Beneficial Use Exempt Well Panel

Steve Custer

Department of Earth Sciences

Montana State University

Gallatin County Water Task Force

- Concern about Exempt (Low-Yield) wells.

- What is a low yield well?
  - A well that discharges less than 35 gpm
  - less than 10 acre-feet per year
  - Less than 6.2 gpm 24 hours per day, 7 days a week, 365 days a year
- If the well is exempt, does it mean the well is pumping at 35 gpm?
  - No, but it could

Exempt Well Issues
(Gallatin Water Resources Task Force)

- Subdivisions with exempt wells are not reviewed for ground-water impacts.
- Exempt wells cumulative Impacts
- Exempt wells and mixing zones
- Exempt wells separation from septic systems
- Notice of completion

Subdivisions with exempt wells are not reviewed for ground-water impacts

- This is the path of least resistance when permitting gets difficult for central water systems
  - Central water allows higher density of development (more profit)
  - Exempt wells require lower density of development (less permitting cost; ?more profit?)
  - A loop hole in review particularly a problem for ground-water-surface-water interaction (Smith River Decision)

Solutions Exempt Wells

- County require all subdivisions above a specific size use central water supply.
- County require review of water for all subdivisions central or exempt-well water supply. (more severe than state law)
- County require third party review of proposed subdivisions as requested by county commission.
- County form a standing water Resources Technical Advisory Committee to independently review water for subdivisions when requested
- County could hire staff to review water issues for subdivisions.
- County could petition for controlled ground water areas

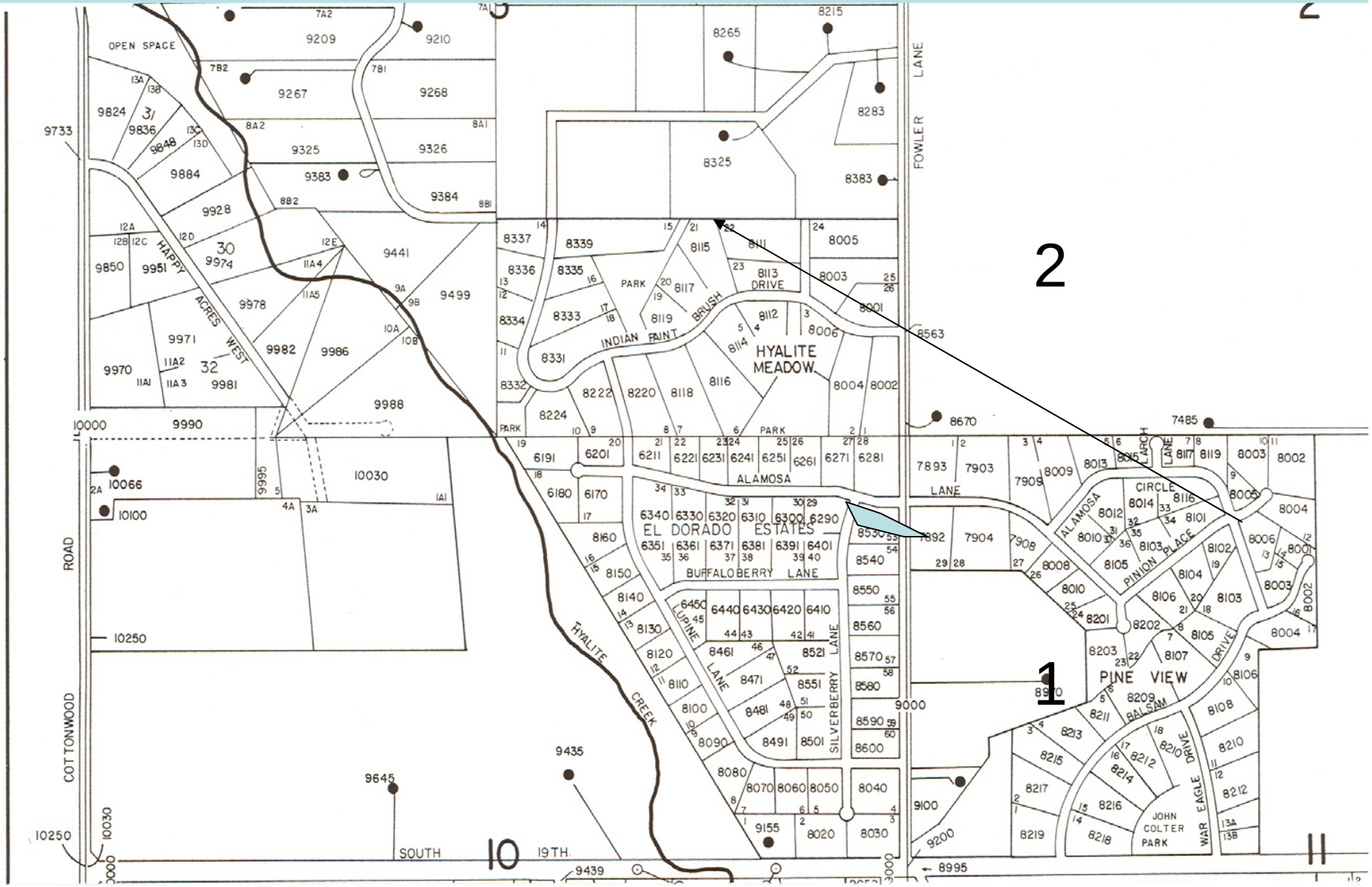
Pros and Cons in the Appendix

Exempt wells cumulative Impacts

- General concern
- No downward trend in wells
- Need good monitoring
- Vigilance
- Generally, Water Law does not recognize the right to a water level.
- This could be an important issue for ground-water-surface-water interaction

