

Public & Domestic Water Supplies

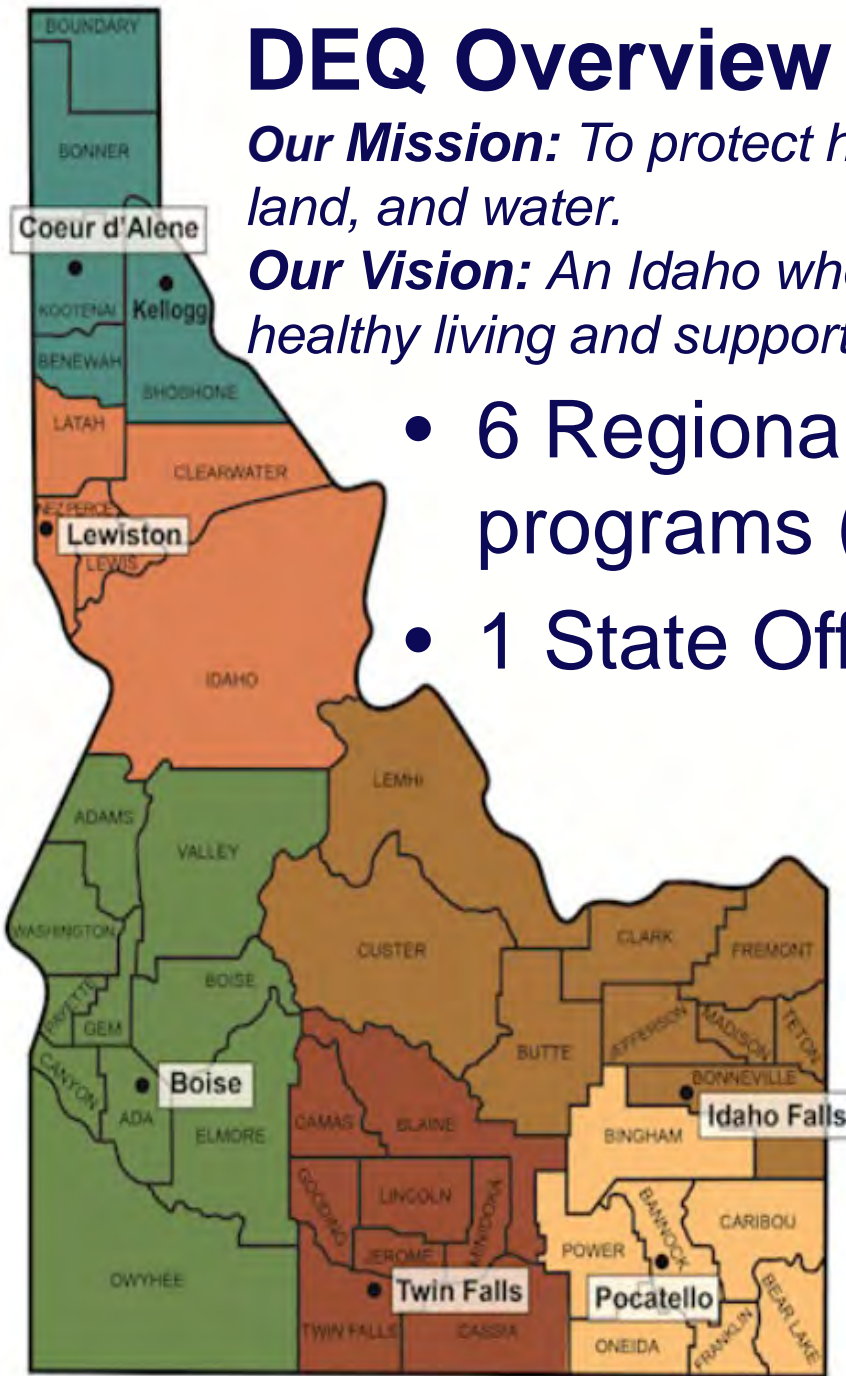
Topics to Be Covered

- Types of water supplies / systems
- Information and resources on public water systems and for private water systems
- System / water quality concerns
- Testing drinking water
- Mortgage approvals

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Drinking Water Compliance Supervisor, Coeur d'Alene**





DEQ Overview

***Our Mission:** To protect human health and the quality of Idaho's air, land, and water.*

***Our Vision:** An Idaho where the quality of our environment enhances healthy living and supports thriving communities.*

- 6 Regional Offices – implement all programs (air, waste, water)
- 1 State Office – Boise, central support
 - Assess environmental problems
 - Oversee facilities that: generate air, water and hazardous waste pollution
 - Monitor air and water quality
 - Cleanup contamination sites
 - Education, outreach, technical assistance to businesses, local government and citizens
 - Grants and loans for water and wastewater, best management practices, environmental cleanup (brownfields)



Types of Water Supplies/Systems

- Public Drinking Water System
 - Serves 15 connections *or* 25 people 60 days or more/year
 - 3 Types: Community, Nontransient Noncommunity, Transient Noncommunity
- Community public water supply
 - Intended to serve 10 or more residential connections
- Non Public Community Water System
- Individual Water System



Public Water Supply

- Defined by Idaho Code
- Requires DEQ approval of engineering prior to construction / material modification, such as:
 - facility plan; technical, financial, managerial capacity; engineering plans and specifications
- May become regulated if it serves 25 or more people 60 days or more per year
- Water rights/well drilling permits required through Idaho Department of Water Resources (IDWR)



Public Drinking Water System

- Regulated by the Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08)
 - Community
 - Serves at least 15 service connections or 25 year-round residents
 - **Regulated at 10 service connections**
 - Nontransient Noncommunity
 - Regularly serves at least 25 of the same persons over 6 months per year (e.g. school, hospital, business, etc.)
 - Transient Noncommunity
 - Does not regularly serve 25 of the same persons, but serves 25 or more 60 days or more / year (e.g. restaurant, campground, gas station, etc.)



