Looking for features in one watershed that are similar to other watersheds, not necessarily looking for differences.

Is any basin Unique?

- Processes not unique
- perhaps linkages between processes are different
- can we relate these differences to HRUs/GRUs using parameterization?
- can the mode have all the possible processes and then they are turned on or off using parameters?

Have to define the dominant processes and then what HRUs/GRUs are important to those processes, then look at the parameters.

What is the optimal representation of the landscape heterogeneity that represents the processes in the simplest way.

What questions are you trying to answer with your model?

Fluxes – process 1, param set 1, model 1

Flow – process 2, param set 2, model 2

GRUs/HRUs based on processes – snowmelt – aspect, land cover, runoff – land cover(bedrock, overburden)

Can one model cover everything?

Transferability of parameters

Parameters tied to HRUs/GRUs

Need to have parameters that are scale independent

How to transfer parameter and processes from CRHM to MESH

Measurability of parameters

Measured versus effective parameters.

Can we relate measured to effective parameters, effective parameters from one basin to another, measured parameters from one basin to another?

Would be good to have range of parameters.

What is the target?

How do we know if we have the correct number or values of parameters, how do we know if we can transfer the parameters to another basin?

Flow- timing, volume, peak

Soil moisture, soil temperature, SWE

How close is close enough?

What is the limit for the number of HRUs/GRUs?

Is 4-7 reasonable?

Process people are interested in knowing the current physics in the model to see how processes are currently being represented and which parameters need to be measured. Have we already decided on a model scale? 1 m – 1000 km? Hillslope scale (100m-10km)