Exempt wells and mixing zones

- Mixing zones cross property boundaries.
- Adjacent property owners are not aware of where they are
- Well may be sited in the mixing zone.


OPEN SPACE
HAPPY ACRES WEST
HYALITE MEADOW
INDIAN PAINT BRUSH
EL DORADO ESTATES
ALAMOSA
BUFFALO BERRY LANE
SILVERBERRY LANE
LUPINE LANE
HYALITE CREEK
PINE VIEW
ALAMOSA CIRCLE
PINION PLACE
DRIVE
LARCH LANE
JOHN COLTER PARK
WAR EAGLE DRIVE
BALSAM
FOWLER LANE
COTTONWOOD ROAD
SOUTH 19TH
2
1

Solutions

- Require mixing zone easement on adjacent properties
- Prohibit mixing zones from crossing property boundaries
- Define mixing zones based on projected nitrate levels rather than on standard length
- Build an internet page that shows mixing zones to everyone.
- Do a better job of notifying adjacent land owners when mixing zones are planned which do cross property boundaries. (Subdivision review process)

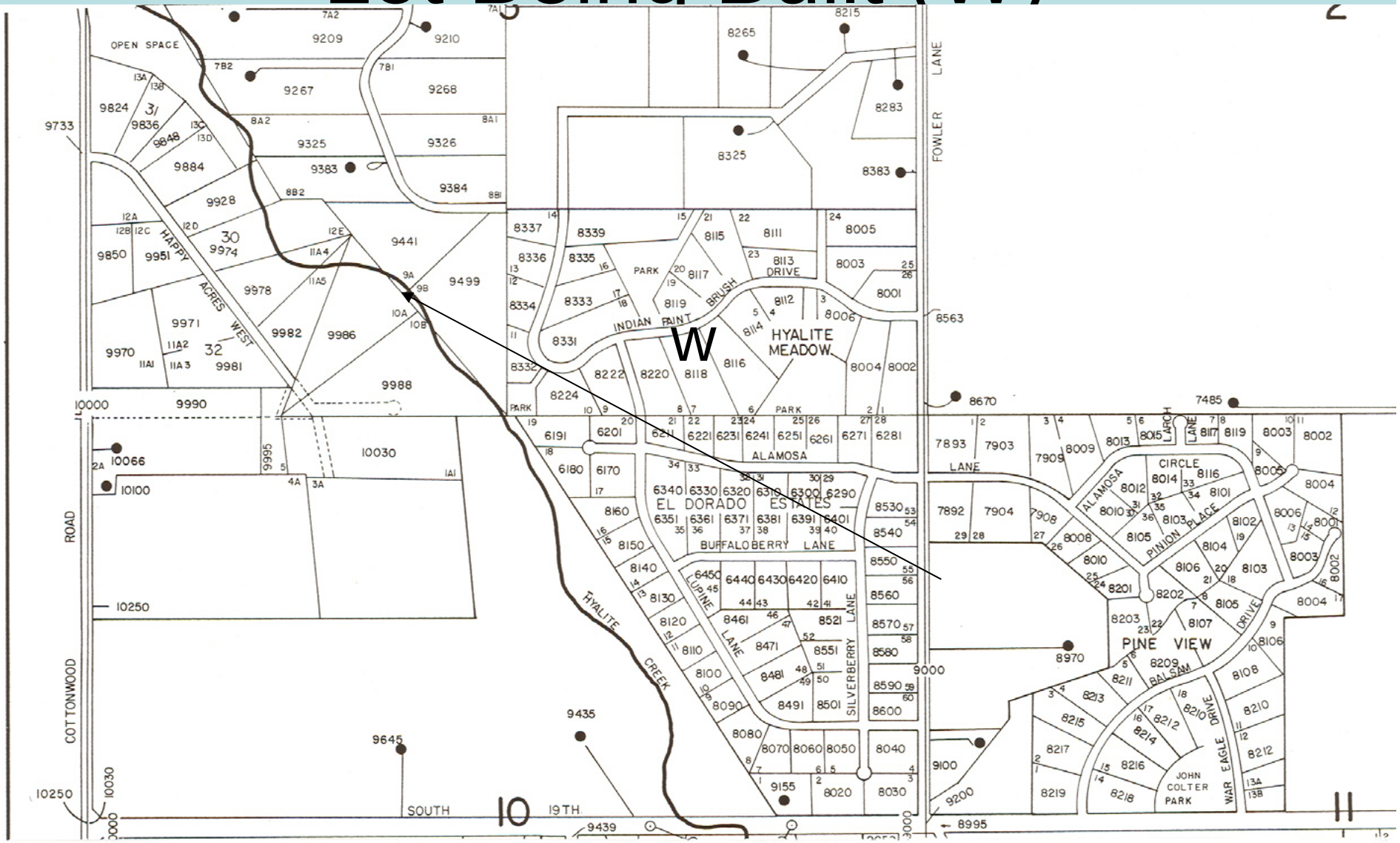
Exempt wells separation from septic systems

