells with chloride levels greater than 160 ppm, or 3. Within 1000 feet of wells with changes in chloride levels greater than 20 ppm | 1. Wells completed in unconsolidated material: water level elevations less than 8 feet above sea level (based on NAVD 88), or 2. Wells completed in bedrock: pumping water level below sea level, or 3. Well tests 100 ppm or greater for chloride; or changes in chloride levels greater than 20 ppm, or 4. Well chemical analysis confirms chloride from sea water intrusion |

C. Application

- 1. Project actions will be evaluated for seawater intrusion risk based on the risk assessment and the proposed Project Action. The extent of the hydrogeologic site evaluation will be in proportion to the scope and risk of the proposal. Projects that may cause or contribute to seawater intrusion (projects meeting two or more of the Location and Groundwater criteria) may be subject to a Hydrogeologic Site Evaluation, as defined in section 8.06.150 E. Projects will be reviewed on a case-by-case basis by the County Hydrogeologist to determine the extent of the hydrogeologic site evaluation required. Information required to be submitted for initial review is located in Table 2.

Table 2: Initial Submittal Requirements

| Water Availability Applications – Individual Wells | | Land Division Applications | New and/or Expanding Group A & B Water System Sources |
|--|--|--|--|
| > 5 Acres | < 5 Acres | | |
| Exempt – No Requirements for Seawater Intrusion Review | <ol style="list-style-type: none"> 1. Well Log 2. Chloride and Conductivity analysis 3. Surveyed wellhead elevation | <ol style="list-style-type: none"> 1. Well Log 2. Complete inorganic chemical analysis 3. Surveyed wellhead elevation 4. Location coordinates 5. Proposed use 6. Pump test results | <ol style="list-style-type: none"> 1. Well Log 2. Complete inorganic chemical analysis 3. Surveyed wellhead elevation 4. Location coordinates 5. Proposed use 6. Pump test results |

2. Non-project actions. Public water systems in seawater intrusion risk areas shall be required to sample for chloride and conductivity in April and October of each year. Single family wells in seawater intrusion risk areas that have been conditionally approved shall be required to sample for chloride and conductivity in April and October. Water quality analysis shall be performed by a state certified laboratory and submitted to the Health Officer annually.

- D. The Health Officer may impose conditions of approval designed to prevent degradation of groundwater quality or quantity. Such conditions may include monitoring, pumping regimes, storage, conservation, and other measures.
- E. Project Actions that cannot mitigate the impact of seawater intrusion on the fresh groundwater resource may be modified or denied by the Health Officer. In addition, Project Action utilizing wells that exceed the EPA chloride maximum contaminant level of 250 mg/L will be denied.
- F. In areas where seawater intrusion is increasing, or hydrogeologic studies indicate that the groundwater resource is at risk of degradation from intrusion, the Health Officer will recommend that the San Juan County Board of Health declare a Critical Water Resource Area.

8.06.220 Waivers

The Health Officer may grant waivers of the requirements of this chapter consistent with the criteria set out in WAC 246-291-060.

8.06.230 Appeals

Decisions by the Health Officer made under this chapter may be appealed to the Hearings Examiner following procedures set out in Chapter 8.22 SJCC. Notwithstanding the above, appeals of the Health Officer under SJCC 8.06.150 shall be heard by the Hearing Examiner and shall be consolidated with the hearing on the merits of the subdivision application.