Appendix E SAN JUAN STATEMOD OUTPUT USED FOR SJBHM REPORTING

The following data is San Juan StateMod output that is utilized for SJBHM depletion reporting purposes. This data, however, is not used directly within the SJRIP RiverWare model. Even without being directly utilized, the river depletion effects of this data are present within the San Juan StateMod hydrology flows used for the SJRIP RiverWare model inflows. A complete breakdown of each of the San Juan StateMod nodes aggregated into each listed parameter is shown in the tables in this appendix.

- Upper San Juan River Basin above Navajo Reservoir
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Basin Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (Southern Ute Indian Tribe, SUIT) Depletion
- Piedra River Basin above Navajo Reservoir
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Basin Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (SUIT) Depletion
- Los Pinos River Basin above Navajo Reservoir
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Basin Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (SUIT) Depletion
- Animas River Basin above Durango
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Basin Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (SUIT) Depletion
- Florida River Basin above confluence with Animas
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Basin Total Reservoir Evaporation
- La Plata River Basin above State Line
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (SUIT) Depletion
- Mancos River Basin above State Line
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (Ute Mountain Ute Tribe, UMU) Depletion
- McElmo Creek Basin above State Line
    - Aggregated Basin Total Diversion Depletion
    - Aggregated Total Reservoir Evaporation
    - Basin Total Future Tribal Reserved (UMU) Depletion
    - Basin Total Imports from Dolores Basin

Table 1: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – Upper San Juan

Upper San Juan Basin above Carracas			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	77_ARS001.Evap + 29_ARS002.Evap + 29_ASS001.Evap		
Total Future Tribal Reserved Depletions	29_SUIT.Consumptive_Use + 29_SUIT.Loss		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(76 total nodes)	2900501	2900768b_Dwn	7700554
	2900519	2900768_Dwn	7700558
	2900550	2900900	7700559
	2900555	2901900	7700560
	2900560	2901900_Dwn	7700562
	2900582	2901902	7700564
	2900588	2901902_Dwn	7700569
	2900597	2901905	7700570
	2900601	2901905_Dwn	7700576
	2900604	2902005	7700577
	2900613	2904669	7700579
	2900618	29_ADS002	7700585
	2900621	29_ADS003	7700586
	2900627	29_ARS002	7700587
	2900653	29_ASS001	7700588
	2900654	29_bypass	7700592
	2900662	7700500	7700597
	2900671	7700514	7702000
	2900677	7700518	7702005
	2900686	7700524	7702005b
	2900691	7700527	7702005b_Dwn
	2900716	7700529	7702005_Dwn
	2900718	7700531	77_ADS001
	2900729	7700536	77_ARS001
	2900768	7700542	77_bypass
	2900768b		
Note: These aggregations are done in the "UpperSanJuan_Depletions_**Scenario*.commands.TSTool" script			

Table 2: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – Piedra Basin

Piedra Basin above Navajo Res			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	78_ARS003.Evap		
Total Future Tribal Reserved Depletions	78_SUIT.Consumptive_Use + 78_SUIT.Loss		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(28 total nodes)	7800501	7800552	7800617
	7800506	7800555	7800638
	7800507	7800562	7800659
	7800513	7800565	7800671
	7800523	7800571	7800692
	7800524	7800580	7804670
	7800525	7800590	7804671
	7800543	7800594	7804672
	7800544	7800604	78_ADS004
	7800545		
Note: These aggregations are done in the "Piedra_Depletions_**Scenario*.commands.TSTool" script			

Table 3: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – Los Pinos Basin

Los Pinos Basin above Navajo Res			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	3103518.Evap ("Vallecito Res") + 31_ARS004.Evap + 31_ASS003.Evap		
Total Future Tribal Reserved Depletions	31_SUIT.Consumptive_Use + 31_SUIT.Loss		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(41 total nodes)	3100502	3100523	3100710
	3100503	3100524	3101900
	3100505	3100527	3101900_Dwn
	3100507	3100528	3103518
	3100508	3100535	3104637
	3100509	3100540	3104638
	3100510	3100545	3199999
	3100511	3100547	3199999_Dwn
	3100512	3100553	31_ADS005
	3100513	3100567	31_ADS006
	3100514	3100575	31_ARS004
	3100516	3100583	31_ASS003
	3100518	3100665	4600503
	3100519	3100668	
Note: These aggregations are done in the "Pine_Depletions_**Scenario*.commands.TSTool" script			

