

## Considerations regarding the State of the Watershed update from the Technical Committee Chair – Dave Walty

First I would suggest we **not** repeat the SOW, but concentrate on changes; new pressures and accomplishments in the watershed that address the first SOW data gaps. Perhaps we organize data gaps and accomplishments under the six main indicators:

1. Landscape,
  2. biological communities
- indicator focus on regionally valuable landscapes supporting critical fish habitats.
1. surface water quantity,
  2. surface water quality
- indicator focus for 3 and 4 -important landscapes supporting important recreational and drinking water source lakes.
1. ground water quality
  2. ground water quantity.

Indicator focus for 3 and 6 -

- Regionally valuable landscapes on more vulnerable watersheds supporting community drinking water,
- Landscapes supporting high water yield areas where human disturbance could be impacting human use and healthy aquatic habitat.

### Major data gaps listed in text of report

1. Greater accounting of water use from flowing waters.
2. Lack of water quality monitoring trends on larger lakes (source water and recreational)
3. Ground water monitoring (GOWN or similar water quantity and quality)
4. Wetland accounting (protection/loss)

I think the groups main exercise would be a general round table on the significant changes to water use, drainage, land use in the Peace Watershed since last SOW. These can be presented and discussed under the relevant indicator perhaps and then we should have a more focused discussion on each indicator and relevant data gaps fleshing out more details. These plus data gaps may influence new priorities of focus areas for us going forward.

Examples of new pressures:

1. Fox Creek south Grande Prairie (Little Smoky and Smoky watersheds) intensive fracturing developments
2. Movement of many communities to the Peace River as their community source water- Spirit River, Rycroft and surrounding towns in progress, Dixonville, Chinook Valley, and Northern Sunrise County Woodland Cree (Cadotte reserve and Metis community} and Lubicon {Little Buffalo, just truck fill but projects in place connecting households} *In most cases this is a positive move in source water improvements as these communities move to more advance treatment and reliable safe water sources,*
3. Ft Vermillion and La Crete extensive agriculture land development, land clearing, roads, drainage, wetlands. {Site C
4. Proposed dam structure on Pats Creek.

## **Biotic Community Update**

Review Data gaps and changes to focus what areas we report on.

1. Fisheries Status is likely an easy way for us to report on the main fisheries in the watershed. I would suggest we list the number of lakes with species harvest. Can focus on most popular species if desired. walleye, pike, perch,(trout stocked lakes don't really change as they are stocked annually, We could just list th total number},lake trout. List number of lake with harvest using regulations guide. The status on river fish used in the SOW have likely not changed.
2. Invasive species changes - could list - crayfish, goldfish, limited to dugouts,
3. Fish species at risk -could list - bull trout special concern, grayling special concern, pike minnow - We will have to check these.
4. A new fishway mitigation on Beaverlodge River for Grayling recovery

## **Ground Water Update**

1. Grimshaw Aquifer, mapped, Mgmt plan , Source Water Protection Plan, Water Well program.
2. Pressures of Smoky basin fracturing on ground water and Fox Creek wells.
3. Likely increase landscape/wetland loss changes and water use with La Crete area agriculture expansion.

## **Landscape Update**

1. Lake values, lake habitat characteristics and total human disturbance were quantified on Peace Watershed lakes larger than 2000 ha. Lakes have been ranked and prioritized by social value and environmental risk. This allows us to focus future management and restoration efforts on the lakes with the highest economic values and those under the greatest environmental pressure.

2. All drinking water watersheds have been mapped for land characteristics and total human disturbance. Watersheds have been broadly classified into risk categories and thus ranked as to the most important or mitigating impacts affecting water quality.
3. Riparian mapping and status of Beaverlodge River

### **Water Quality Update**

1. Concentrated effort on the Smoky River, the most impacted sub watershed in the Peace Watershed by human disturbance/development - Wapiti River Mgmt. Plan, Source Water Protection Plan were completed
2. Victor Lake Source Water protection plan - Town and Grande Cache/Greenview MD
3. Wabasca Source Water Protection Plan - Wabasca community/Big Lakes MD.
4. Heart River Mgmt. Plan - Northern Sunrise County
5. Woodbuffalo Park World Heritage Action Plan
6. Nalms Lake monitoring program
7. Water Quality Assessment of the Beaverlodge River

### **Water Quantity Update**

1. Little Smoky Industry/town/County partners cooperative water quantity monitoring and water allocation sharing. Supports minimum flow mgmt.
2. AEP flood Risk mapping - list towns maybe
3. NWT/AB bilateral agreement (likely could be listed under water quality too.
4. Site C *As more communities move to the Peace River, minimum flow periods in late summer will need to be managed/regulated to ensure domestic water supplies are not impacted. Also included is impact of dam filling.*