

## Upper Yampa River Watershed Group

### Technical Committee notes from 12/03/2013 meeting

Present: Liz Schnackenberg, Kevin McBride, Kelly Heaney, Ben Beall, Brian Hodge, Jackie Brown

Guests: Billy Atkinson (CPW), Dennis Jones , Bill Badaracca, Don Meyer (CRWCD-phone), David Smith (CRWCD-phone)

- I. Kevin McBride: CDM Smith Projects and Methods Modeling maps. Kevin briefed the group that the intent of the Yampa White Green Basin Roundtable's (BR) Projects and Methods modeling is to create scenarios showing current demands compared with future demands recognized in the BR Identified Projects and Processes (IP&Ps). These scenarios will allow the BR to create the Basin Implementation Plan (BIP) as part of the State Water Plan. These maps are important; Kevin shared, because of potential transbasin diversions currently being discussed by both the Colorado Interbasin Compact Committee (IBCC) and the Roundtables. Maps attached.
- II. SOTWR Mapping
  - a. Combine Flow map and geology map and create one of the entire watershed. Replace eras with rock groups and categories or properties to further define (i.e. igneous basalt, metamorphic gneiss, etc.) Group requested that the flow data be checked against flow data used in the RT maps discussed above (same period of record- 50 years). Flows need labels that describe order of magnitude.
    - i. Wetland Map using Natural Wetland Inventory overlain on a land cover map... may or may not work. We'll take a look. Cover should show:
      1. Trees (coniferous and Aspen forest combined)
      2. Riparian
      3. Grassland
      4. Shrubland
      5. Agriculture
      6. Open water
  - b. For each sub-basin, please create two maps:
    - i. Conditions
      1. Oil & Gas
      2. Land Use
        - a. Can we separate irrigated v. dryland agriculture in this category instead of land cover?
      3. There was discussion regarding identification of grazing lands – SLB, USFS, BLM but the general thought was that it would be too conditional and cluttered. The same brief conversation was had regarding mapping beetle kill effects.
      4. Discharge
        - a. WTP
        - b. WWTP

c. CRWCD to send me the attribute table of Discharge permits in Excel and we will redline and send back.

ii. Present Segments

1. 303d listed
2. M&E listed
3. ISFs

III. Billy Aktinson, CPW, Mercury in the Yampa Basin: Mercury can be distributed into the system via forest fires, geology, burning of fossil fuels. Methylmercury is formed from inorganic mercury by the action of anaerobic organisms that live in aquatic systems lakes, rivers, wetlands, soil and sediment. It becomes bioavailable in the food chain; levels are highest in the top carnivorous fish. Methylmercury binds to fat and cannot be cooked out of fish. Pregnant women and infants are most at risk from eating fish with higher levels of mercury.

CPW and the Water Quality Control Division pulled fish from 100 lake sites in 2007. They are currently working on another round of sampling for 2014. In 2007, Catamount and Elkhead reservoirs exceeded the EPA and State of Colorado accepted standard of .3 PPM, a median value. Locally, many crayfish have been removed, reducing the availability of bottom-feeders into the food chain. Many pike have been removed as well, so it is expected that mercury levels should not have risen, and may have decreased. Experiments have shown that when the sources of food containing mercury are denied, levels of mercury in fish having tested for previously elevated will reduce drastically. Mercury therefore can be expelled, just not at a rate higher than it can be bio accumulated (half-life is 72 days). Currently, the Upper Yampa has a listing for fish tissue mercury in Elkhead and Catamount and is on the M&E for Mercury in Lost Dog Creek in the USFS.

To view information. Go to <http://www.colorado.gov/cs/Satellite/CDPHE-Main/CBON/1251583470000> Topics A-Z; "F"; Fish; Consumptive Guidelines

Adjourned at 11:30.