Public Water System Cont'd, Idaho

- Statewide **2,010** **as of 1/5/22-and growing*
 - Community (C) 750
 - Nontransient Noncommunity (NTNC) 248
 - Transient Noncommunity (T) 1,012
- Coeur d'Alene Region (Boundary, Bonner, Kootenai, Shoshone, Benewah) **404**
 - C 200
 - NTNC 25
 - T 189
- Lewiston Region (Latah, Nez Perce, Clearwater, Lewis, Idaho) **150**
 - C 69
 - NTNC 18
 - T 64



Non Public Community Water System

(Intended to serve < 10 connections and < 25 people 60 days / year)

- Types of Supplies/Sources
 - Wells
 - Surface Water
 - Springs
- Does not require DEQ approvals
- No state-required water quality monitoring
- Health District (HD) signs off on sanitary restrictions for counties with applicable codes for platted subdivisions/parcel development
- Water rights/well drilling permits required through IDWR
- Some counties require shared well agreement



Individual Domestic Water Systems

- Types of Supplies/Sources
 - Wells
 - Surface Water
 - Springs
- Does not require DEQ approvals
- No State-required water quality monitoring
- HD signs off on sanitary restrictions for counties with applicable codes for platted subdivisions/parcel development
- Water rights/well drilling permits required through IDWR



Finding Information on a Water System

- Public Drinking Water Systems
 - Contact the water system
 - Ask a neighbor
 - Consumer Confidence Report
 - Drinking Water Watch
 - <http://dww.deq.idaho.gov/IDPDWW/>
 - Source Water Assessment
 - <http://www2.deq.idaho.gov/water/swaOnline/Search>
 - Contact DEQ or HD
 - HD regulates systems <25 connections, not government-owned, not utilizing surface water as source = 183 in N.Idaho
- Individual and Non Public
 - IDWR
 - Well Driller or Pump Installer



What to look for

Individual and Non Public Water Systems

- Wells
 - Sanitary Setbacks (septic tanks, drainfields, sewer lines)
 - Rules – IDWR Well Construction Standards and Individual/Subsurface Sewage Disposal Rules
 - Could compare to Idaho Rules for Public Drinking Water Systems
 - Capacity (drillers log/pump installer)
 - Well caps / seals / vents / conduit
 - Water Quality
 - Coliform bacteria
 - Nitrate
 - Arsenic
 - Iron/Manganese
 - Corrosive water (alkalinity, calcium, pH)
- Surface Water Systems and Springs
 - Treatment adequate?
 - Sanitary protection?
 - May not be safe or adequate
- Storage tanks
 - Hatches/access – water tight?
 - Vents, screens, openings?
 - Drains/overflows – screened?
 - Leaking? Cracks?



Good Wells



Bad Wells



Water Quality Concerns

- Coliform and *E. Coli* bacteria
 - Indicators of the sanitary quality
- Nitrate
 - Harmful to infants >10 ppm (mg/L)
 - Can be indicator of groundwater contamination (~>2.0 ppm)
- Arsenic
 - Naturally occurring in this region
 - Cancer Risk >10ppb (0.010 mg/L)
- Iron (Fe) / Manganese (Mn) - aesthetic
 - Staining (Fe 0.3 mg/L)
 - Rotten egg smell (Fe high + Mn > 0.05 mg/L)
 - Toxicity with Mn (> 0.3 mg/L infant / 0.5 mg/L all others)
- Corrosive water
 - Potential to leach lead and copper
 - Alkalinity, pH, calcium



Drinking Water Testing – Private Labs

Accurate Testing Lab
Coeur d'Alene
www.accuratetesting.com
7950 Meadowlark Way
Coeur d'Alene
208-762-8378

SVL Analytical – CDA & Kellogg
www.svl.net | SVLinfo@svl.net
CDA– 2195 Ironwood Ct, Ste C
208-665-5666
Kellogg –One Government Gulch
208-784-1258

Anatek Labs Inc – Spokane and
Moscow
www.anateklabs.com
Spokane –504 E Sprague Ave, #D
509-838-3999
Moscow – 1282 Alturas Drive
208-883-2839

Pathologists' Regional Laboratory
Lewiston
www.pathregional.com
415 6th St.
208-746-0516



Drinking Water Testing, Cont'd

- Options
 - Sample yourself (lab provides instructions)
 - Pay Panhandle HD for mortgage evaluation
 - Pay third party for hire (e.g. home inspectors)

- Interpreting results
 - Laboratory
 - Panhandle HD
 - DEQ for regulated systems



Private Well Owner Resources



Well Water Safety

Maintaining safe water for you and your family

- Idaho Department of Health and Welfare
 - <https://healthandwelfare.idaho.gov/Health/EnvironmentalHealth/WellWater/tabid/1128/Default.aspx>
- Local Health District

External Resources

- » Free Online Private Well Class
- » Water Systems Council
- » DEQ - Water
- » Idaho Public Health Districts
- » EPA - Private Drinking Water Wells
- » Licensed Well Drillers of Idaho
- » CDC - Private Ground Water Wells
- » Guide for Well Owners
- » Idaho Department of Water Resources
- » ISDA - Water Quality Program
- » Water Treatment - NSF International
- » Well Water Disinfection (Shock Chlorination)
- » National Ground Water Association



Mortgage Approvals

- Depends on Financial Institution
 - Letter/email from health agency
 - Coliform bacteria test
 - Well drillers report or well test pump report
- Public Drinking Water Systems
 - Letter/email from DEQ or health district
- Individual and non public systems
 - Site survey by Health District



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Thank you