Table 4: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – Animas and Florida Basins

Animas Basin above State Line and Florida Basin above conf. with Animas			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation – Animas	3003536.Evap ("Cascade Res") + 30_ARS005.Evap + 30_ASS002.Evap		
Total Evaporation – Florida	3003581.Evap ("Lemon Res")		
Total Future Tribal Reserved Depletions (Only in Animas)	30_SUIT.Consumptive_Use + 30_SUIT.Loss		
Total Depletions - Animas	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(23 total nodes)	3004661	3000641	3000634
	3004662	3000506	30_ADS007
	3000523	3000581	3001228
	3000509	3000568	3001056
	3000612	3000580	3001094
	3000510	3000545	3001023
	3000504	3001024	30_ADS010
	3000617	3000582	
Total Depletions - Florida	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(12 total nodes)	3001000	3001009	3001219
	3001011	3001033	3001220
	3001003	3001243	30_ADS009
	3001019	30_ADS008	3001076
Note: These aggregations are done in the "Animas_Depletions_**Scenario*.commands.TSTool" script			

Table 5: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – La Plata Basin

La Plata Basin above State Line			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	3303530.Evap ("Long Hollow Res") + 33_ARS006.Evap + 33_ASS005.Evap		
Total Future Tribal Reserved Depletions	33_SUIT.Consumptive_Use + 33_SUIT.Loss *(Note: These are zero in current San Juan StateMod Baseline)*		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(23 total nodes)	3300501	3300542	3301905_Dwn
	3300504	3300547	3302999
	3300508	3300548	3302999_Dwn
	3300518	3300549	3303530
	3300533	3300550	33_ADS011
	3300535	3300551	33_ARS006
	3300536	3300554	33_ASS005
	3300540	3301905	
Note: These aggregations are done in the "LaPlata_Depletions_*_Scenario_.commands.TSTool" script			

Table 6: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – Mancos Basin

Mancos Basin above State Line			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	3403589.Evap ("Jackson Gulch Res") + 34_ARS007.Evap + 34_ASS006.Evap		
Total Future Tribal Reserved Depletions	34_UMU.Consumptive_Use + 34_UMU.Loss		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(29 total nodes)	3400505	3400542	3400577
	3400506	3400543	3400582
	3400508	3400544	3400583
	3400514	3400552	3401902
	3400522	3400554	3401902_Dwn
	3400527	3400560	34_ADS012
	3400530	3400565	34_ADS013
	3400531	3400567	34_ADS014
	3400534	3400573	34_AMS001
	3400535	3400576	3400577
Note: These aggregations are done in the "Mancos_Depletions_*_Scenario_.commands.TSTool" script			

Table 7: San Juan StateMod Model Aggregations for SJBHM Depletion Reporting – McElmo Basin

McElmo Basin above State Line			
Aggregation Name	**Aggregated San Juan StateMod Nodes and Parameters**		
Total Evaporation	7103619.Evap + 7103602.Evap + 32_ARS008.Evap + 32_ASS004.Evap		
Total Future Tribal Reserved Depletions	32_UMU.Consumptive_Use + 32_UMU.Loss		
Total Transbasin Imports into McElmo Basin	7104675.Carried_Water + 7104674.Carried_Water + 7100618.Carried_Water + 7100609.Carried_Water		
Total Depletions	Total Depletions are the sum of ".Consumptive Use" and ".Loss" for the San Juan StateMod nodes below		
(21 total nodes)	3200509	3200652	3202001
	3200528	3200662	3202006
	3200529	3200680	3204675
	3200558	3200690	32_ADS015
	3200574	3200699	32_ADS016
	3200590	3200772	32_ARS008
	3200634	3200884	32_ASS004
Note: These aggregations are done in the "McElmo_Depletions_**Scenario*.commands.TSTool" script			