# MT-13-34 Grantsdale Addition Subdivision (Bitterroot River, Clark Fork Watershed) Wastewater Discharge Permit BACKGROUND AND KEY CONCERNS

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### **BACKGROUND**

Septic systems in rural high density subdivisions discharge a variety of contaminants including nutrients, pathogens, organic matter and solids, which can degrade drinking water quality and fisheries in watersheds. <a href="http://watercenter.montana.edu/training/decisions/landuse/docs/septic\_system\_impacts.pdf">http://watercenter.montana.edu/training/decisions/landuse/docs/septic\_system\_impacts.pdf</a>

The Montana Department of Environmental Quality (DEQ) is in the process of considering a wastewater discharge permit to groundwater for a subdivision along the Bitterroot River, about two miles south of Hamilton near Skalkaho Creek called the Grantsdale Addition.

Based on the comments received during the public comment period that ended November 15, 2013 and the additional feedback provided to DEQ concerning the draft permit and fact sheet, DEQ is **reopening** the public comment period for this subdivision and has scheduled a **public hearing** to receive additional comments and testimony from the public and other interested entities.

# <u>The public hearing is scheduled to begin at 5:30 PM on January 23, 2014, in the Ravalli County Commissioner's Conference Room located at 215 S. 4th Street in Hamilton, Montana.</u>

For the DEQ Public Notice, Environmental Assessment and Statement of Basis (Fact Sheet) for the MT-13-34 Grantsdale Addition subdivision go to: <a href="http://www.deq.mt.gov/notices/WQnotices.mcpx">http://www.deq.mt.gov/notices/WQnotices.mcpx</a>

# KEY PROBLEMS with High Density Septic System Wastewater Effluent Discharge in Watersheds

- Drinking Water Contamination
  - O High nitrogen (nitrates/nitrites) levels in drinking water is harmful to human health: http://water.epa.gov/drink/contaminants/basicinformation/nitrate.cfm
  - O High nitrogen is also an indicator of the likelihood of other hazardous human contaminants such as herbicides, pesticides, solvents and pharmaceuticals. This is supported by a recent DEQ study of the Helena Valley Aquifer showing the presence of measurable levels of these contaminants from septic systems in drinking water derived from wells:

    <a href="http://www.deq.mt.gov/wqinfo/pws/docs/Helena%20valley%20pharms">http://www.deq.mt.gov/wqinfo/pws/docs/Helena%20valley%20pharms</a> new.pdf
- Fishery Degradation-Wastewater effluent discharge from high density subdivision septic systems into
  watersheds causes a buildup of oxygen consuming algae and slime in streams, rivers and lakes, which
  can negatively affect aquatic habitat for fish and their food supply, adversely impacting Montana's
  valuable fisheries and recreational opportunities. For a comprehensive overview of septic system
  impacts see
  - http://watercenter.montana.edu/training/decisions/landuse/docs/septic system impacts.pdf

#### **KEY CONCERNS** with the Grantsdale Addition Subdivision Project

 Proximity to and degradation of an impaired river-According to the DEQ 303(d) list of impaired waters, the Bitterroot River beginning at Skalkaho Creek is classified as an impaired due to nitrates and under DEQ nondegradation rules if a stream is impaired it can't be further degraded <a href="http://deq.mt.gov/wqinfo/cwaic/reports.mcpx">http://deq.mt.gov/wqinfo/cwaic/reports.mcpx</a>.

- Lack of appropriate analysis-The permit Environmental Analyses and Fact Sheet acknowledge that there
  is connection between groundwater and surface waters in the area, but do not provide any assessment
  and analysis of the degradation to the Bitterroot River, Skalkaho Creek, or other surface waters if the
  permit is approved.
- **High nitrogen concentrations currently in aquifer and predicted in permit**-High nitrogen concentrations in water wells harm public health and high nitrogen levels in waterways degrade fisheries.
  - O The current nitrogen concentration in the local aquifer supporting the Bitterroot River in the project area is already at 670 micrograms/liter. This is more than double the DEQ target goals (Source: Permit Fact Sheet and draft DEQ Circular 12).
  - o If approved, this permit will allow a wastewater effluent discharge nitrogen at concentration of 24,000 micrograms/liter, into the aquifer supporting the Bitterroot River in the Clark Fork River Basin. This is an 80 times the DEQ target level of 300 micrograms per liter for the Bitterroot River (Source: Permit Fact Sheet and draft DEQ Circular 12).
  - O If approved, the developer will be allowed an estimated average of 40,000 gallons/day of septic effluent to be deposited into the aquifer and, ultimately, into the impaired Bitterroot River (Source: Permit Fact Sheet).

## **ADDITIONAL CONCERNS**

- Lesser water quality permit standards for on-site wastewater disposal systems in rural high density subdivisions beyond the limits of a municipality wastewater collection creates an economic incentive which helps promote rural sprawl development.
- Taxpayers ultimately bear the cost burden when water contamination occurs (USEPA, 1995b. Benefits and Cost of Prevention: Case Studies of Community Wellhead Protection. Office of Water, Washington, DC. EPA816-B-95-002)