

Jeff Comstock, Jon Kim, Rod LaMothe, Meddie Perry, Don Maynard, Michael Smith, Craig Heindel, Darlene Autery, Liz Royer, Scott Stewart, Kasey Kathan, Anne McMillan, John Brabant, Kira Jacobs (call in)

Jeff – Required Agricultural Practices (slides attached)

- Act 64 required taking AAPs thru rule making process – Required Agricultural Practices Rule. Presented to LCAR that morning (10/20), probably need to go back again.
- Application of requirements to ~7,000 farms. Permit needed for medium farm operation (139 MFOs, 200-699 milking cows); 27 large farm operations (700+ milking cows)
- These rules add Small Farm Ops requirements, applies to ~40% all animals in the state.
- Smallest groups (non-RAP operations): if in area w/ municipal ordinances jurisdiction can be transferred to town, if no zoning, under ag jurisdiction. Acreage and income are trigger. Rentor/Operator of agricultural parcels are responsible for water quality and soil testing.
- Custom manure applicator training to be provided.
- Liz-raised concerns during rule review process regarding consideration of public and private wells for water supply protections – pasturing near public water supplies was missed. Public water supplies (new supplies are dealt with; grandfathered systems left to address ownership or control of land activities up to water system). Gail Center, Liz and Jeff met and worked on rule language. Potable source setback = 100 feet, Public = 200 feet. Both apply to field stacking of manure and mechanical spreading. If pasture is used to point where it is considered a feeding area the 100/200 setback applies.
- **Wastewater and Potable rule (and upcoming Water Supply Rule) should look at these rule setbacks in their isolation tables for consistency.**
- There is a performance standard that applies to all size farm operations. The Ag Secretary can require corrective action.
- There was discussion regarding RAP jurisdiction which is applied to farm operation and activities and Executive Order 52 which requires water system projects to evaluate location and risk from nearby ag activities and requires water system (if contaminated) to put in treatment (essentially holding ag activity harmless). These are separate jurisdictions and requirements.
 - There was a question of how it would be determined that the agricultural activity was the source of contamination. For new projects, that determination is part of DWGPD source permit review. Later it would be a hydro study of some kind and

looking at routine water system sampling data (Synthetic Organic chems and Inorganics).

- Tile drainage report Jan 2017, rules due 2018.
 - Studies: surface, plant uptake, soil core, infiltration and monitoring well work (some in drainage report and in the pollinator assessment – awaiting data).
 - **Send copy of report to GWCC when available. This may be proposed rule and process the committee will be interested in following/providing input on.**

Arsenic – Anne McMilland (Dept. of Agriculture, slides attached)

- Lead Arsenate (LA) used in late 1800s, in 1930s pesticide resistance became a problem, in 1940s DDT replaced its use. EPA cancelled registration of LA in 1988. Spraying provided higher concentration around drip cone.
- Little evidence lead accumulates in crops, arsenic does.
- Primarily a soil issue (not groundwater), complaints were greater 15-20 years ago. Not a high priority or concern.
- BMPs for soils: dilute by deep tillage, add soils – garden plots, add organic matter to tie-up metals, lime to neutralize pH.
- Remediation: reduce exposure. Pave or grass, legal restrictions. Question of who has jurisdiction.
- Craig – some sampling around shallow wells near older orchards, showed no indications.
- New Hampshire Arsenic Consortium meets annually
- Jon Kim (VGS) and Joe Ayotte (USGS) have more recent articles available.

Private well conference update. – Liz Royer VRWA

Follow up with planners in two workshops Bennington area and Northeast Kingdom in the spring

2018 NE GSA is in Burlington 3rd week in March

- Craig on local committee – discussing themed conference (unlikely) but considering afternoon session/add-on regarding private wells

Intern – Liz

- Jordyn's work – finished towns – Liz putting together proposal to have EPA intern do analysis

PFAS – Michael

- Bennington/N. Benn. wrapping up the work to define the full range/scotpe
- Solid Waste looking at Closed landfills in Bennington and Windham counties – unlined 2 with results have detectable PFOA – in the teens, mostly thought presence due to carpets, sealers, etc. not industrial sources.

- ITRC (PFOS team) working on guidance and fact sheets. Precursor chems degrade to PFOS/A. C8 chems are being replaced by C6 but limited data on health risks.
- USGS toolbox might be useful to consider for data management – Army Corps of Engineers prefers Rockworks as a display tool.
- Jon – 6 wells logged for geophysics, 6 more to be done before Thanksgiving – bedding is a dominant plane or surface for groundwater flow.

Arcadis presentation – Michael and Scott

- Historical approach was grid of monitor wells, “lampshade” shaped plume with dispersion a major force. This missed a lot of contamination and very costly and very long remediation times (if at all)
- Integrated dnapl site characterization
- Mass flux and detailed stratigraphy is new view (monitor wells are for sampling not characterization). Map high and low permeability layers – high flow areas, mass transfer from “storage” and little movement in low permeability zones (clays). Plumes are in discrete layers, long (up to 50 miles in Italy) and sinuous.

GWPRS – Scott

- High priority rule still reviewing the comments – LCAR in Nov.
- Rule team working on finalizing GW Enforcement Standard table and use of the MCLS and the VALs.

Drought Outreach – question from Liz

- Public systems that might be at risk for drought have been contacted
- Some with problems, some systems are using supplemental sources
- Some funding may be available for potable and public systems (SRF)
- What are systems being told? – voluntary conservation and evaluating for other issues. Drillers are busy.

Well drillers database – Scott

- Upcoming work, better data – Online form for well-driller entry and submittal of reports and looking at digital field submission for staff for source location info.
- Working on queries of database for QA/QC

Act 250 documents - Scott

- BMPs from several years ago are being rewritten, simplified, clarifying responsibility and submissions. Being reviewed by program management and Office of Policy and Planning and ANR Act 250 staff soon.
- Drafts will go to the committee, likely within the next month or so.

Comprehensive GW Management Plan – Scott and Kasey working on draft with priorities and actionable tasks with timelines. Plan to have draft to DWGPD and GWCC by end of year. Will look at items and issues for the coming year.

Keep those ideas and issues coming in so we can have full agenda in 2017!