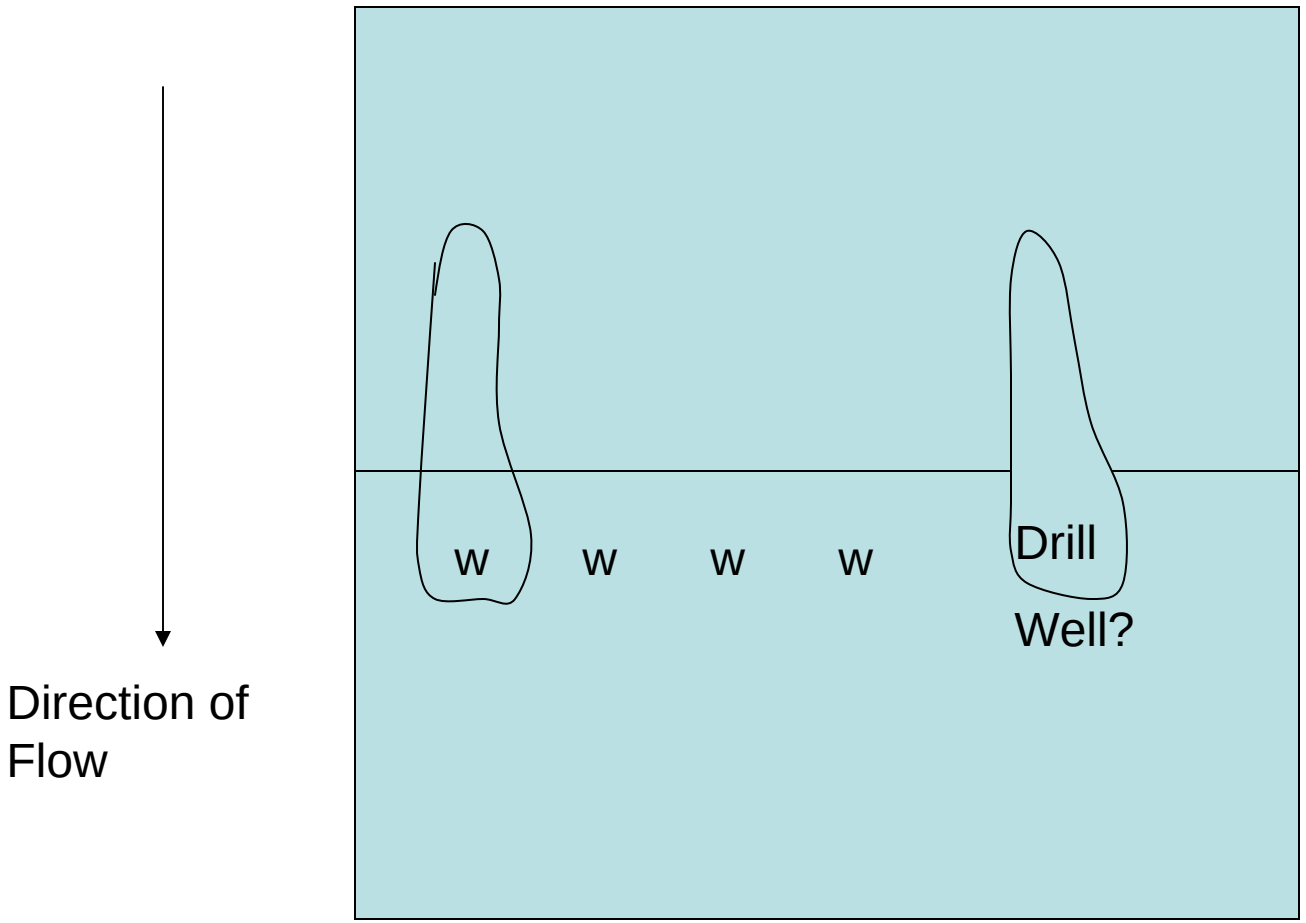
- Current rules: 100 foot separation when drilling a well
- BUT there is not an effective process for making sure that a septic system is not permitted within 100 feet of a well.

Solutions

- Make septic system permits and subdivision plat maps available on the web.
- Require a drilling permit before drilling a well.

Lot Being Built (W)




Direction of Flow
w
w
w
w
Drill
Well?

Notice of completion

- Up to 50% of the owners of low yield wells have not filed a notice of completion
- Many do not transfer their water right when the property is transferred

- Solution: Education
  - DNRC
  - County

Appendices