

Potential Modeling Scenarios brainstormed by Subgroup on 6/28/18

Potential Eel River Management Actions:

- Baseline conditions (RPA flows, existing dams)
- PVP Decommission: Scott Dam and Cape Horn Dam removal (no diversion)
- PVP RPA modification: Modify E5 condition, existing dams)
- Partial Removal of Scott Dam to maintain enough storage for PVID and easing fish passage infrastructure needs
- Run of the River seasonal diversions under various diversion timing windows and various diversion capacity scenarios
- Others

Potential Russian River Management Actions:

- Baseline conditions (RPA flows, existing dam)
- Modified Lake Mendocino Forecast Informed Reservoir Operations (FIRO)
 - Full Ensemble
 - Hybrid
- Fish Flow EIR Operations: Modify downstream releases
- Raise Coyote Valley Dam, new flood control rule curves
- Others

Modeling Scenarios:

$$n = 5 \times 6 \times 3 \times 4 = 360 !!!$$

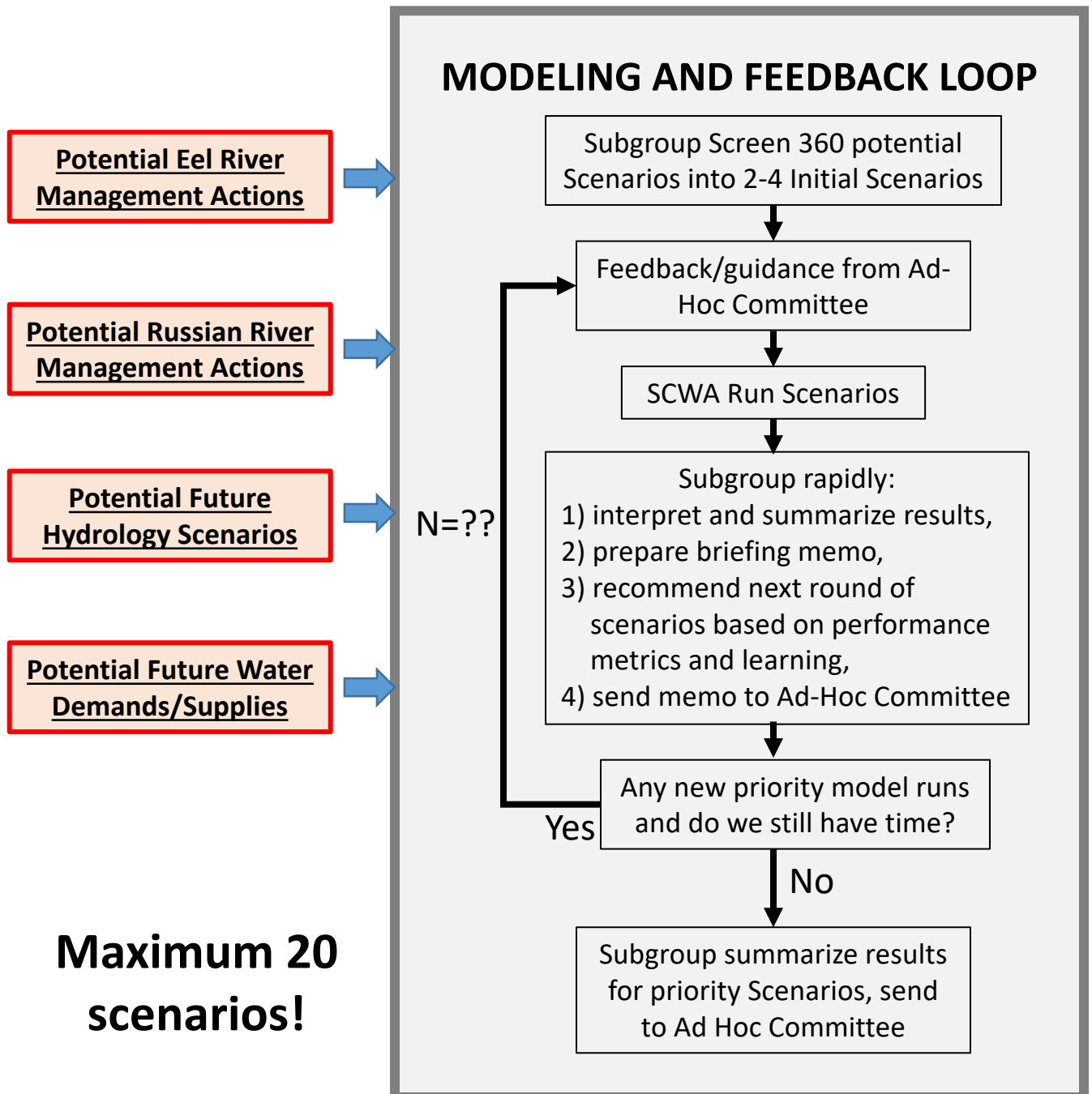
Potential Hydrology Options:

- Baseline conditions (Historical record from 1910-2017, or 1976-2017)
- Future Conditions
 - Assume historic
 - Assume Hot-Dry climate change scenario
 - Assume Less Hot- Less Dry climate change scenario
- Others

Potential Future Water Demands/Supply Options:

- Baseline conditions (existing Russian River and Eel River consumptive demands)
- Future demands (future Russian River and Eel River demand scenarios)
- Reduced Russian River demand options
- New Water Supply Options
 - Potter Valley
 - Russian River
- Others

Need a way to quickly and logically narrow down modeling scenarios based on learning as we go



Matrix of potential initial model runs (still need to choose Future Hydrology and Water Demands)

		Russian River / Lake Mendocino Alternatives				
		Baseline / Current Ops	Lake Mendocino FIRO (Full)	Lake Mendocino FIRO (Hybrid)	Fish Flow EIR Ops	Raise Coyote Valley Dam
PVP Alternatives	Baseline / Current Ops	1				
	PVP Decommission		1			
	PVP Revised Ops (TBD)					
	Lowered Scott Dam					
	Run-of-River diversions (existing cap.)	?				
	Run-of-River diversions (increased cap.)					

Current: Historic hydrology + current water supply demands

Future A: Hot, dry climate hydrology + future Russian River water supply demands

Future B: Less hot, wet climate hydrology + future Russian River water supply demands