

Nitrates, Groundwater & Drinking Water

A Tale of Two Communities

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Office of Drinking Water

PUBLIC HEALTH
ALWAYS WORKING FOR A SAFER AND HEALTHIER COMMUNITY

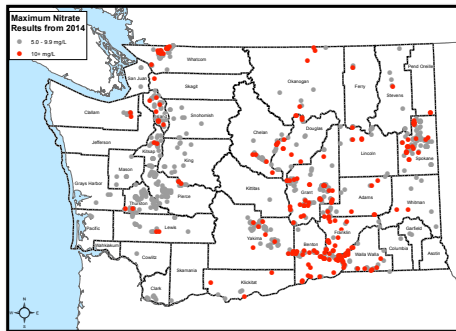


Office of Drinking Water's Mission

To protect the health of the people of Washington State by ensuring safe and reliable drinking water.

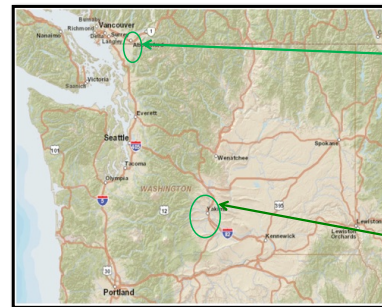


Public Water Wells with Elevated Nitrates



Our most challenging source Water Quality issue

A Closer Look at Nitrates & Drinking Water

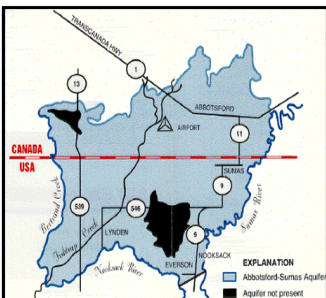


Abbotsford Sumas Aquifer (Sumas-Fraser)

Lower Yakima Valley Groundwater Management Area

Abbotsford Sumas

Lower Yakima Valley



Abbotsford Sumas

Lower Yakima Valley

Dairies
Raspberries
Berries
Seed Potatoes

Dairies
Orchards
Hops
Wine grapes



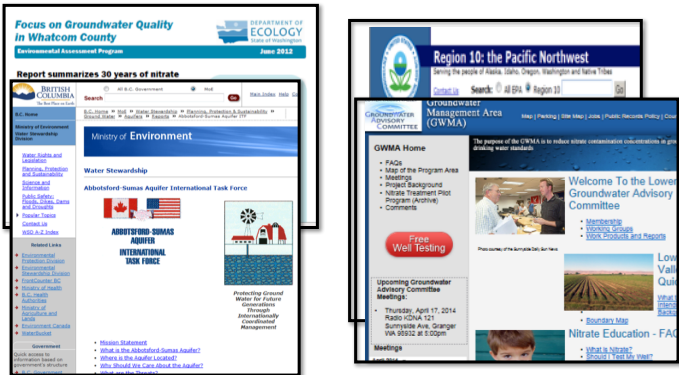
Abbotsford Sumas Aquifer (Whatcom County)



Lower Yakima Valley Groundwater Management Area (GWMA)



The Local Initiatives



Abbotsford Sumas

Advisory Committee

- Provincial & State Sponsors
- Local Government (*county, cities*)
- Ag. Community
- Universities
- Tribal participation*

Lower Yakima Valley

GWMA Committee

- Local Government Lead
- Citizens groups
- Ag community
- State Agencies
- Federal Partners
- Universities
- Tribal participation *

Abbotsford Sumas

Top down approach

- International
- Goal- reducing nitrates & improving practices
- Limited funding
- Partnerships with Ag community, Extension & Universities
- Limited monitoring & assessment through existing programs
- Limited assistance for public supplies to treat for nitrate
- Raise public awareness of the shared resource

Lower Yakima Valley

Locally driven under state regulations and statute

- Defined Advisory Board
- Goal- preserving & restoring DW resources
- Funded directly by legislature
- Contract with local lead entity to develop management plan & recommendations
- Education community about safe water options
- Provide access to safe water for at risk populations
- Track & manage data locally

Abbotsford Sumas

Successes

- Active AG community involvement with applied "research" community.
- Periodic conferences to share information on research & data
- Build on common points of agreement, (Support of International Joint Commission)
- Public water system are monitoring DW and must implement treatment options for customers.

Lower Yakima Valley

Successes

- Robust community participation with conflict & progress managed locally
- GWMA framework will form the basis for state & local actions
- Quarterly reporting
- Active bilingual public outreach
- Ground water monitoring & deep soil sampling
- Active participation by state & federal agencies
- Locally managed database

Abbotsford Sumas

Lower Yakima Valley

Challenges

- No single vision of success
- Implementation piece meal & relying on existing state & provincial authorities
- No coordinated work plan or funding.
- No clear timeline, metrics or deliverables.
- No single "champion" to support & foster success
- Visibility is moderate to low
- No mandate or authority

Challenges

- Everyone is in the room
- No shortage of conflict
- Implementation is Phase II
- Requires continued legislative support
- Fear of liability / enforcement impacts level of participation
- Frustrating pace
- Building & maintaining trust among stakeholders
- Everyone is watching



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Abbotsford Sumas

Lower Yakima Valley

Innovations

- International Cooperation
 - Canada / US
 - 1st Nation / Tribal
- International Joint Commission support
- Periodic international conferences to share data
- Initiated local aquifer protection in Canadian portion of the aquifer.
- Legislative interest in supporting innovation in the fields.
- Emerging local advocate groups
- Issues moving downstream (Shellfish protection)

Innovations

- Everyone in the room
- Acknowledge conflicts & seeks to build trust
- Authority lives at the local level
- Formal charter
- Water testing program & active community outreach
- Free & low cost water treatment options
- Multilingual materials & outreach.
- Solutions will be locally based
- Building a locally managed dataset



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Public Health Lessons Learned:

- *Simple, Clear & Universal Goals:*
 - Access to safe & reliable drinking water for community
 - Support of efficient & sustainable agricultural community
- Active local Sponsor/ Champion
- All stakeholders have "Skin in the Game"
- Cultivate political partners that will support a community solution
- Planning & Implementation:
 - Are not the same,
 - Both must be tied to local capacity & goals
- Talk about success publicly



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Questions?

- For more information:

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